

Technical and Bibliographic Notes / Notes techniques et bibliographiques

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

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

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

The Canadian Patent Office

RECORD




Vol. XXVIII.—No. 2. FEBRUARY 28th, 1900. { Price free by post in Canada and the United States, \$2.00. }
 { SINGLE NUMBERS, - - - 20 Cts }

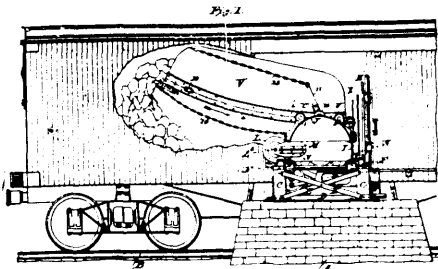
NOTICE.

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

INVENTIONS PATENTED.

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

No. 66,047. Car Loader. (*Machine à charger les chars.*)



Henry Phillips and William Hunt, both of Ottumwa, Iowa, U.S.A., 1st February, 1900; 6 years. (Filed 16th January, 1900.)

Claim.—1st. In a car loading machine, a longitudinally movable frame adapted to move into and out of a car, a revoluble pedestal mounted on the end of said frame, a hopper mounted directly upon the revoluble pedestal and adapted to travel across the axis of said pedestal in combination with suitable means for moving the frame longitudinally, and means for forcing a load carried by the hopper out of the same, substantially as hereinbefore set forth. 2nd. In a car loading machine a longitudinally movable supporting frame, a pedestal located at one end of said frame and a hopper mounted directly upon said pedestal and adapted to longitudinal and revoluble movement thereon, in combination with means for forcing the contents of the hopper over and out of either end thereof, substantially as hereinbefore set forth. 3rd. In a car loading machine a movable pedestal and a hopper mounted thereon and adapted to reciprocate and revolve directly upon said pedestal, in combination with an end gate or pusher located within said hopper, and means for moving said end gate or pusher in either direction longitudinally substantially as and for the purposes set forth. 4th. In combination with the reciprocating hopper mounted upon a movable pedestal and an end gate or load pusher movable longitudinally within the hopper, means intermediate of the end gate or pusher and the hopper for automatically locking the same in a fixed relation with the

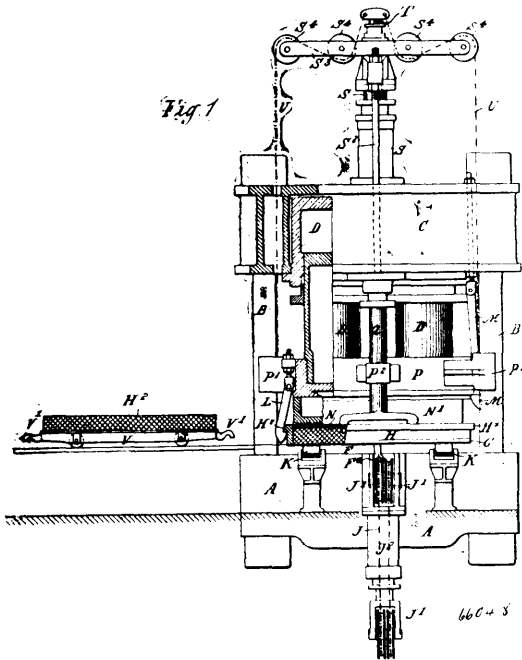
pedestal and releasing the same, substantially as and for the purposes described. 5th. The hopper having Z-plates riveted centrally and longitudinally thereof as described to form a slot and housing, in combination with a draw bar composed of the two parts A¹, B¹, secured together as described, and to the end gate or pusher C¹, and the chain 24 secured to the arms a a of the part B¹ and adapted to move the end gate in either direction as hereinbefore set forth. 6th. In combination with the hopper, pedestal and crown, and the draw bar and end gate or pusher constructed and arranged as described, the lever 11, with V-shaped recesses 13, the arrow shaped bolts 14 15, locking pin 9, and chain 18, connected at one end to the lever 11, and at the opposite end to the end gate or pusher C¹, whereby the hopper is automatically locked and released as hereinbefore set forth. 7th. The pedestal O, secured to the movable frame I, and formed with a race for the anti-friction balls P, in combination with the crown Q, and disc bottom R, the crown and disc bottom being separably connected by screw bolts S, substantially as and for the purposes described. 8th. In combination with the rotary crown Q and longitudinally movable hopper thereon the driving shaft E having the sperical head h keyed to the sprocket wheel D¹ in the manner described whereby the sprocket wheel may be rotated at different angles to the plane of the driving shaft, substantially as set forth. 9th. The sprocket wheel D¹ made in disc sections bolted together and formed with diametric recesses n, in combination with the shaft E with sperical head h having circumferential groove l and keys m constructed as described and located in the recesses n, and groove t, substantially as shown and described. 10th. The hopper V provided with flange curved plates or ribs 4, on each side in combination with the supporting crown Q and friction wheels U, substantially as and for the purpose set forth. 11th. In combination with the hopper, the reciprocating end gate or pusher and a chain for moving the end gate or hopper, means for confining and protecting the chain, and guiding the end gate or pusher, substantially as set forth.

No. 66,048. Hydraulic Press for Making Artificial Stone. (*Presse hydraulique pour la fabrication de pierre artificielle.*)

Albert Taylor, Daisy Croft, Hipperholme, Willie Brooke and Newton Brooke, both of Lightcliffe, and Aspinall Brooke, Hipperholme, all near Halifax, York, England, 1st February, 1900; 6 years. (Filed 15th June, 1899.)

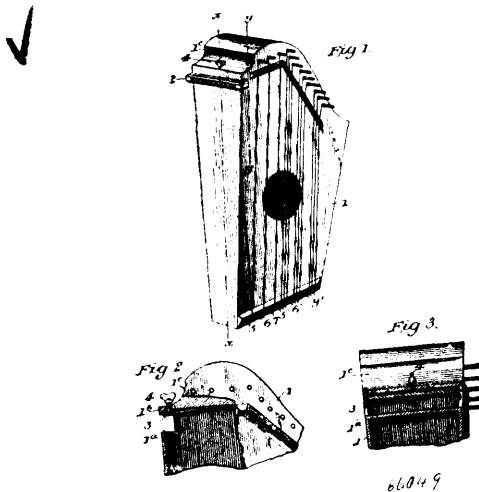
Claim.—1st. A hydraulic press for use in the manufacture of artificial stone slabs or the like, comprising one or more downwardly acting pressure cylinders having its ram or their rams connected at the lower end to a crosshead provided with a die for pressing the slab material into a mould and also with lifting catches adapted to engage the said mould, holding up catches connected to the stationary press head and adapted to engage with and hold up the mould when the same has been raised, and means whereby a trolley or other carrier, placed beneath the partly raised die, mould and slab can be raised with the latter and lowered together therewith, the arrangement being such that after a finished slab has been raised together with the mould, die and trolley or other carrier, a downward pressure of the main ram or rams will gradually force the slab from the mould and cause it to descend together with the trolley or other carrier, substantially as described. 2nd. In a press of the kind herein referred to, the combination of a groove plate or surface arranged below the main ram or rams, a perforated table adapted to reciprocate above the said plate to carry away the empty moulds and bring freshly charged moulds into pressing position, a pressing die having a grooved lower surface and a perforated

plate provided upon the said grooved lower surface, means for preventing the slab material from being pressed into the perforations



n the said table and plate, and means for holding the charged mould upon the table, substantially as described for the purpose specified, whether the grooves in the pressing die are provided or not with non-return flap valves for the purpose set forth.

No. 66,049. Musical Instrument. (Instrument de musique.)

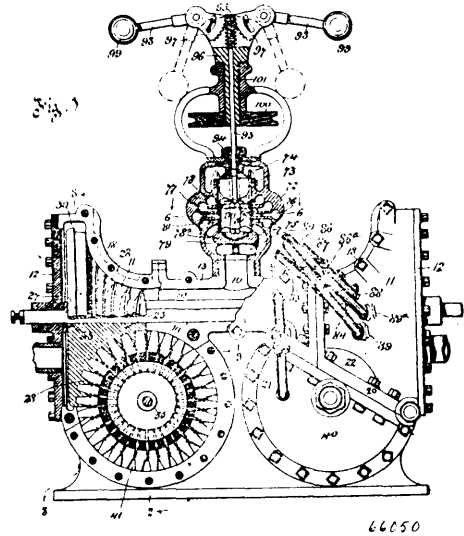


The Harp-o-Chord Company, assignee of Carl Ernest Brown, all of Columbus, Ohio, U.S.A., 1st February, 1900; 6 years (Filed 27th December, 1899.)

Claim.—1st. A cithern-like instrument provided with an opening extending to the interior thereof and having means to removably receive a harmonica or mouth harp in said opening so that the tones of said harmonica or mouth harp may be introduced into the body of the cithern-like instrument, substantially as described. 2nd. A cithern-like instrument provided with an opening extending to the interior thereof and a harmonica or mouth harp attached thereto in said opening, so that the tones from the harmonica or mouth harp shall be introduced into the body of the cithern-like instrument, substantially as described. 3rd. A stringed instrument provided with an opening to receive a wind instrument so that the tones of the wind instrument shall be modified by the stringed instrument, said stringed instrument being recessed adjacent said opening, substantially as indicated at 1c for the purpose explained. 4th. A

cithern-like instrument having separately grouped bass and chord strings, and provided with an opening extending to the interior thereof, combined with a harmonica or mouth harp connected with said opening, substantially as and for the purpose set forth.

No. 66,050. Rotary Engine. (Machine rotatoire.)

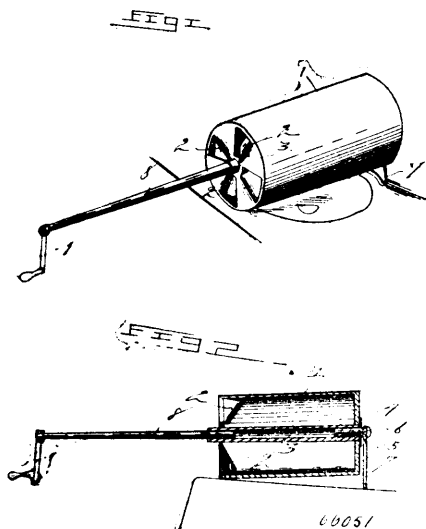


Charles Havelock Taylor, Westmount, Montreal, Quebec, Canada, 1st February, 1900; 6 years. (Filed 17th January, 1900.)

Claim.—1st. In a rotary engine, the combination with a cylinder and a part to be driven, of means for forming a series of spiral chambers within said cylinder, means for operatively connecting said chambers to the part to be driven, said spiral chambers being of progressively increasing capacity from the fluid intake port of said cylinder to the exhaust port thereof, and means for causing said fluid to pass successively through said chambers, for the purpose set forth. 2nd. In a rotary engine, the combination with a cylinder and a part to be driven, of means for forming a series of spiral chambers within said cylinder, means for operatively connecting said chambers to the part to be driven, said spiral chambers being of increasing capacity from one end thereof to the other, means for supplying an expansible fluid direct to several of said chambers, means for automatically decreasing or increasing the number of said supplies, and means for causing said fluid to pass successively through all of said chambers, for the purpose set forth. 3rd. In a rotary engine, a cylinder, a spiral piston located within said cylinder and increasing in diameter from one end to the other, said cylinder closely fitting the periphery of said piston, an exhaust port from said cylinder at the end of greatest diameter, means for supplying steam to said cylinder at points of different diameter along said spiral piston, and means for automatically decreasing or increasing the number of points to which steam is supplied, for the purpose set forth. 4th. In a rotary engine, a cylinder, a shaft extending through said cylinder, a spiral vane formed integrally with and entwined about said shaft from end to end of the portion thereof within said cylinder, said cylinder corresponding in form to and fitting closely the periphery of said vane, supply and exhaust ports to and from said cylinder and located respectively at the opposite ends thereof, the spiral space formed by said vane, the surface of said shaft and the inside face of said cylinder increasing in capacity from the supply end to the exhaust end thereof, a series of diaphragms adapted to intermesh with said vane and completely bisect the spaces between the convolutions thereof, means for carrying said diaphragm and means for causing same to travel axially of said shaft during the revolution thereof, for the purpose set forth. 5th. In a rotary engine, a cylinder, a concavo-conoidal shaft extending through said cylinder, a spiral vane formed integrally with and entwined about said shaft from end to end of the portion thereof within said cylinder, said cylinder corresponding in form to and fitting closely the periphery of said vane, supply and exhaust ports to and from said cylinder and located respectively at the ends of minimum and maximum diameter thereof, a circular box extending laterally in an axial plane from said cylinder, a hub mounted rotatably within said box, a series of diaphragms adapted to completely bisect the spaces between the convolutions of said vane, and means for yieldingly connecting said diaphragm radially to the periphery of said hub, and means for packing the line of juncture of said box and cylinder and the points at which said diaphragms intersect said line of juncture, for the purpose set forth. 6th. In a rotary engine, a cylinder, a concavo-conoidal shaft extending through said cylinder, a spiral vane formed integrally with and entwined about said shaft from end to end of the portion thereof

within said cylinder, said cylinder corresponding in form to and fitting closely the periphery of said vane, supply and exhaust ports to and from said cylinder and located respectively at the ends of minimum and maximum diameter thereof, a circular box extending laterally in an axial plane from said cylinder, a hub mounted rotatably within said box and having a series of radial borings formed in the periphery thereof, a series of tapered wedge-shaped resistance heads 62, each formed with a plug 67 adapted to take into said borings, said resistance heads being adapted to completely bisect the space between the pair of convolutions adjacent thereto of the vane, a series of coiled springs adapted to take over said plugs and bear between said resistance heads and the hub, and means for packing the line of juncture of said box and cylinder and the points at which said diaphragms intersect said line of juncture, for the purpose set forth. 7th. In a rotary engine, a cylinder, a concavo-conoidal shaft extending through said cylinder, a spiral vane formed integrally with and entwined about said shaft from end to end of the portion thereof within said cylinder, said cylinder corresponding in form to and fitting closely the periphery of said vane, supply and exhaust ports to and from said cylinder and located respectively at the ends of minimum and maximum diameter thereof, a circular box extending laterally in an axial plane from said cylinder, a pair of sleeves formed in one with and extending axially in opposite directions from the exterior of said box, a hub mounted rotatably within the said box and having a series of radial borings formed in the periphery thereof, a series of tapered wedge-shaped resistance heads 62, each formed with a plug 67 adapted to take it into said borings, said resistance heads being adapted to completely bisect the space between the pair of convolutions adjacent thereto of the vane, a series of coiled springs adapted to take over said plugs and bear between said resistance heads and the hub, a series of packing pins located in registering grooves in the adjoining edges of said resistance heads, a pair of pins located respectively in contact with each side edge of each head, said hub being formed with oppositely extending sleeves adapted to take into said before mentioned sleeves, a spindle passing through said sleeves and enlarged and screw-threaded at one end to take into the screw-threaded interior of one end of the outer sleeves, the exterior of the adjacent inner sleeve being circumferentially grooved, and a series of packing rings L-shaped in cross section encircling said sleeve and taking into the grooves thereof, substantially as described and for the purpose set forth. 8th. An automatic cut-off device, comprising a casing 72, formed with a cylindrical valve chamber 73, a steam supply to the upper end of said valve chamber, a series of channels 75, 76, 77 and 78, communicating with the cylinder of the engine and each communicating independently with the valve chamber 73 at a different points along the length thereof, of a tray 178 supported a short distance beneath the lower end of said valve chamber, a valve 90 of hollow cylindrical form slidable within and longitudinally of said valve chamber, and means under control of a moving part of the engine for sliding said valve to cut off the steam supply to said channels as the speed of said moving part becomes excessive. 9th. A governor for actuating a cut off device, consisting of a slidable stem 93 formed at its upper end with a rack 95, a rotatable bracket 96, a pair of toothed segments 97 pivoted to said bracket and intermeshing with said rack 95, a pair of rods 98 connected rigidly at their inner ends to said racks and carrying governor balls 99 at their outer ends, and a pulley 100 mounted rigidly upon said bracket 96, as described and shown.

No. 66,051. Peanut Roaster. (*Torréfacteur de pistache.*)

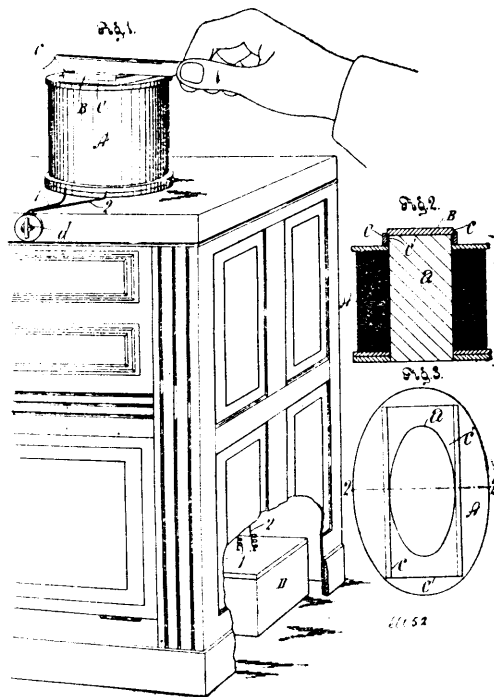


Nelson R. H. Burnett, Clay Brook, Tennessee, U.S.A., 1st February, 1900; 6 years. (Filed 17th January 1900.)

Claim.—The shell 1, formed with the closed rear end, and having its front end formed with inwardly projecting radial blades, the axial tube fixed in said shell, the stud shaft fixed in one end of said tube, the supporting bracket loosely mounted on said stud shaft, and the removable crank shaft mounted in the opposite end of said sleeve, substantially as shown and described.

No. 66,052. Electro-Magnetic Hone.

(*Pierre electro-magnetique.*)



Theodore R. Smith, Los Angeles, California, U.S.A., 1st February, 1900; 6 years. (Filed 12th January, 1900.)

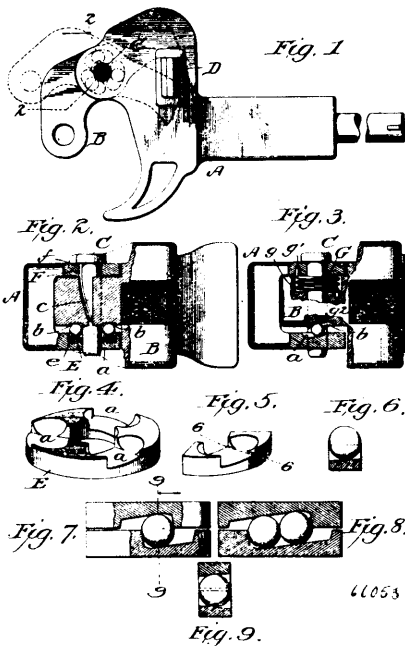
Claim.—1st. The combination of a hone and an electro-magnet arranged with such relation to the hone that the lines of effective magnetic force through the hone toward one pole of the magnetic only. 2nd. The combination of an electro-magnet, a hone, and a holder for holding the hone on the electro-magnet. 3rd. The combination of an electro-magnet having a projecting core, a hone holder with slot to seat the projecting core and with a hone seat in its upper face, and a hone in said hone seat. 4th. An electro-magnet with cone oblong in cross section, a hone, and means for holding the hone above the core. 5th. The combination of a magnet and a superposed hone which lies wholly in the field of a single pole of the magnet.

No. 66,053. Car Coupler. (*Attelage de chars.*)

Hylas Sabine, Marysville, Ohio, U.S.A., 1st February, 1900; 6 years. (Filed 17th January, 1900.)

Claim.—1st. A car coupling, comprising a drawhead, a jaw, a pin pivoting the jaw to the drawhead, and a series of balls interposed between the under side of the jaw and the drawhead, and arranged in grooves therein on different sides of the pin, the walls of said grooves being arranged on inclined planes, substantially as and for the purpose specified. 2nd. A car coupling, comprising a draw head, a jaw, a pin pivoting the jaw to the drawhead, a series of balls interposed between the drawhead and the jaw and arranged in grooves in the drawhead and the jaw and on different sides of the pin, the upper and lower walls of said grooves being inclined tangentially, for the purpose specified. 3rd. A car coupling, comprising a drawhead, a jaw, a pin pivoting the jaw to the drawhead, a ball interposed between the jaw and the drawhead and arranged in a groove in the drawhead, the lower wall of which is inclined tangentially relatively to the pivot pin, and also radially with reference thereto. 4th. A car coupling, comprising a drawhead, a jaw, a pin pivoting the jaw to the drawhead, a ball interposed between the under side of the jaw and the draw-head, and arranged in grooves in the drawhead and in the jaw, said grooves being inclined tangentially with reference to the pivot pin and also radially relatively thereto. 5th. A car coupling, comprising a drawhead, a jaw, a pin pivoting the jaw to the drawhead, a grooved block arranged in a recess of the drawhead around the pin and below the jaw, and one or more balls arranged therein. 6th. A car coupling, comprising a drawhead, a jaw, a pin pivoting

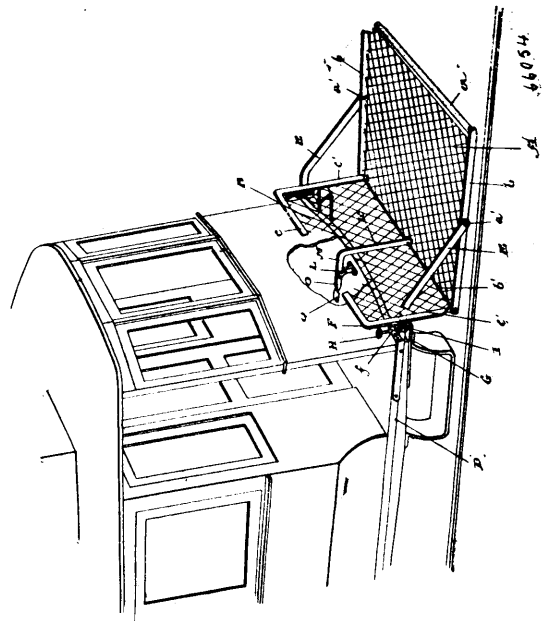
the jaw to the drawhead, a grooved block made in sections, arranged in a recess in the drawhead surrounding the pin, and



balls arranged in said grooves and bearing against the jaw, the pin and the lower walls of the grooves. 7th. A car coupling, comprising a drawhead, a jaw, a pin pivoting the jaw to the drawhead, a spring placed under tension when the jaw is closed and tending to open it, and balls arranged on different sides of the pin and interposed between the jaw and the draw head. 8th. A car coupling, comprising a drawhead, a jaw, a pin pivoting the jaw to the drawhead, a spring placed under tension when the jaw is closed and tending to open the jaw, and balls arranged in inclined grooves on different sides of the pin and interposed between the jaw and the drawhead. 9th. A car coupling comprising a draw head, a jaw, a pin pivoting the jaw to the drawhead, a spring placed under tension when the jaw is closed and tending to open the jaw, and balls interposed between the jaw and the drawhead and arranged in inclined grooves on different sides of the pin and extending from the pin outwards so that the balls bear against the pin as well as against the jaw and drawhead. 10. A car coupling comprising a drawhead, a jaw, a pin extending through the pin holes in the drawhead and jaw, a ball interposed between the jaw and the drawhead and arranged in a groove in the drawhead which extends from the pin hole outwards so that the ball may be inserted through the pin hole into the groove and may bear against the pin as well as against jaw and drawhead. 11th. A car coupling comprising a drawhead, a jaw, a pin extending through pin holes in the draw head and jaw, a ball interposed between the jaw and the drawhead and arranged in a groove in a drawhead and a groove in the jaw, both of which grooves are inclined both radially and tangentially and which extend from the pin hole of the jaw outwards, whereby the ball may be inserted through the pin hole into the grooves and may bear against the pin as well as against the drawhead and jaw. 12th. A car coupling comprising a drawhead, a jaw, a pin to which the jaw is secured and which is provided with an enlarged head, a ball arranged in a groove in the head of the pin, and in a groove below the pin head, substantially as described. 13th. A car coupling comprising a drawhead, a jaw, a pin secured to the jaw and having an enlarged head provided on its under side with a groove, the upper wall of which is arranged on an inclined plane, and a ball or roller arranged in said groove, and also in a groove having a reversely inclined plane below the head of the pin. 14th. A car coupling comprising a drawhead, a jaw, a pin secured to the jaw and having an enlarged head, a ballway in the head of the pin, a ballway in the disc or boss below the head, and a ball in said ballway. 15th. A car coupling comprising a drawhead, a jaw, a pin secured to the jaw and having an enlarged head, a ballway in the head of the pin having an inclined upper wall, a ballway in the disc or boss below the head and having an inclined lower wall, and a ball in said ballway. 16th. A car coupling comprising a drawhead, a jaw, a pin secured to the jaw and having an enlarged head provided

with ballways having walls arranged on double inclined planes, a disc having ballways or grooves, with the walls arranged on double inclined planes, removably secured to the draw head below the head of the pin, and balls arranged in said grooves. 17th. A car coupling comprising a draw head, a jaw, a pin to which the jaw is secured, and which is provided with an enlarged head provided on its under side with a groove, the upper wall of which is arranged on an inclined plane, and a ball or roller arranged in said groove, and also in a groove, the lower wall of which is arranged on a plane which is inclined tangentially to the pin, and also is inclined from its outer end inwardly and downwardly towards the pin. 18th. A car coupling comprising a drawhead, a jaw, a pin to which the jaw is secured, and which is provided with an enlarged head, a ball arranged in a groove in the head and in a groove below the head, and a spring connected with the drawhead and with the jaw, substantially as described.

No. 66,054. Street Car Fender. (Defense de chars.)



James H. Clinkumbroome, Toronto, Ontario, Canada, 1st February, 1900; 6 years. (Filed 17th January, 1900.)

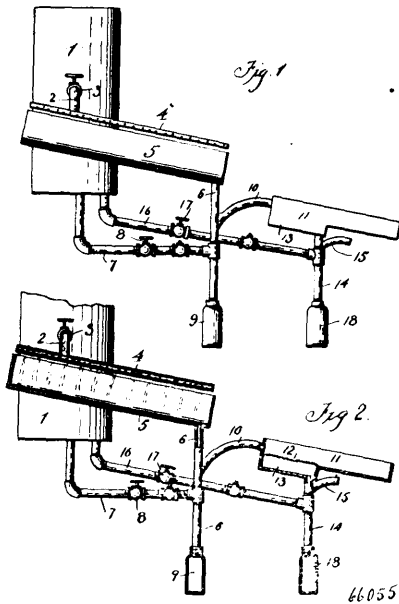
Claim.—1st. A street car fender embracing in its construction a platform, a back pivotally connected to the platform rearwardly projecting lugs from the frame of the back straps connected to the platform of the car upwardly directed bolts connected to the straps projecting through the lugs springs mounted on the bolts between the lugs and straps and side braces pivotally connected to the sides of the fender platform and rigidly connected to the sides of the car, substantially as specified. 2nd. A street car fender embracing in its construction a platform, a back pivotally connected to the platform rearwardly projecting lugs from the frame of the back straps connected to the platform of the car, upwardly directed bolts connected to the straps projecting through the lugs springs, mounted on the bolts between the lugs and straps, side braces pivotally connected to the sides of the fender platform and rigidly connected to the sides of the car, a bracket connected to the under side of the car, a bell crank lever journalled in the bracket, one arm of the lever projecting upwardly through the bottom of the car and fitted with a pedal, the other arm of the lever connected to the back of the platform of the fender, substantially as specified.

No. 66,055. Gold Separator. (Séparateur d'or.)

Franklin E. Jackson and Lucius R. Henley, both of Greentown, Indiana, U.S.A., 1st February, 1900; 6 years. (Filed 1st April, 1899.)

Claim.—In a concentrating machine, the combination with the elevated water tank, the inclined sluice box, and the perforated pipe located above said sluice box and extending from end to end thereof and connected with said tank, of the vertical pipe connected with the lower end of said sluice box having a sight receptacle at the lower end, and provided intermediate its ends with a pipe leading to said tank, the curved pipe connected with said vertical pipe above the connection of the pipe leading to the tank, the inclined trough having a box connected with its upper end provided with a

screen flush with the bottom of the trough and said trough provided with a vertical pipe connected with said tank and having a curved



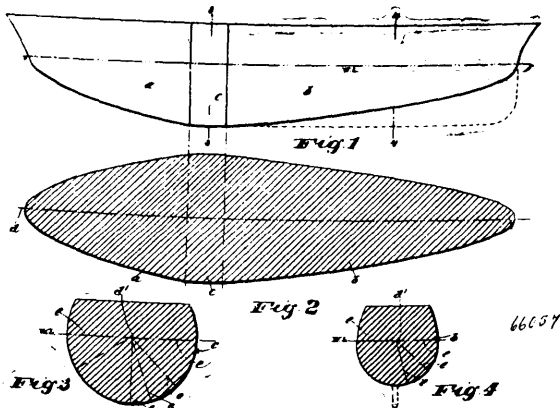
discharge pipe above said connection and with a sight receptacle at the lower end, substantially as described.

No. 66,056. Production of Caustic Alkalies, etc.
(*Production d'alcali caustiques, etc.*)

Fitz Projan, Duisburg, Prussia, Germany, 1st February, 1900; 6 years. (Filed 15th May, 1899.)

Claim.—A process for the production of caustic alkali, and alkaline earths, alkali carbonates and aluminates consisting in heating in an appropriate furnace native metals with sulphates or nitrates or other congenial salts rich in oxygen, whereby these salts are led over in the caustic state without a reducing carbon being used, the sulphur of the sulphate being at the same time converted into a metal sulphide without the assistance of a third substance, substantially as described, and the carbonates being formed by adding of coaly substance to the corresponding mixture, the aluminates by adding of substances containing alumina, substantially as described.

No. 66,057. Forms for the Hulls of Marine Vessels.
(*Modèle pour carcasses de vaisseau marin.*)

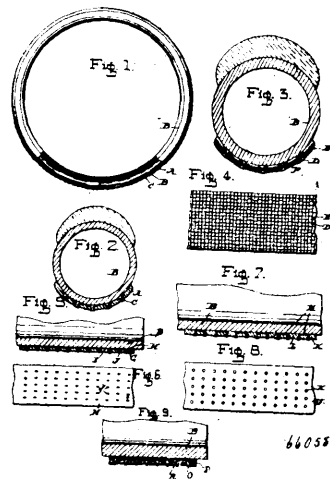


Millard F. Mithoff, New Orleans, Louisiana, U.S.A., 1st February, 1900; 6 years. (Filed 20th June, 1899.)

Claim.—1st. A hull for marine vessels, the hull having an entrance and a run, longitudinal sections of each of which formed on planes passing through a central longitudinal axis of the hull, are bounded by parabolic branches, the origins of which are respectively at the bow and stern of the hull. 2nd. A hull for marine vessels, having an entrance and a run, longitudinal sections of each of which, formed by planes passing through a central longitudinal axis of the hull, are

bounded by parabolic branches, the origins of which are respectively at the bow and stern of the vessel, and the said parabolic branches ending at the greatest beam of the hull, the hull having at its greatest beam a neutral zone or belt serving to join the ends of the parabolic branches into a mechanically regular form.

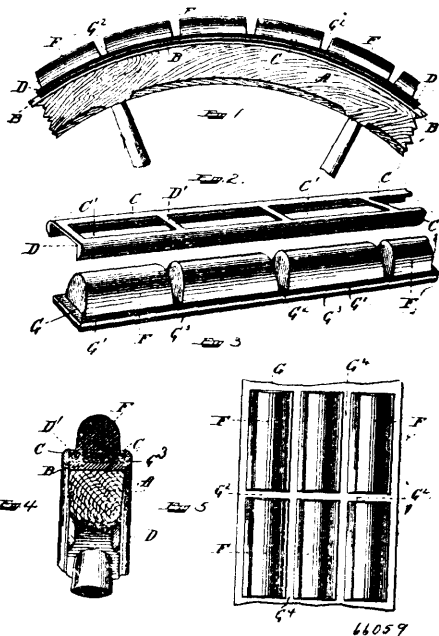
No. 66,058. Vehicle Tire. (*Bandage de voiture.*)



Calvin Thayer Adams, New York City, New York, U.S.A., 1st February, 1900; 6 years. (Filed 22nd July, 1899.)

Claim.—1st. A tread for a pneumatic or cushioned vehicle tire studded with rivets, staples or equivalent devices as described, having integral heads bearing against opposite sides of said tread. 2nd. A tread for a pneumatic or cushioned vehicle tire consisting of woven fabric studded with rivets, staples or equivalent devices interwoven with the meshes of the fabric, parts of said rivets, staples or equivalent devices being exposed to the outer surface of the tread to prevent slipping. 3rd. A tread for a pneumatic or cushioned vehicle tire, studded with rivets, staples or equivalent devices as described, having integral heads bearing against the inner surface of the tread, shanks expanded in the tread by longitudinal pressure, and outer ends exposed on the outer surface of the tread.

No. 66,059. Wheel Tire. (*Bandage de roue.*)

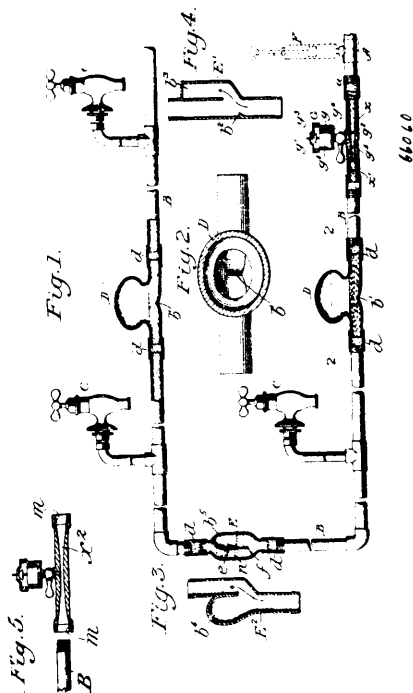


Frank Elmer Hall, Boston, Massachusetts, U.S.A., 1st February, 1900; 6 years. (Filed 13th September, 1899.)

Claim.—1st. In a tire for vehicles, a series of elastic knobs or sections, a common base for said series, a fabric material vulcanized

to said base and integral therewith for reinforcing and stiffening the same, and a clamping band adapted to engage said base to hold the tire on the wheel. 2nd. In a tire for vehicles, a series of elastic knobs or sections, a common base for said series provided with said flanges extending beyond said knobs or sections, a fabric material vulcanized to said base and integral therewith for reinforcing and stiffening the same, and a clamping band adapted to engage said flanges to hold the tire on the wheel. 3rd. In a tire for vehicles, a series of elastic knobs or sections, a common base for said series provided with side flanges extending beyond said knobs or sections, a fabric material vulcanized to said base throughout its width and integral therewith for reinforcing and stiffening the same, and a clamping band adapted to engage said flanges to hold the tire on the wheel. 4th. In a tire for vehicles, a series of elastic sections or knobs, a common base for said series provided with said flanges extending beyond said sections or knobs and with end flanges between said knobs or sections, a fabric material vulcanized to said base throughout its width and length and integral therewith for reinforcing and stiffening the same, and a clamping band adapted to engage said side and end flanges to hold the tire on the wheel. 5th. In a tire for vehicles, a series of elastic sections or knobs, a common base for said series provided with side flanges extending beyond said sections or knobs and with end flanges between the said knobs or sections, a fabric material vulcanized to said base throughout its width and length and integral therewith for reinforcing and stiffening the same, and a clamping band having cross bars and adapted to engage said side and end flanges to hold the tire on the wheel. 6th. In a tire for vehicles, a series of longitudinally and transversely arranged elastic sections or knobs, a common base for said series, a fabric material vulcanized to said base and integral therewith for reinforcing and stiffening the same, and a clamping band adapted to engage said side and end flanges to hold the tire on the wheel. 7th. In a tire for vehicles, a series of longitudinally and transversely arranged elastic sections or knobs, a common base for said series provided with side and end flanges, a fabric material vulcanized to said base throughout its length and width and integral therewith for reinforcing and stiffening the same, and a clamping band adapted to engage said flanges to hold the tire on the wheel.

No. 66,060. Apparatus for Preventing the Bursting of Water Pipes. (*Appareil pour empêcher les tuyaux à eau de crever.*)



Nevil Munroe Hopkins, Washington, District of Columbia, U.S.A., 1st February, 1900; 6 years. (Filed 18th September, 1899.)

Claim.—1st. The combination of a water pipe, an expansion chamber connected therewith and a transverse rib or flange therein

to deflect the freezing water or ice laterally. 2nd. The combination of a water pipe, a separate expansion chamber opening thereinto, and a deflecting flange or rib in the pipe opposite the mouth of the expansion chamber. 3rd. A water pipe, a section of which is provided with a chamber open at both ends for the passage of water, and another chamber for containing air, and for receiving ice or freezing water and having a mouth or opening in line, or substantially in line, with the direction of flow or pressure in the water pipe. 4th. A water pipe in which is interposed a casting provided on one side with a free passage for water, and also on the other side with a vertically arranged stationary or fixed air containing chamber having a greater vertical length than breadth, and provided with a mouth at its lower end, and in line with the direction of flow or pressure in the water pipe. 5th. The combination of a water pipe and an interposed, oblong casting provided with an air tight, vertical expansion chamber in line, or substantially in line, with the direction of flow or pressure in the water pipe, and having a deflected passage around the chamber for the flow of water. 6th. The combination of a water pipe provided with an expansion chamber to receive freezing water or ice, and devices for supplying a gas, such as air, to the chamber. 7th. The combination of a water pipe provided with an expansion chamber to receive freezing water or ice, and a device connected with the water pipe for supplying air to the water pipe from which it in turn passes to the expansion chamber. 8th. The combination of a water pipe provided with an expansion chamber to receive freezing water or ice, and means for admitting or forcing air into the water pipe. 9th. The combination of a water pipe provided with an expansion chamber to receive freezing water or ice, an air inlet port for admitting air to the water pipe, a valve controlling this port, means for inducing a flow of air through the valve and into the pipe. 10th. The combination of a water pipe provided with an expansion chamber to receive freezing water or ice, an air inlet port for admitting air to the water pipe, a valve controlling this port, and a nozzle in the pipe extending past the port. 11th. The combination of a water pipe provided with an expansion chamber to receive freezing water or ice, a vessel communicating with the water pipe and having an air inlet, a valve controlling the air inlet, a float to which the valve is attached, and a nozzle within the water pipe extending past the passage between the water pipe and the valve chamber.

No. 66,061. Manufacture of a Composition from Rhea Fibre. (*Fabrication d'une composition de fibre rhé.*)

William James Cordner, London, England, 1st February, 1900; 6 years. (Filed 26th October, 1899.)

Claim.—1st. A process for the manufacture of a composition consisting of a treatment of Rhea fibre, gummed or degummed, in a solution of silicate of soda, of a density of 15° to 20° Beaume, the drying of same to extract the moisture, the saturation of the fibre with a heavy hydrocarbon such as resin oil and the like, the mechanical removal of superfluous heavy hydrocarbon, the treatment by heat of the saturated fibre to transform it into a heavy hydrocarbon cellulose, the mechanical disintegration of the said cellulose and the mixture therewith of gums, resins, oxidisable oils, and the like to form a composite material, substantially as described. 2nd. A composite material made from Rhea fibre consisting of heavy hydrocarbon cellulose mixed with oils, resins, gums, and similar materials, substantially as described.

No. 66,062. Cleaning and Polishing Compound.

(*Composé pour nettoyer et polir.*)

Arthur Manning Waitt, New York City, New York, U.S.A., 1st February, 1900; 6 years. (Filed 1st December, 1899.)

Claim.—A liquid compound for cleaning and polishing varnished surfaces, consisting of a permanent emulsion composed of a refined petroleum having a specific gravity of thirty-two or about thirty two degrees Baumé, and diluted acid that is not injurious to varnish, and having the said ingredients mixed in the proportion of about one part of the petroleum to two parts of the diluted acid, substantially as set forth.

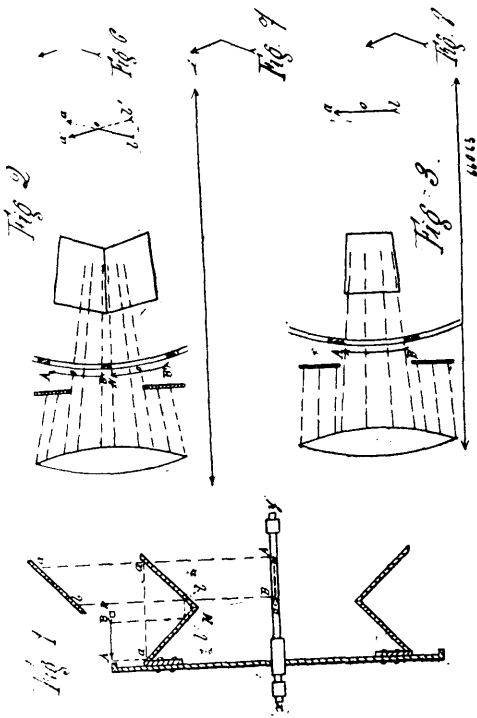
No. 66,063. Kinematographic Apparatus.

(*Appareil kinematographique.*)

Paul Mortier, Civil Engineer, of 7 Place Mi Careme, St. Etienne, in the Republic of France, 1st February, 1900; 6 years. (Filed 31st August, 1899.)

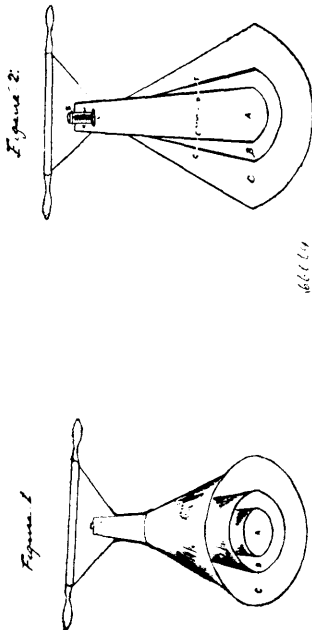
Claim.—1st. In a kinematographic apparatus, traversing the pellicle or photographic film in front of reflectors that produce a virtual image thereof, rectangular, parallel and inverted in relation to the image that would be produced on a single plane mirror, rotating the reflectors about an axis lying in the plane of the virtual image, and coincident with the symmetrical axis thereof, and projecting the image on to a screen by means of a lens placed on a line

passing through the centre of the image and normal to its plane.
2nd. In kinematographic apparatus the combination with a drum



on which the photographic band or film is traversed, of a frame which regulates the angular rate of speed of the film.

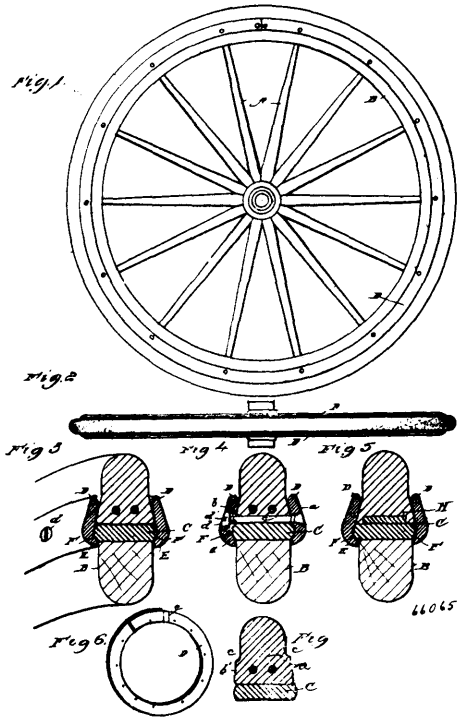
No. 66,064. Washing Machine. (*Machine à laver.*)



Edgar Robert B. Hayward, Toronto, Ontario, Canada, 1st February, 1900; 6 years. (Filed 2nd January, 1900.)

Claim.—1st. The combination of the three tubes or cylinders unsupported by wire or other stays with air holes in same as hereinbefore described. 2nd. The brass air tube, coil spring and air valve placed in the main tube or cylinder, as hereinbefore described.

No. 66,065. Vehicle Rubber Tires.
(*Bandage de caoutchouc pour voitures.*)



James Frank Winchell, Springfield, Ohio, U.S.A., 1st February, 1900; 6 years. (Filed 8th January, 1900.)

Claim.—In a rubber tire equipment, the combination with a pair of open rings, of a body of india rubber composing a rubber tire, such rings having hook portions along their inside near their inner periphery and one of them having holes to receive bolts and their heads, and the other holes to receive bolts and their nuts, said rings being adapted to pivot about an ordinary band tire to clamp against the sides of said rubber tire and thus form a dove tailed clamping seat for such tire, and bolts and nuts to hold the rings in such clamping relation to the rubber, the nuts on the bolts being held from unscrewing by the expansive action of the rubber.

No. 66,066. Pneumatic Tire. (*Bandage pneumatiques.*)

Edward Arthur, West Drayton, Middlesex, England, 1st February, 1900; 6 years. (Filed 18th December, 1899.)

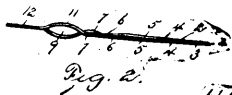
Claim.—1st. The improvements in, or connected with, self-healing pneumatic tires, consisting in a composition of a material for rendering such tires self-healing in the event of puncture, said composition being produced by dissolving raw rubber in benzine or naphtha, and adding thereto either coal tar, or stockholm, or archangel tar or pitch, softened by mineral oil, in or about the proportions hereinbefore stated, the said benzine or naphtha being subsequently evaporated until the composition reaches a desired consistency, substantially as specified. 2nd. In improvements in, or connected with, self-healing pneumatic tires, the composition or material formed of raw rubber, dissolved in benzine or naphtha, to which is added tar or pitch fashioned into strips and fixed to the outer periphery of the inner tube of a tire, or to the inside of the outer covering of the tire, said strips being further held in place, on the periphery of the tube by means of an India rubber cover, adapted to envelope the said tube and the strips thereon, substantially as specified.

No. 66,067. Hair Pin. (*Epinyle à cheveu.*)

John Leick and Caleb M. Harrison, both of Verona, New Jersey, U.S.A., 2nd February, 1900; 6 years. (Filed 22nd January, 1900.)

Claim.—1st. A hair pin having a head from which extend opposite members crossed at an intermediate point and provided with parallel prongs or legs, each leg or prong having an extended indentation to reverse position in a vertical direction to that in the opposite leg or prong. 2nd. A hair pin having a head with opposite members extending therefrom in straight divergent lines to angular bends,

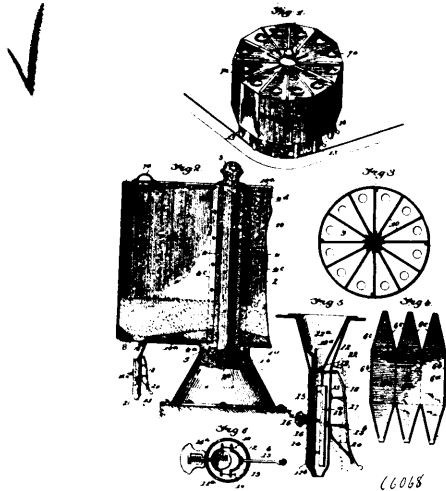
said members converging from said bends and crossing and continued into leg or sprongs which are substantially parallel, each leg or



66067

prong having a regularly curved extended indentation in a position reverse in a vertical direction to that of the opposite leg or prong.

No. 66,068. Revolving Canister. (Canastre tournante.)



66068

Clarence C. Bell and Thomas Ewart, both of Marietta, Ohio, U.S.A., 2nd February, 1900; 6 years. (Filed 18th January, 1900.)

Claim.—1st. A revolving canister, comprising a base, a post, a tubular support arranged to rotate on the post and provided with vertical ribs, the sheet metal blocks having upper and lower bending portion and the radial division plates 10, secured to the ribs of the tubular support and having lapping ends to engage the top and bottom portions of the blocks, substantially as described. 2nd. In a canister as described, the combination with the supporting post and the tubular support held to rotate thereon, said support having vertical ribs, of the sheet metal blocks 6, having upper and lower inwardly bending portions, said portions having apertures, the division plates 10, adapted to be secured to the tubular support having lap ends to engage the top and bottom members of the metal blocks 6, and discharge funnels secured to the lower members of the section 6, all being arranged substantially as shown and described. 3rd. In a canister as described, the combination with the compartments having discharge openings, of receiving pockets, each having a vertical fixed portion and a vertically disposed movable portion, a bottom member vertically adjustable therein, a cut off for closing the discharge openings of the canister compartment from the pocket, and a single lever mechanism common to the adjustable receiving pocket member and the cut off valve, hand operated to one of its movements automatically operated to its other movement, as specified. 4th. The combination in a canister as described, of a combined discharging and measuring mechanism comprising a pendent chamber, having a vertical receiving portion formed of a fixed and a side-wise movable portion adapted when in its closed position to form, in connection with the fixed member, a receiving pocket, a bottom piece for such pocket vertically adjustable from without the pendent chamber, a cut off valve operating over such receiving pocket, a lever connected to such valve and the adjustable pocket member, constructed substantially as shown, whereby to operate the said valve and adjustable pocket member reversely, as and for the purposes specified.

No. 66,069. Cuff Button. (Bouton de poignets.)

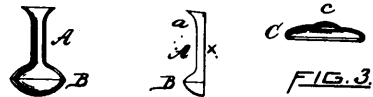


FIG. 1.



FIG. 2.



FIG. 3.



FIG. 4.

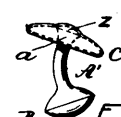


FIG. 5.



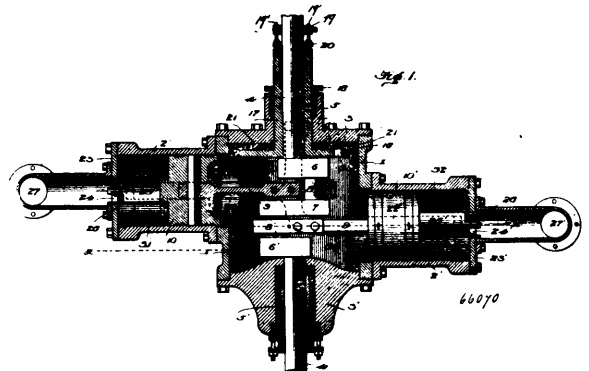
FIG. 6.

66069

William Lippitt Mauran, Providence, Rhode Island, U.S.A., 2nd February, 1900; 6 years. (Filed 22nd January, 1900.)

Claim.—The improved cuff button herein described, consisting of the combination of a compound post and knob, having straight edged longitudinal halves, soldered together and forming a bell-shaped mouth at one end of said post, an ornamental head, and a mass of solder in said end of the post, united therewith and with the centre of said head on the under surface thereof, substantially as specified.

No. 66,070. Engine. (Machine à vapeur.)



66070

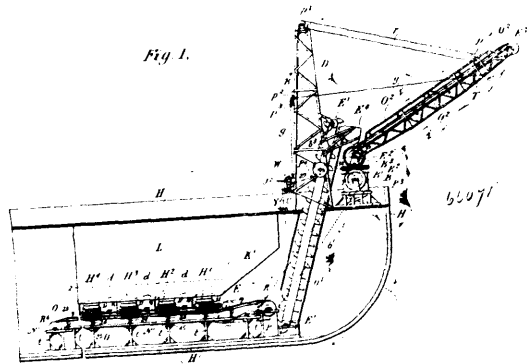
Eli A. Stark and Thomas Winship, both of Toledo, Ohio, U.S.A., 2nd February, 1900; 6 years. (Filed 22nd January, 1900.)

Claim.—1st. An engine having a cylinder, pistons, shaft cranks and means for uniting the pistons and cranks located within the cylinder, means for periodically admitting motive fluid to corresponding sides of the pistons, means for educting the fluid to the other corresponding sides of the pistons, and means for finally exhausting the fluid to the atmosphere. 2nd. An engine having a cylinder, two movable pistons dividing the interior of the cylinder into three chambers, a rotary shaft in the cylinder, means joining the pistons and shaft, valve mechanism for periodically admitting motive fluid to corresponding sides of the pistons, valve mechanism for periodically educting the motive fluid to the other corresponding sides of the pistons, and valve mechanism for finally exhausting the fluid to the atmosphere. 3rd. An engine having a cylinder provided with ports, two pistons dividing the cylinder into three chambers, a rotary shaft, two cranks, two pitmen, means for periodically admitting motive fluid into the central chamber, and means for periodically educting the motive fluid from the central chamber into the end chambers back of the pistons, and finally exhausting it to the atmosphere. 4th. An engine having two pistons dividing the cylinder into three chambers, a rotary shaft in the central chamber, means for transmitting the motion of the pistons to the shaft, means operated by the shaft controlling the inlet and eduction ports, and means for finally exhausting motive fluid to the atmosphere. 5th. An engine having a cylinder, two pistons dividing the interior of the cylinder into three chambers, a rotary shaft, two cranks, two pitmen, an inlet port for the admission of motive fluid to the central chamber, an eduction port and passages from the central chamber to the end

chambers, means within the central chamber controlling the inlet and eduction ports, and means for exhausting the motive fluid from the end chambers, in substance as set forth. 6th. An engine having a cylinder provided with an inlet port for the motive fluid, two pistons dividing the interior of the cylinder into three chambers, a rotary shaft in the central chamber, two cranks, two pitmen, an eduction port and passages from the central chamber to the end chambers, a rotary valve controlling the inlet and eduction ports, and means for exhausting the motive fluid from the end chambers, in substance as set forth. 7th. An engine having a cylinder provided with an inlet port for the motive fluid, two pistons dividing the interior of the cylinder into three chambers, a rotary shaft in the central chamber, two cranks, two pitmen, an eduction port and passages from the central chamber to the end chambers, a rotary valve in the central chamber operated by the shaft and controlling the inlet and eduction ports, and means for exhausting motive fluid from the end chambers, in substance as set forth. 8th. An engine having a cylinder provided with an inlet port for the motive fluid, two pistons dividing the interior of the cylinder into three chambers, a rotary shaft in the central chamber, two cranks, two pitmen, an eduction port and passages from the central chamber to the end chambers, a rotary valve adjustable about the shaft and controlling the inlet and eduction ports, and means for exhausting motive fluid from the end chambers, in substance as set forth. 9th. The combination in an engine, constructed and operating substantially as set forth, of a cylinder having inlet and eduction ports, a rotary shaft, and a rotary valve for controlling the inlet and eduction ports operated by the shaft, said valve being slotted or cut away to afford a passage for motive fluid. 10th. The combination in an engine, constructed and operating substantially as set forth, of a cylinder having inlet and eduction ports, a rotary shaft, and a valve for controlling the inlet and eduction ports, said valve comprising a disc portion and a sleeve or cylindrical portion mounted on the shaft. 11th. The combination of an engine, constructed and operating substantially as set forth, of a cylinder having inlet and eduction ports, a rotary shaft, and a valve for controlling the inlet and eduction ports, said valve being adjustable upon the shaft. 12th. The combination in an engine, constructed and operating substantially as described, of a cylinder having inlet and eduction ports, a rotary shaft, and a valve for controlling the inlet and eduction ports, said valve being mounted upon the shaft and adjustable longitudinally upon and also about the axis of the shaft. 13th. An engine having a cylinder provided with an inlet port for the motive fluid, two pistons dividing the interior of the cylinder into three chambers, a rotary shaft, two cranks, two pitmen, a valve controlling the inlet port and which admits motive fluid only during a part of the period of the outward traverse of the pistons, an eduction port and passages from the central chamber to the end chambers, means for periodically opening and closing the eduction port, and means for exhausting the motive fluid from the end chambers, in substance as set forth. 14th. The combination in an engine, constructed and operating substantially as set forth, of a cylinder having inlet and eduction ports, a rotary shaft, and a valve for controlling the inlet and eduction ports, the said valve being cut away or slotted in the shape of an arc of a circle for a distance less than half the circumference of the valve measured by an arc described by a radius extending from the center of the shaft to the inlet port, whereby motive fluid can be used expansively in the central chamber of the engine. 15th. The combination in an engine constructed and operating substantially as set forth, of a cylinder provided with inlet and eduction ports, passages from the central chamber to the end chambers, means for controlling the admission of motive fluid to and its eduction from the central chamber, and means operated by the pistons for exhausting the motive fluid from the end chambers. 16th. The combination in an engine, constructed and operating substantially as set forth, of a cylinder provided with an inlet and eduction ports, passages from the central chamber to the end chambers, means for controlling the admission of motive fluid to, and its eduction from the central chamber, and valves operated by the pistons each having open passages in a part of its length for exhausting motive fluid. 17th. The combination of an engine, constructed and operated substantially as described, of exhaust valves consisting of tubes secured to the pistons and notched or slotted at the ends, in substance as set forth. 18th. The combination in an engine, constructed and operating substantially as set forth, of a cylinder provided with inlet and eduction ports, said valve bearing against a boss in which the inlet and eduction ports are located. 19th. The combination in an engine, constructed substantially as set forth, of a side casting having bosses in which inlet and eduction ports are located, and a rotary valve bearing against the bosses. 20th. The combination in an engine constructed and operating substantially as set forth, of a cylinder provided with inlet and eduction ports, a rotary shaft, two pistons, two cranks, two pitmen, two passages from a central chamber to the end chambers, means for controlling the admission of motive fluid through the inlet port, a valve located within the central chamber which controls the eduction port, and valves operated by the pistons for exhausting the motive fluid from the end chamber, in substance as set forth. 22nd. The combination in an engine, constructed and operating

substantially as set forth, of a casting, a rotary shaft, a rotary valve in contact with the inner surface of the casting and operated by the shaft, inlet and exhaust ports through the casting controlled by the valve and passages from the central chamber to the end chambers, and means for exhausting motive fluid from the end chambers.

No. 66,071. Coal Removing Apparatus.
(Appareil à transporter le charbon.)

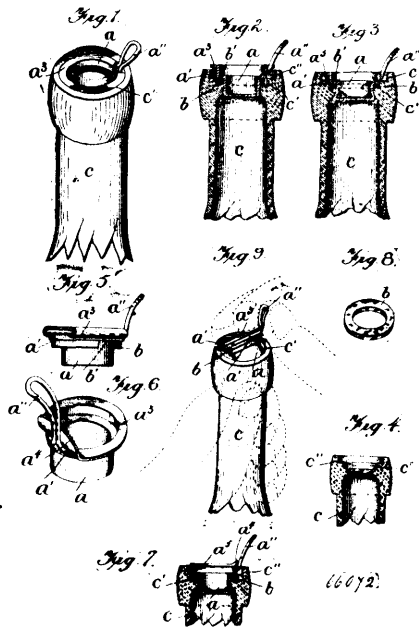


Owen James Conley, New York City, New York, U.S.A., 2nd February, 1900; 6 years. (Filed 23rd January, 1900.)

Claim.—1st. A vessel having a conveyer located beneath the load to be carried, in combination with means between the load and the conveyer for preventing the former from resting upon the latter, and additional means, in the nature of feeding and feed regulating drums for simultaneously checking and feeding the material laterally into or upon the conveyer, substantially as described. 2nd. A vessel having a conveyer located beneath the load to be carried, means between the load and the conveyer for preventing the former from resting upon the latter, in combination with hoppers adapted to convey the material of the load laterally to the conveyer, together with means located in each hopper beneath the means which supports the load and in the direct path of the inflowing material, said means being adapted to hold the material in check and prevent the too rapid advance thereof to the conveyer, substantially as described. 3rd. A vessel having a conveyer located beneath the load to be carried, a supporting roof located beneath the load and over the conveyer, hoppers beneath the lateral edges of said roof and sliding doors on the underside of said roof, in combination with means for causing said doors to close the hoppers, and feeding mechanism adapted to check the flow of the material and to simultaneously feed it forward, substantially as described. 4th. A vessel having a double inclined roof located beneath the load to be carried, a conveyer or belt located beneath said double inclined roof, hoppers adapted to convey the material of the load from the carrying compartment to the conveyer or belt, in combination with means located beneath the lateral edges of said double inclined roof and in the path of the inflowing material, said means being adapted to hold said material in check and prevent the too rapid advance thereof to the conveyer, substantially as described. 5th. A vessel having a conveyer located beneath the load, in combination with means, as hoppers, for directing the material of the load toward the conveyer, together with feeding and feed regulating drums adapted to simultaneously hold in check and deliver the material directly to the conveyer, substantially as described. 6th. A vessel having a conveyer, located beneath the load to be carried, in combination with means, as hoppers, for directing the material of the load toward the conveyer and feeding and feed regulating drums, one pair for each hopper, said drums being carried by continuously driven lines of shafting and provided with clutch mechanism for connecting them to and disconnecting them from said lines of shafting at will, substantially as described. 7th. A vessel provided with a compartment under a roof-like structure extending beneath the entire load, in combination with lateral or side openings in said compartment, together with pairs of drums for regulating the flow of the material of the load through the openings and holding it in check in accordance with the angle at which the material will flow by its own weight, one drum of each pair being provided with means for adjusting it with relation to the other, substantially as described. 8th. A vessel having a carrying compartment, a double inclined or roof-like structure located beneath the load to be carried, a conveyer or belt located beneath said roof-like structure, hoppers for delivering the material of the load from the carrying compartment to the conveyer, means located in said hoppers and beneath the lateral edges of the double or roof-like structure for holding the material in check, in combination with side ledges or pockets adapted to permanently hold a part of the material, in such manner that the upper surface of the material thus held will act as a frictional or sliding surface for the removable part of the load, to move or slide thereover, substantially as described. 9th. Means for handling coal, iron ore and similar materials, compris-

ing a conveyer located in a compartment beneath the entire load to be carried by a vessel, an elevator adapted to receive the material discharged from said conveyer and elevate the same, a second conveyer adapted to receive said material from the outer delivery end of the elevator, said second conveyer being secured to the deck of the vessel by pivotal means adapted to permit of the free or universal movement of the outer delivery end thereof in all directions, together with means carried by the vessel for elevating the free or delivery end of the second conveyer to a point above the delivery end of the elevator, additional means for moving the free end of said conveyer laterally, and clutch controlling mechanism for connecting both sets of such conveyer moving means operatively to a source of power, as a steam engine, located also on board of the vessel, substantially as described. 10th. A conveyer or elevator pivotally supported at one end, so that its free or delivery end may partake of vertical and lateral movements, in combination with a continuously driven shaft carrying three drums adapted to run loosely thereon, a rope running from one of said drums over a sheave supported at the top of a derrick or mast and thence to the free or delivery end of the conveyer, a rope running from each of the remaining drums over sheaves at the opposite ends of a cross-bar and thence to points on the opposite side of the delivery end of said conveyer, together with clutch and brake mechanism for connecting the drums to the shaft and controlling the movements of the conveyer, substantially as described. 11th. The combination of a vessel, a conveyer located in a compartment beneath the entire load carried by the vessel, an elevator adapted to receive the material discharged from said conveyer and elevate the same, a second conveyer adapted to receive said material from the upper or delivery end of the elevator, said second conveyer being pivotally secured to the deck of the vessel in such manner as to adapt its free or delivery end to be moved in any desired direction, together with means carried also by the vessel for elevating the free or delivery end of said second conveyer to a point above the delivery end of the elevator, whereby the material carried by the vessel may be elevated and unloaded at various heights and angles, substantially as described. 12th. The combination of a vessel, a conveyer located in a compartment beneath the entire load carried by the vessel, an elevator adapted to receive the material discharged from said conveyer and elevate the same, a second conveyer adapted to receive said material from the upper or delivery end of the elevator, said second conveyer being pivotally secured to the deck of the vessel in such manner as to adapt its free or delivery end to be moved in any desired direction and raised to a point above the delivery end of the elevator, a derrick secured also to the deck of the vessel, together with block and fall mechanism pivotally connecting the second conveyer with the top of the derrick, and means, as a winch, for elevating the free or delivery end of said second conveyer to any desired height, substantially as described.

No. 66,072. Bottle Seal. (Secau pour bouteilles.)



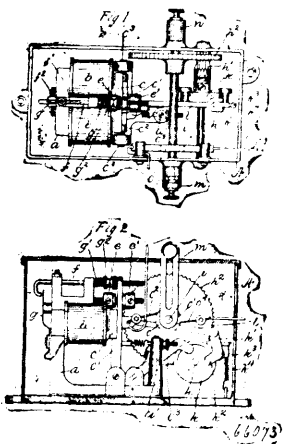
William Elisha Heath, Baltimore, Maryland, U.S.A., 2nd February, 1900; 6 years. (Filed 22nd January, 1900.)

Claim.—1st. A hollow cup shaped metal sealing plug formed of non-elastic, ductile metal, adapted to enter and be expanded within a bottle neck to seal the same, in combination with a projecting

approximately rigid thumb piece, and means whereby said thumb piece is confined to the upper part of the plug so that lateral pressure against said thumb piece will tilt the plug with the thumb piece, from the bottle neck, the plug and thumb piece together acting as a lever, substantially as described. 2nd. A metal bottle seal formed of non-elastic ductile metal adapted to be bent in to engagement with the bottle neck to seal the same, whereby the seal can be extracted only by prizing or tilting the same up from one side, the diametrically opposite portion of the seal serving as a fulcrum, said seal provided with an approximately rigid thumb piece projecting from the edge thereof and having an approximately non-elastic connection with the seal and forming a lever with the seal so that the seal and thumb piece tilt together in extracting the seal, substantially as described. 3rd. A metal sealing plug for bottles having an annular edge flange and provided with a projecting thumb piece having a portion permanently secured to said plug by said flange, said plug and thumb piece tilting from the bottle neck together, substantially as described. 4th. A bottle, in combination with a ductile metal plug expanded therein, said plug provided with an approximately non-elastic thumb piece projecting upwardly from its upper edge and having a non-elastic connection with the plug, whereby the thumb piece constitutes a lever when the plug is tilted from the bottle neck by pressure against the thumb piece, substantially as described. 5th. A ductile metal bottle seal having an annular edge flange, and a wire bent to fit the seal and confined thereto by said flange and formed with a lateral deflection constituting a thumb piece, whereby lateral pressure against the thumb piece tilts the seal and thumb piece together from the bottle neck, substantially as described. 6th. A metal seal having a ring shaped portion secured to the top portion of the seal and provided with an arm projecting above the seal, said arm being rigid with and permanently fixed to the seal and arranged to move with the plug in tilting or rocking the same bodily from the bottle neck, substantially as described. 7th. The hollow cup shaped bottle sealing plug formed of non-elastic thin ductile metal formed of non-elastic thin ductile metal formed to have its lower end expanded to lock the plug in and sealing the bottle neck, and a metal ring permanently affixed to the upper end of plug and provided with an upwardly projecting lever thumb piece, whereby the plug can be removed intact, substantially as described. 8th. A bottle having an annular recess in the edge surrounding its mouth, in combination with a hollow cup shaped metal plug said mouth of the bottle and sealing the same and provided with a rigid metal ring permanently secured around its upper portion and seated in said recess and formed with a rigid upwardly projecting lever arm, substantially as described. 9th. A cup shaped metal sealing plug having the top flange and provided with the metal surrounding ring permanently fixed beneath said flange, having the rigid lateral upward deflection through the plane of said flange, the flange displaced for the passage of said deflection, whereby the plug is forced from the bottle by lateral pressure, against said deflection which forms a thumb piece and is rigid with the plug during the extraction, substantially as described. 10th. A hollow cup shaped metal bottle sealing plug formed of non elastic ductile metal, said plug formed with an annular abrupt downwardly facing shoulder between its ends, and a flat packing washer having its flat face resting against said shoulder, said plug adapted for a bottle having an oppositely facing annular shoulder within the neck, whereby the plug on entering the bottle is limited in its downward movement, and said washer fits between the said opposing shoulders of the plug and bottle neck, and the plug can be expanded to lock itself in the bottle neck and compress said washer to form the liquid tight joint. 11th. A cup-shaped metal sealing plug formed with an upper cylindrical portion, and a reduced lower cylindrical portion, and a flat packing washer surrounding the plug at the junction between said portions, said plug adapted to enter, with said two cylindrical portions within the neck of a bottle formed a distance below its mouth with an upwardly facing annular shoulder on which the under flat face of said washer is adapted to rest, whereby the lower end of said plug on being expanded holds the flat washer compressed between the intermediate portion of the plug and said shoulder of the bottle neck, substantially as described. 12th. A bottle formed with an internal stop shoulder or ledge in its mouth or neck portion, in combination with a cup-shaped metal sealing plug expanded at its lower extremity in the neck and formed with a corresponding stop shoulder or ledge opposing said shoulder of the bottle, and sealing means said opposing edges, whereby the liquid within the bottle is kept from contact with said sealing means, substantially as described. 13th. A cup-shaped metal sealing plug having the annular downwardly facing stop shoulder or seat intermediate its ends, and a flat packing washer on the plug with its flat face against said seat, the lower end of the plug a distance below said washer adapted to be expanded within the bottle neck, substantially as described. 14th. A bottle having a stop shoulder or seat in the neck and below the mouth in combination with a hollow cup-shaped sealing plug in said neck and formed of non-elastic ductile metal, said plug between its ends having a downwardly facing stop shoulder opposing said seat of the neck and limiting the inward movement of the plug, sealing means compressed between said opposing shoulders of the plug and neck, the plug expanded against the inner face of the bottle neck, substantially as described. 15th. A bottle having an outwardly facing seat in its neck portion or mouth with an internally increased diameter below the seat, in combination with a cup-shaped

metal sealing plug in the bottle neck provided with a packing washer at an intermediate portion of its length and compressed between the plug and said seat, the lower portion of the plug below said washer expanded and locking the plug in the bottle neck, substantially as described. 16th. A bottle having the annular recess around the open top of its neck and the annular facing seat within its neck, the neck formed with an increased internal diameter below said seat in combination with the hollow cup-shaped ductile metal plug having the annular top enlargement provided with the rigid thumb piece fixed thereto and projecting above the bottle mouth, said enlargement located in said top recess of the bottle mouth, said plug having the intermediate flat shoulder opposing said seat within the bottle neck, a flat washer compressed between and having its flat faces engaging said seat and shoulder, the lower end of the plug projecting below the said washer being expanded into engagement with the inner face of the bottle neck at said portion of increased diameter, substantially as described.

No. 66,073. Thermostatic Regulators for Dampers, etc.
(*Régulateur thermostatique pour registres, etc.*)

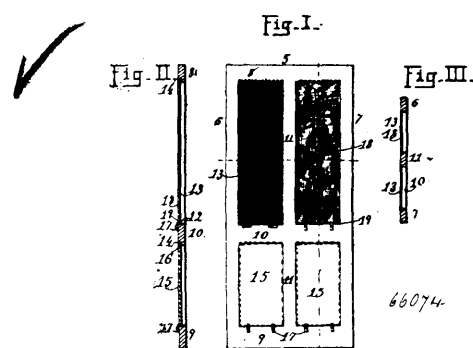


George F. Richardson, Hartford, Connecticut, U.S.A., 2nd February, 1900; 6 years. (Filed 19th January, 1900.)

Claim.—1st. In combination in a damper regulator, a thermostat adapted to close an electric circuit under the influence of heat or cold, an electrically driven motor, a driving shaft, mechanism intermediate of the motor and driving shaft adapted to impart a rotary movement to the latter, a driven shaft operatively connected with the driving shaft, and bearing crank arms adapted by their movement to operate the dampers of a heating or like apparatus, and means dependent upon the rotation of said driven shaft, adapted to break the electrical connections and stop the movement of the crank arms at predetermined points, substantially as set forth. 2nd. In combination in a damper regulator, a thermostat included in an electric circuit with a motor, and adapted under the influence of undue heat or cold to close a normally open circuit, a driven shaft bearing damper operating means and a circuit opening switch, a driving shaft operatively connected with the driven shaft and bearing a clutch drum, and a frictional clutch driving member operatively connected with the motor and adapted to impart to the clutch drum a rotary step by step movement, substantially as set forth. 3rd. In combination, in a thermostat regulator for the dampers of heating apparatus, a thermostat adapted by the influence of undue heat or cold to close a normally open electric circuit, a drum shaft bearing damper operating means and circuit opening switch, a driven shaft operatively connected with the driven shaft and bearing one member of a clutch mechanism, an electrically driven motor in circuit with the thermostat, a clutch member operatively connected with the motor and adapted by its movement to impart to the clutch drum a rotary movement and a second clutch mechanism adapted to permit a movement of the clutch drum in one direction only, substantially as set forth. 4th. In combination in a thermo-electrical damper regulator, means for operating the dampers of a heating or like apparatus through the medium of links, cords or the like, an electrically operated motor comprising an electro-magnet, its vibratory armature and circuit making and breaking mechanism, a driving shaft bearing a clutch drum, a clutch member operated by the vibratory armature and adapted during the forward movement of the latter to cramp against the surface of the clutch drum and upon a reverse movement to slide along said surfaces, and a clutch member for preventing a retrograde movement of the clutch drum, substantially as set forth. 5th. In combination in a damper regulator including a thermostat and mechanism adapted to be set in operation by the action of the thermostat, of a motor comprising an electro-magnet and its vibratory armature, and a circuit making and breaking device located in operative relation to the vibratory armature arm and adapted to have a movement independent of the

movement of the armature arm, substantially as set forth. 6th. In combination in a motor for operating a damper regulator, an electro-magnet, a vibratory armature, adapted to move between fixed but adjustable limits, and a circuit making and breaking device normally making contact of its two members under spring pressure and adapted to open the circuit a predetermined movement of the vibratory armature arm, substantially as set forth. 7th. In combination, the bar adapted to expand and contract by heat and cold, the pivoted electrode adapted to be vibrated by the expansion and contraction of said bar, the two electrodes adapted to respectively make contact with said pivoted electrode accordingly as it is vibrated one way or the other, the screw threaded pivot bar carrying said pivoted electrode, and the operating nut carried on and adapted to move said pivot bar, substantially as set forth. 8th. In combination, the bar adapted to expand and contract by heat and cold, the pivoted electrode adapted to be vibrated by the expansion and contraction of said bar, the two electrodes adapted to respectively make contact with said pivoted electrode accordingly as it is vibrated one way or the other, the screw threaded pivot bar carrying said pivoted electrode, the split nut carried by said pivot bar and itself exteriorly threaded, and the interiorly threaded case carrying said nut, substantially as set forth. 9th. In combination, the bar adapted to expand and contract by heat and cold, the pivoted electrode adapted to be vibrated by the expansion and contraction of said bar, the two electrodes adapted to respectively make contact with said pivoted electrode accordingly as it is vibrated one way or the other, the screw threaded pivot bar carrying said pivoted electrode, the split nut carried by said pivot bar and itself exteriorly threaded, the interiorly threaded case carrying said nut, and the index finger carried by said nut, substantially as set forth.

No. 66,074. Screen Door. (*Porte-écran.*)



William H. Rogers, Watertown, New York, U.S.A., 2nd February, 1900; 6 years. (Filed 20th January, 1900.)

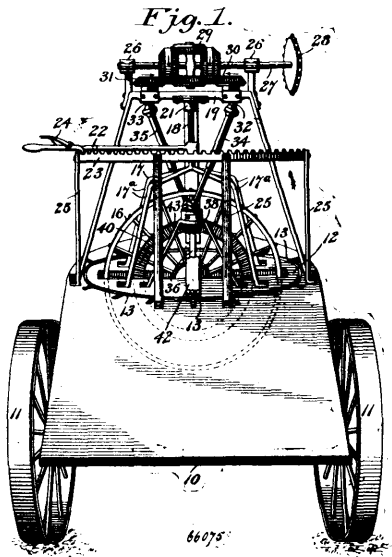
Claim.—The combination of a door frame having one or more panel openings and rabbeted around the openings to a depth sufficient to receive a wooden panel, also having a groove extending from one side of the rabbet into the frame in the plane of the door, a screen of open material secured to the frame at the bottom of the rabbet and covering the panel opening, a glass panel fitted removably into the rabbet and grooved opening, buttons on the door frame at the side of each opening opposite to the said groove, and a removable strip between the glass panel and buttons, substantially as described.

No. 66,875. Traction Engine. (*Machine à traction.*)

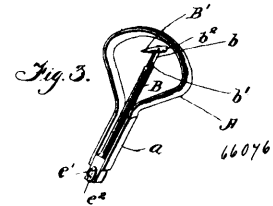
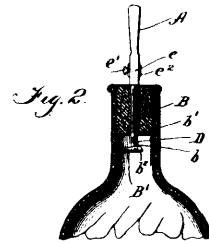
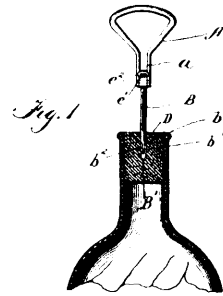
Riley Knight and Ira W. Knight, both of Moscow, Idaho, U.S.A., 2nd February, 1900; 6 years. (Filed 22nd January, 1900.)

Claim.—1st. The combination with a vehicle having a supporting frame, of a fixed yoke or support mounted on said frame, a turn table mounted for revoluble movement in an opening in said frame, a steering wheel carried by the turn table, a spider fixed to the turn table and having a central spindle stopped at its upper end in a bearing on said yoke or support, said spindle being arranged directly over the steering wheel, and means for actuating the turn table to vary the position of the steering wheel, substantially as specified. 2nd. The combination with a vehicle wheel having a supporting frame, of a fixed yoke or support mounted on said frame, a turn table mounted for revoluble movement in an opening in said frame, anti-friction bearings arranged between the turn table and the frame, a steering wheel carried by the turn table, a spider fixed to the turn table and having a central spindle, a ball and socket connection between the upper end of the spindle and the yoke or support, and means for communicating rotary motion to the turn table, substantially as specified. 3rd. The combination with a vehicle having a frame and supporting wheels, of a fixed yoke supported by said frame, a turn table mounted for revoluble movement in an opening in said frame, a spider fixed to the turn table and having a central spindle stepped at its upper end in a bearing on said yoke, a steering wheel mounted upon the turn table, a

steering lever fixed to the spindle of said yoke, and a rack traversed by the steering lever, said lever having a hand latch,



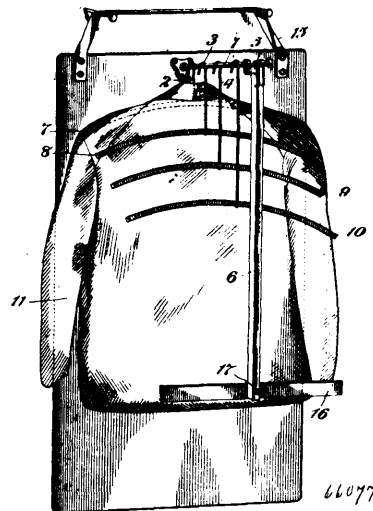
shoulders, a head pivotally secured to said reduced extension and having a bevelled end adapted to engage said shoulder, and



a spring secured to said rod and adapted to engage said head, substantially as described.

No. 66,077. Garment Hanger. (Porte-vêtements.)

Fig. 1



substantially as specified. 4th. The combination with a vehicle having a frame and supporting wheels, of a turn table, a steering wheel mounted upon the turn table, means for actuating the turn table to angularly vary the position of the steering wheel with relation to the length of the vehicle, driving mechanism mounted upon the frame, and flexible connections between the driving mechanism and the steering wheel for communicating revolvable movement to the latter, substantially as specified. 5th. The combination with a vehicle having a frame and supporting wheels, of a turn table, a steering wheel mounted upon the turn table, means for actuating the turn table to angularly vary the position of the steering wheel with relation to the length of the vehicle, driving mechanism mounted upon the frame, and flexible connections, including tumbling rods, between the driving mechanism and said steering wheel, for communicating rotary motion to the latter, substantially as specified. 6th. The combination with a vehicle having a frame and supporting wheels, or a turn table, a steering wheel mounted upon the turn table and having side gears, means for angularly varying the position of the turn table with relation to the length of the vehicle, driving mechanism including driving spindles arranged at opposite sides of the axis of movement of the turntable, driven pinions mounted upon the turn table and meshing with said side gears of the steering wheel, and tumbling rods connecting said driving spindles with the driven pinions, substantially as specified. 7th. The combination with a vehicle having a frame and supporting wheels, of a turn table, a steering wheel mounted upon the turntable and having side gears, means for angularly varying the position of the turn table with relation to the length of the vehicle, driving mechanism including driving spindles arranged at opposite sides of the axis of movement of the turn table, driven pinions mounted upon the turn table and meshing with said side gears of the steering wheel, and extensible tumbling rods connecting said driving spindles with the driven pinions, substantially as specified. 8th. The combination with a vehicle having a frame and supporting wheels, of a turn table, a steering wheel mounted upon the turn table and having side gears, means for angularly varying the position of the turntable with relation to the length of the vehicle, driving mechanism, consisting of a driving shaft, driving spindles, and differential gearing for communicating motion from the driving shaft to the driving spindles, driven pinions mounted upon the turn table and meshing with said side gears on the steering wheel, and flexible connections between the driving spindles and the driven pinions, substantially as specified.

No. 66,076. Cork Puller. (Tire-bouchon.)

Adolphe Cordeau, Ste. Madeleine, Quebec, Canada, 2nd February, 1900; 6 years. (Filed 18th January, 1900.)

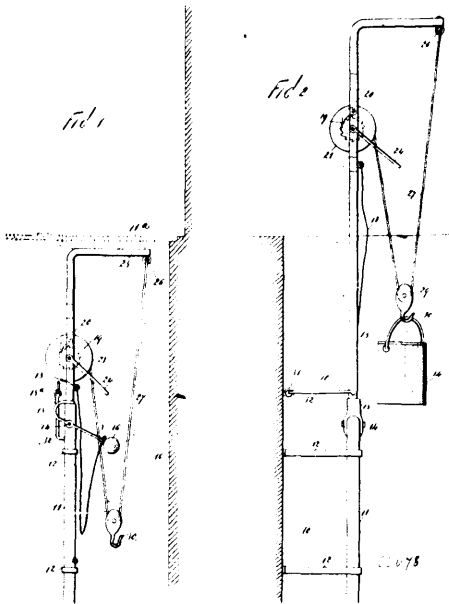
Claim.—1st. A cork puller, comprising a handle, a rod pivotally secured to said handle, and a head pivotally secured to said rod and adapted to enter and engage the cork, substantially as described. 2nd. A cork puller, comprising a handle, a rod pivotally secured thereto, a reduced extension formed on said rod having inclined

Seymour W. Bonsall, New York City, New York, U.S.A., 2nd February, 1900; 6 years. (Filed 18th January, 1900.)

Claim.—1st. A hanging and packing device for garments comprising at least one horizontal rod, sliding frame suspended on said rod, and a retaining bar also suspended on said rod by a sliding socket capable of gripping the rod when the bar is swung outward. 2nd. A hanging and packing device for garments, comprising the elements named in claim 1, and wherein each frame is longer than the one behind it. 3rd. A hanging and packing device for garments, comprising the elements named in claim one, supported upon a movable

base. 4th. A hanging and packing device for garments, comprising the elements named in claim 1, and wherein the retaining bar is provided with a pivoted cross piece at its extremity, said retaining bar being capable of swinging laterally upon its supporting rod.

No. 66,078. Hoisting Apparatus. (Ascenseur.)



Frederick E. Herzog and Frank L. Martin, Brooklyn, New York, U.S.A., 2nd February, 1900; 6 years. (Filed 22nd January, 1900.)

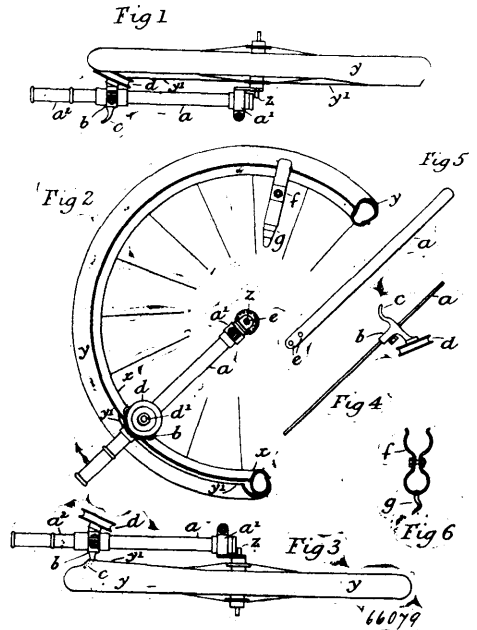
Claim.—1st. In an apparatus of the class described, a support consisting of two telescoping members, one of which is provided with a grooved portion and the other with a pivoted catch provided at one end with a bifurcated portion which engages said grooved portion, and at the other end with a weight and a cord connected with the weighted end of said catch and with the grooved member of said support. 2nd. The herein described hoisting apparatus, comprising an extensible support consisting of two members, one of which is provided at one side with a pulley, and with a projecting and horizontally deflected end, a rope or cable connected with said deflected end and said pulley and with which the article to be hoisted is connected, the vertical plane of the axle of said pulley being at an acute angle to the vertical plane of said horizontal end of the member, means for preventing rotary relative movement of said support members, and means for operating said pulley, substantially as shown and described. 3rd. An apparatus of the class described, a support provided with a projecting and horizontally deflected portion, a pulley connected with one side of said support, a rope or cable connected with said pulley and with said deflected portion, the relative construction and arrangement of parts, being such that the vertical plane of the axle of said pulley is at an acute angle to the vertical plane of said horizontal end of the support, substantially as shown and described. 4th. In an apparatus of the class described, a support consisting of two telescoping members, one of which is provided with a grooved portion, and the other with a pivoted weighted catch provided at one end with a bifurcated portion which engages said grooved portion, and connected with said grooved member by means of flexible operating means, substantially as shown and described.

No. 66,079. Device for Placing and Removing Pneumatic Tires. (Appareil pour placer et culver les bandages pneumatiques.)

Albert Clayton Palmer, Euroa, Victoria, Australia, 2nd February, 1900; 6 years. (Filed 10th November, 1899.)

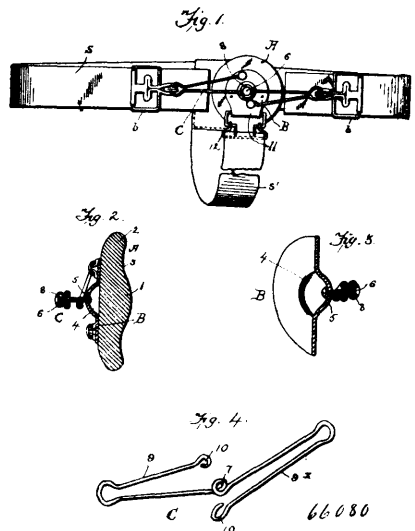
Claim.—1st. In an appliance for manipulating pneumatic tires of wheels, the combination with (and near one end of) the stem of an inflater, or other rod, of an attachment or part adapted to be attached, or pivoted to or on the axle of the wheel, and (at an adjustable distance therefrom on the said stem or rod) a sleeve or attachment having a projection consisting of any suitably bent or hooked plate for the removal of the external tire or cover substantially as and for the purposes set forth. 2nd. In an appliance for manipulating pneumatic tires of wheels, the combination with (and near one end of) the stem of an inflater, or other rod, of an attachment or part adapted to be attached or pivoted to or on the axle of the wheel, and (at an adjustable distance therefrom on the said stem or rod) a sleeve or attachment having a flanged or grooved

wheel for the replacing of the external tire or cover, substantially as and for the purpose set forth. 3rd. In an appliance for manipulat-



ing pneumatic tires of wheels, the combination with (and near one end of) the stem of an inflater, or other rod, of an attachment or part adapted to be attached or pivoted to or on the axle of the wheel, and (at an adjustable distance therefrom on the said stem or rod), a sleeve or attachment having on one side a projection consisting of any suitably bent or hooked plate, and on the side opposite said projection, a flanged or grooved wheel, all as and for the purposes set forth. 4th. The combination with a rod or inflater stem *a*, of the adjustable sleeve or attachment *b*, having the plate or arm *c* on one side, and the obliquely set grooved wheel *d*, on the other side, substantially as and for the purposes set forth. 5th. The combination with a rod or inflater stem *a*, of an attachment *a*¹ having an eye or eyes *e* (adapted to fit over the spindle *z* of a wheel) and a sleeve or attachment *b*, having the plate *c* at one side and the grooved wheel *d* at the other, the distance of the sleeve or attachment *b* from the eye or eyes *e* being adjustable, the said rod or stem having also a part or end *a*², (to be grasped by the operator) more distant from the eye or eyes *e* than the said attachment *b*, so as to enable an external tire or cover to be removed and replaced, substantially as set forth.

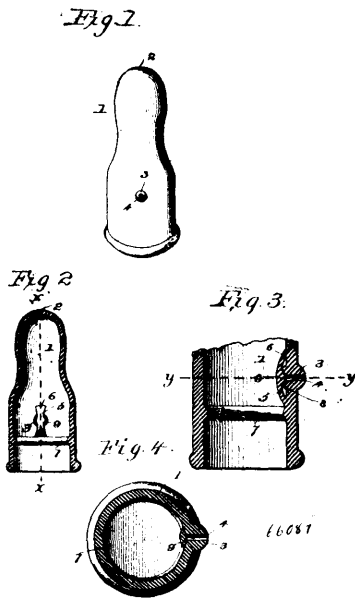
No. 66,080. Truss. (Bandage herniaire.)



William H. Harrington, Salamanca, New York, U.S.A., 2nd February, 1900; 6 years. (Filed 28th October, 1899.)

Claim.—1st. In a truss, the combination of a pad and a pressure spring consisting of a single piece of wire formed with an eye in the middle of its longer or main bar, and having its opposite ends bent backward toward the main bar, and having eyes formed in its opposite ends adapted to bear on the truss pad a pivotal fastening passed through the eye of the main bar forming a fulcrum for the spring, whereby a play or movement is given by said pivotal fastening to the spring to accommodate the movements of the pad and connection on the movements of the body. 2nd. A truss pad comprising a suitable pad, a spring consisting of a single piece of wire formed with an eye in its middle, and having the ends turned back on opposite sides of the main bar and adapted to bear on the outer face of the pad, and a pivot pin through the middle eye of the spring and fastening it to the pad, substantially as described. 3rd. A truss pad, comprising a pad, a pivotal fastening pin secured in the pad, a spring consisting of a single wire pivotally secured to and supported on the pin and having its ends turned back upon itself and adapted to bear on the face of the pad on opposite sides of the pivotal support. 4th. A truss comprising a pad, a plate secured to the outer face of the pad, a pivotal pin loosely secured in the plate, a spring pivotally supported on said pin, and consisting of a single piece of wire having its ends bent back to lie on opposite sides of the main bar and to bear on the face of the said plate, a buckle secured to the pad, a body band secured to the respective outer ends of the spring and a crotch band secured to the body band and adapted to be adjustably connected to the buckle on the pad.

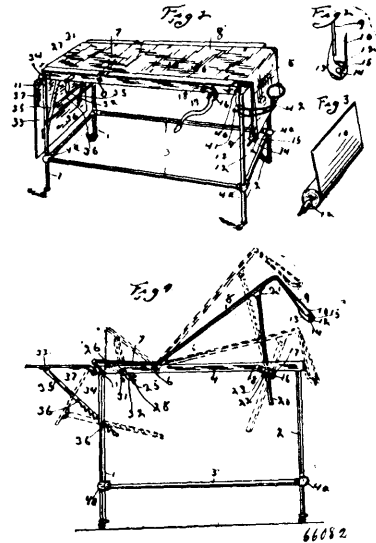
No. 66,081. Nursing Bottle Nipple. (Biberon.)



William Robert Coulbourn and Jerome James Lankford, both of Roanoke, Virginia, U.S.A., 2nd February, 1900; 6 years. (Filed 17th March, 1899.)

Claim.—1st. As a new article of manufacture, a nursing bottle nipple having one of its walls thickened transversely to form the protruding enlargement, a transverse air passage extending through said enlargement, and a flap valve carried by a flexible strip which is united at both ends to the nipple and forms an integral part of the same, substantially as described. 2nd. A nursing bottle nipple having a transverse air passage, a flexible strip united at both ends to the nipple and forming an integral part of the same, and a flap valve carried by said flexible strip at a point intermediate of its length and normally seated by the tension of said flexible strip over the inner end of the air passage, substantially as and for the purpose described. 3rd. A nursing bottle nipple provided, at an intermediate point of its length, with a transverse vent opening, a valve strip united at both ends to the nipple and provided with a valve adapted to be normally pressed, by the tension of the valve strip, over the vent opening, and an annular bead or flange projecting inwardly beyond the inner surface of said nipple and situated between the open mouth thereof and one point of union of the valve strip with the nipple, substantially as described. 4th. A nipple for nursing bottles, having a vent or air passage in the side thereof, said vent having thickened or enlarged walls, a concave valve seat at the inner end thereof, and a flap valve formed integral with the nipple having a convex enlargement fitting the concave valve seat, substantially as and for the purpose set forth.

No. 66,082. Surgical Table. (Table de chirurgie.)



Hiram G. Bowers, Canton, Ohio, U.S.A., 2nd February, 1900; 6 years. (Filed 19th April, 1899.)

Claim.—1st. In a surgical table, a frame provided with a top, rollers journaled to the frame and to the downwardly extending portion of the top, the downwardly extending portion and a covering connected to the rollers and movable longitudinally upon the top of the table, substantially as and for the purpose specified. 2nd. In a surgical table, the combination of a table frame, table sections hinged together, one of said sections provided with a downwardly extending portion, a roller carried by said downwardly extending portion, a roller located at the opposite end of the table, and below the hinged section 7, and the movable top connected to the rollers, substantially as and for the purpose specified. 3rd. In a surgical table, the combination of a hinged top formed in sections, a supporting frame, rollers journaled to the frame and to one of the hinged top sections, flexible fabric connected to the rollers and resting upon the hinged table top sections, and movable longitudinally upon the hinged sections, substantially as and for the purpose specified. 4th. In a surgical table, the combination of supporting frame, parallel bars 4, a shaft journaled to said bars and provided with a pinion, guide bars loosely mounted upon the shaft carrying the pinion, a rack bar pivotally connected to one of the hinged table sections and meshing with the pinion, and one of said table sections provided with a downwardly extending portion, a flexible cover resting upon the hinged sections, rollers journaled to the parallel bars 4, and to the downwardly extending portion, substantially as and for the purpose specified. 5th. The combination of a table frame, a flexible cover located upon hinged sections of the table and following the movements of the hinged sections and movable longitudinally upon said hinged sections and means for moving the hinged sections and the flexible cover, substantially as and for the purpose specified. 6th. The combination of a frame, a table top formed in sections and the sections and the sections hinged together, a flexible movable cover located upon the top of the table sections, and movable longitudinally thereon and provided with the loops 44, substantially as and for the purpose specified.

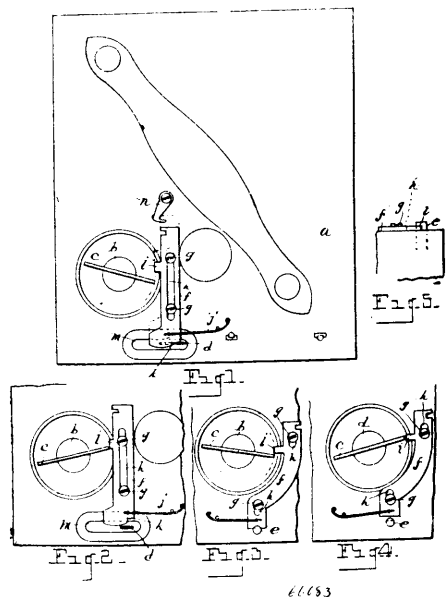
No. 65,083. Photographic Apparatus Lock.

(*Serrure d'appareil photographique.*)

Edward G. Goodell and William B. Haskins, both of Detroit, Michigan, U.S.A., 2nd February, 1900; 6 years. (Filed 17th May, 1899.)

Claim.—1st. In a photographic apparatus, the combination with shutter mechanism, of means for actuating a film roll, and a locking device to prevent the movement of the shutter, said locking device actuated by the means for actuating the film roll, substantially as described. 2nd. In a photographic apparatus, the combination with shutter actuating mechanism, of a roller for actuating a film roll, and a locking device actuated by said roller to prevent the movement of the shutter actuating machine, substantially as described. 3rd. In a photographic apparatus, the combination with shutter actuating mechanism, of a roller for actuating a film roll and a locking dog to project into the path of the shutter actuating mechanism, said dog actuated by the movement of said roller, substantially as described. 4th. In a photographic apparatus, the combination with shutter actuating mechanism, of a roller for actuating a film roll, a locking slide to project into the path of the

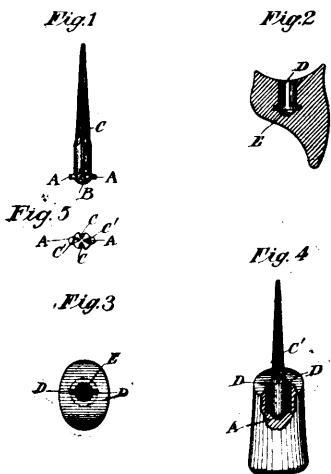
shutter actuating mechanism, and means to restore said slide to normally locked position, said slide actuated by the movement of



66083

said roller, substantially as described. 5th. In a photographic apparatus, the combination with shutter mechanism, means for actuating a film roller, a locking device to prevent a movement of the shutter, and means to hold the locking device out of locked position, said locking device actuated by the means for actuating the film roller, substantially as described. 6th. In a photographic apparatus, the combination with a shutter actuating device, of a roller for actuating the film roll, and a reciprocatory slide engaged upon said apparatus and arranged to project into the path of the shutter actuating mechanism, whereby said slide will be actuated by the movement of said roller, substantially as described.

No. 66,084. Tooth Crown. (Dent artificielle.)

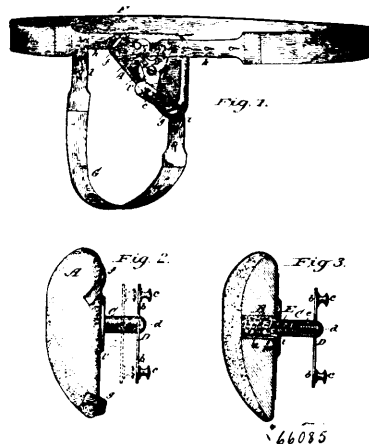


66084

James Neil, jr., New York City, New York, U.S.A., 2nd February, 1900; 6 years. (Filed 1st September, 1899.)

Claim.—1st. In a tooth crown, the combination with a pin having lugs at the end, of a tooth crown having a cavity to receive said pin and permit it to be locked to the crown by turning. 2nd. A grooved pin, with lugs at the end, which is round between the lugs, combined with a cavity in the artificial tooth crown slotted at the sides and rounded at the bottom, along which the lugs slip and lock by turning, thereby enabling the artificial tooth to be ground to fit the natural root without grinding the pin, and the crown to be fastened to the root without the aid of a pin baked in the crown.

No. 66,085. Truss. (Bandage herniaire.)

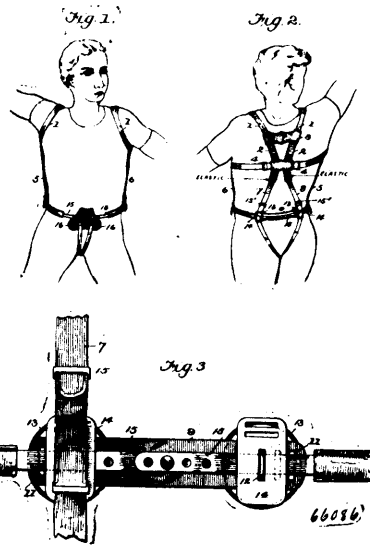


66085

Nels P. rson, Platville, Wisconsin, U.S.A., 2nd February, 1900; 6 years. (Filed 5th September, 1899.)

Claim.—A truss, consisting of a suitable harness, and a pad connecting therewith, a cylinder within the pad and having a guide pin projecting outwardly from its bottom, combined with a coiled spring in the cylinder, a chambered plunger adapted to work in the cylinder and having secured to its outer end, attaching means, and to its inner end a shoulder to prevent this end from being withdrawn from the cylinder, and a cap plate secured to the outer side of the pad, and catching over the shoulder or plunger, substantially as shown.

No. 66,086. Body Trainer and Abdominal Support. (Support abdominal.)



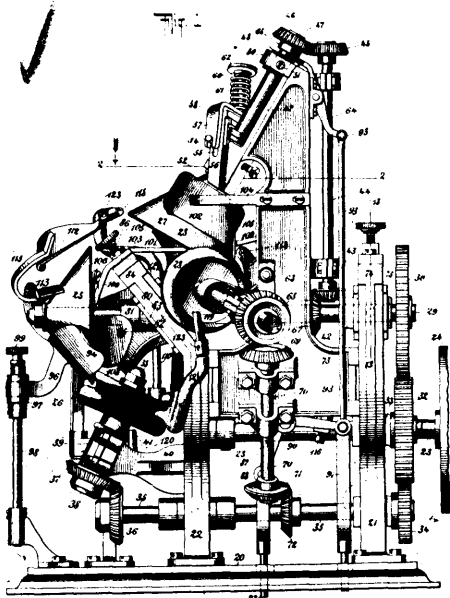
66086

John Harvey Kellogg, Battle Creek, Michigan, U.S.A., 2nd February, 1900; 6 years. (Filed 21st September, 1899.)

Claim.—1st. In a body trainer and abdominal supporter, the combination with shoulder braces, back and side straps depending therefrom and adjustably attached to the abdominal frame, such abdominal frame comprising a back plate having a series of vertical slots near either end, right and left spring arms adjustably secured to said back plate, the free ends of said arms being formed so as to normally press inward and upward and support the lower organs of the body pads carried by said arms, and back pads adjustably carried by the back plate in order that the device may be adapted to the varying shapes of the human body, and straps which pass between the wearer's limbs and the abdominal supporting pad 16 supported in position by the spring arms, as and for the purposes set forth. 2nd. In a body trainer, shoulder braces having front and back depending strops adjustably attached to the abdominal frame, whereby the shoulders may be drawn back to any degree desired by adjusting the back straps, the straps serving to support said

abdominal frame in position, back pads and abdominal pads secured to the abdominal frame, whereby a round-shouldered or flat-chested condition can be corrected, and a prolapsed state of the bowels, liver and lower organs treated at the same time, said abdominal frame comprising a back plate provided with a central aperture and a series of vertical slots formed near either end, such slots being adapted to receive the staples of the back pads, oblong slotted plates arranged to fit over said staples and carrying buckles to which the upper shoulder and lower perineal straps are attached, right and left spring supporting arms with series of circular apertures on their rear ends, said arms being passed through the staples of the back pads, the apertures in said arms registering with the central aperture of the back plate, a set screw adapted to pass through said registering apertures and to be secured in a threaded hub formed on the back plate, abdominal pads carried by the free ends of the spring arms and means for easily and adjustably attaching said pads to the spring arms, perineal straps attached to the rear of the abdominal frame and arranged to pass between the wearer's limbs and to be secured to the abdominal pads to retain the same in position, all arranged, substantially as and for the purposes set forth.

No. 66,087. Machine for Folding and Shaping Turn-down Collars. (*Appareil à plier et donner la forme aux collets rabattus.*)



William Adolph Zeidler and Gilbert A. Clark and Lewis H. Hopps, all of New York City, New York, U.S.A., 5th February, 1900; 6 years. (Filed 24th January, 1900.)

Claim.—1st. In a collar folding and shaping machine, a conical disc, and a grooved disc co-operating with said conical disc and receiving within its groove the edge of said conical disc, with means for rotating the said discs in the same direction, substantially as set forth. 2nd. In a collar folding and shaping machine, a conical disc, and a grooved disc co-operating with said conical disc and receiving within its groove the edge of said conical disc, combined with means for rotating said discs simultaneously in the same direction, and mechanism for separating said discs to a greater or less extent without stopping the rotation of either, substantially as set forth. 3rd. In a collar folding and shaping machine, a conical disc, a grooved disc co-operating therewith and receiving within its groove the edge of said conical disc, and guides adjacent to the inner and outer walls of the conical disc for compelling the folded portions of the collar to travel on the inner and outer walls of the conical disc, substantially as set forth. 4th. In a collar folding and shaping machine, a conical disc, a grooved disc co-operating with said conical disc and receiving within its groove the edge of the said conical disc, means for rotating said disc simultaneously and in the same direction, guides at the inner and outer walls of the said conical disc for causing the folded portions of the collar to travel on the inner and outer surfaces of said conical disc, and means for positively varying the distance between the co-operation portions of said discs, thereby adapting the said discs to collars varying in size or thickness, substantially as set forth. 5th. In a collar folding and shaping machine, the conical disc and its co-operating grooved disc to receive the collar from the operator, combined with the additional conical disc and its co-operating grooved disc to receive the collar

after the latter has passed between the first pair of discs, with means for rotating said discs, substantially as set forth. 6th. In a collar folding and shaping machine, the conical disc and its co-operating grooved disc to receive the collar from the operator, combined with the additional conical disc and its co-operating grooved disc to receive the collar after the same has passed between the first pair of discs, the said additional conical disc being smaller in diameter than the first conical disc, substantially as set forth. 7th. In a collar folding and shaping machine, the conical disc, and co-operating grooved disc to receive the collar from the operator, combined with the additional conical disc and co-operating grooved disc to receive the collar from the first mentioned pair of discs, means for rotating said discs, and guides for causing the folded portions of the collar to travel along the inner and outer surfaces of said conical discs, substantially as set forth. 8th. In a collar folding and shaping machine, the conical disc and co-operating grooved disc to receive the collar from the operator, combined with the additional conical disc and co-operating grooved disc to receive the collar from the first mentioned pair of discs, means for rotating said discs, guides for causing the folded portions of the collar to travel along the inner and outer surfaces of said conical discs, and a guide for automatically directing the collar from the first pair of discs to the second pair of discs, substantially as set forth. 9th. In a collar folding and shaping machine, the conical disc with its co-operating grooved disc to receive the collar from the operator, and the second conical disc with its co-operating grooved disc to receive the collar from the first pair of discs, the shafts of said conical discs being at an angle to one another, combined with guide plates at the inner and outer sides of said conical discs to compel the folded portions of the collar to follow said sides, a guide extending from the edge of one conical disc to the edge of the other conical disc upon which the collar may travel and be directed from the first to the second conical disc, and an exterior guide following the line of the guide connecting the conical discs and passing from the exterior side of one conical disc to the exterior side of the other conical disc, substantially as set forth. 10th. In a machine for shaping and folding collars, a conical disc and a grooved roller co-operating therewith and receiving within its groove the edge of the said conical disc, the said conical disc having tapered walls converging toward the apex of the disc, substantially as set forth. 11th. In a collar folding and shaping machine, a conical disc and a grooved disc co-operating therewith and receiving within its groove the edge of said conical disc, means for heating said discs, and inner and outer guides for compelling the folded sides of the collar to travel on inner and outer surfaces of the conical disc, substantially as set forth.

No. 66,088. Medicinal Compound.

(*Composition medicinale.*)

Fridolin Vanchestein, assignee of Amelia Vanchestein, St. Michel de Napierville, Quebec, Canada, 5th February, 1900; 6 years. (Filed 8th November, 1899.)

Claim.—1st. The herein described medicinal compound, consisting of pure pine tar, lard and beeswax. 2nd. The herein described medicinal compound, consisting of pure pine tar 6 lbs., lard 6 lbs., and beeswax 5 lbs., substantially as set forth.

No. 66,089. Explosive. (*Explosif.*)

Edward B. Jennings and Frederick D. H. Topken, both of Portland, Oregon, assignees of Sherman Clark, Roseburg, Oregon, U.S.A., 5th February, 1900; 6 years. (Filed 8th May, 1899.)

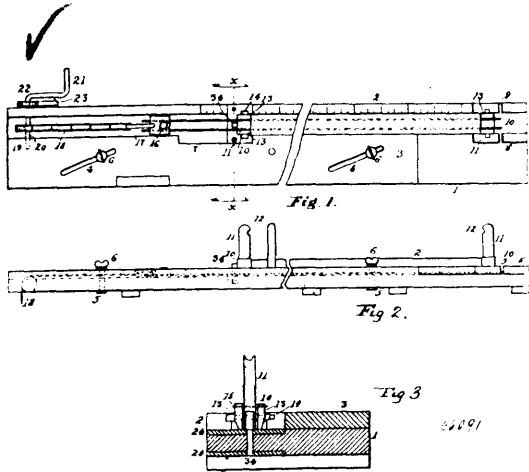
Claim.—An improved explosive compound made of the mixture of crude nitrate of soda, sulphide or metallic animony, charcoal powder and commercial sulphur, substantially as set forth.

No. 66,090. Explosive. (*Explosif.*)

Thomas Hussey Kelley, George W. Bell and Robert Newby Kirk, all of Sydney, assignees of Alexander Fraser, Yelta, Harris Park, near Parramatta, all in New South Wales, Australia, 5th February, 1900; 6 years. (Filed 13th May, 1899.)

Claim.—1st. An explosive compound, consisting of nitro-glycerine containing spirit of eucalyptus leaves, mixed with nitrate of potash, calcined leaves and cork dust, substantially as herein described and explained. 2nd. The manufacture of an explosive compound by treating green gum leaves with sulphuric acid and with nitric acid and calcining the washed pulpy remnant, and then adding same with other ingredients to nitro-glycerine manufactured from the said acids, substantially as herein described and explained. 3rd. The manufacture of an explosive compound in the manner and of the ingredients in about the proportions set forth, substantially as herein described and explained.

No. 66,091. Apparatus for Setting Rubber Tires. (Appareil pour placer les bandages de caoutchouc.)



Frederick Stewart, New York, City, New York, assignee of C. H. Wheeler and F. W. Kremer, Wadsworth, Ohio, all in the U.S.A., 5th February, 1900; 6 years. (Filed 26th July, 1899.)

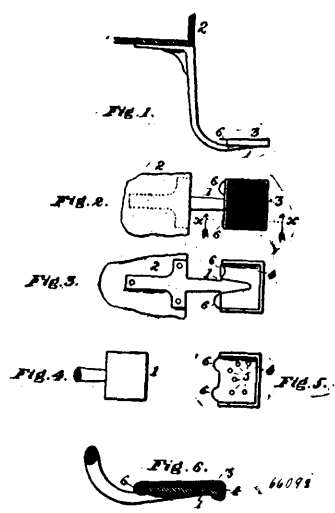
Claim.—1st. In a rubber tire setting machine, a table having a fixed and a movable ledge, an abutment pin, a windlass and chain and devices for retaining said windlass, in combination with clamps adapted to retain the ends of the wires in the tire, and a clamp connected with said chain arranged to draw said wires lengthwise in said tire, substantially as shown and described. 2nd. In a rubber tire setting machine, a table having a movable ledge, an abutment pin, a windlass and chain, devices for retaining said windlass, clamps to retain the ends of the wires in the tires, and a clamp connected with said chain to draw said wires in the tire, of a graduated fixed ledge and mitre grooves to form a tool guide to cut said tire, substantially as shown and described. 3rd. The combination with a table having a movable ledge, a fixed ledge, an abutment pin a windlass and chain and a clamp to hold the wires of a rubber tire, of clamps consisting of a central post, notched to form a hold for compressing devices, two side jaws, a guide pin to regulate the movement of said side jaws and a bolt to draw them together, substantially as shown and described. 4th. An improved clamp for rubber tire setting machines, consisting of a central post longer than the side jaws and notched to form a hold for a compressing device, and two side jaws in combination with a guide pin and a bolt to compress said jaws, substantially as shown and described. 5th. In rubber tire setting machines, the combination with clamps with projecting ends to hold the ends of the wire with the rubber compressed between them, of a yoke provided with two sets of oppositely disposed screws, one set thereof being arranged outwardly on the ends of said clamp ends, and the others arranged to push them inwardly below said ends, substantially as shown and described. 6th. An improved machine for drawing together the ends of wires in a rubber tire consisting of vertical ways, a slide mounted on said ways, yoke pivotally connected with said slide, set screws to retain said slide and yoke, oppositely disposed screws arranged to draw outward the ends of clamps holding said wires and oppositely disposed screws to press them together, substantially as shown and described. 7th. An improved apparatus for extending the rubber of an elastic tire upon embedded wires fastened in tension about the wheel, consisting of wires placed under said tire with projecting ends, a clamp to receive the ends of said wires, a lever to engage and draw said clamp, a fulcrum for said lever, and a roller to engage said tire adjacent to said wire, substantially as shown and described.

No. 66,092. Vehicle Step. (Marche de voiture.)

Frederick Stewart, New York City, New York, assignee of Charles H. Wheeler, Akron, and F. W. Kremer, Wadsworth, both of Ohio, all in the U.S.A., 5th February, 1900; 6 years. (Filed 26th July, 1899.)

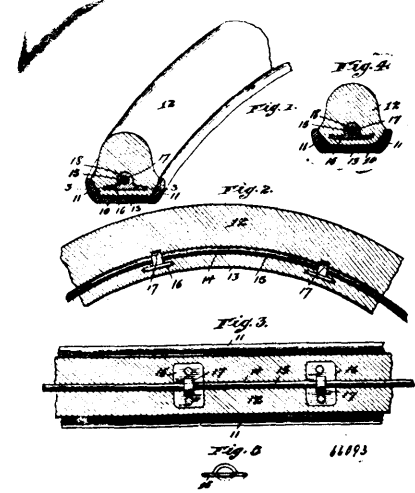
Claim.—1st. An improved cushion for buggy steps, consisting of a sheet metal foundation plate having the sides and front bent to form channels for the edges of the steps and malleable tongues to bend over the back edge, in combination with an adhering coating of rubber to cover the face of said plate, substantially as shown and described. 2nd. An improved cushion for buggy steps, consisting of a perforated sheet metal foundation plate having the sides and

front bent to form channels for the edges of the step, malleable tongues to bend over the back edge and an adhering coating of



rubber to cover the top and edges of said plate, substantially as described.

No. 66,093. Vehicle Tire. (Bandage de voiture.)



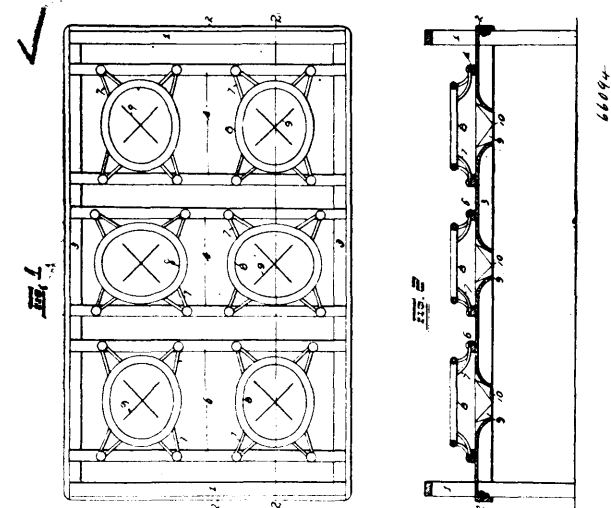
Frederick Stewart, New York City, New York, assignee of C. H. Wheeler, Akron, Ohio, U.S.A., 5th February, 1900; 6 years. (Filed 26th July, 1899.)

Claim.—1st. The combination, with a channelled metallic rim, of a rubber tire fitting within said rim and provided with an aperture or passage throughout its interior, independent retaining plates, each having a broad bearing surface, said retaining plates being embedded in said rubber tire at separated points or intervals with their bearing surfaces substantially parallel to the bottom of the rim, and said plates being provided with eyes or loops, and a retaining wire passing through the aperture or passage in the rubber tire and through the eyes or loops of the retaining plates, substantially as described. 2nd. The combination, with a channelled metallic rim, of a rubber tire fitting within said rim and provided with a central aperture or passage throughout its interior, independent retaining plates, each having a broad bearing surface, said retaining plates being embedded in said rubber tire at separated points or intervals with their bearing surfaces substantially parallel to the bottom of the rim, and each plate being provided with a central eye or loop, and a retaining wire passing through the aperture or passage in the rubber tire and through the eyes or loops of the retaining plates, substantially as described. 3rd. The combination, with a channelled metallic rim, of a rubber tire fitting within said rim and provided with a passage or aperture throughout its interior, independent retaining plates, each having a broad bearing surface, said retaining plates being embedded in and permanently united by adhesion to said rubber tire at separated points or intervals with

their bearing surfaces substantially parallel to the bottom of the rim, and a retaining wire passing through the aperture or passage in the rubber tire and through the eyes or loops of the retaining plates, substantially as described. 4th. The combination, with a channeled metallic rim, of a rubber tire fitting within said rim and provided with a central aperture or passage throughout its interior, a plurality of independent retaining plates, each having a broad bearing surface, said retaining plates being embedded in said rubber tire at separated points or intervals with their bearing surfaces substantially parallel to the bottom of the rim within the outer periphery thereof, and provided with an outwardly extending eye or loop, and a retaining wire passing through the aperture or passage in the rubber tire and through the eyes or loops of the retaining plates, substantially as described. 5th. The combination, with a metallic rim having outwardly diverging flanges forming a channel, of a rubber tire having a correspondingly shaped inner portion to fit said channel and an outer portion the sides of which are at an angle to the inner portion and hollowed or concaved adjacent to the lines of junction which are located at or outward from the outward periphery of said flanges, said rubber tire having an aperture or passage throughout its interior, independent retaining plates, each having a broad bearing surface, said retaining plates being embedded in said rubber tire at separated points or intervals with their bearing surfaces substantially parallel to the bottom of the rim and provided with outwardly extending eyes or loops, and a retaining wire passing through the eyes or loops of the retaining plates, substantially as described.

guard proper having an annular channel, a keeper, a packing ring, an encircling spring secured to one end of the keeper, the encircling

No. 66,094. Hat Rack. (Porte chapeau.)



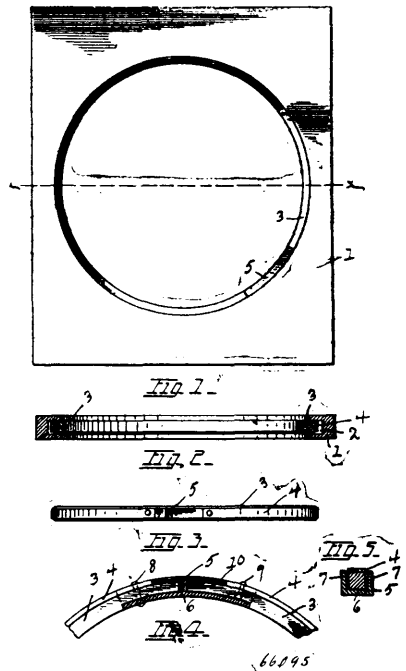
Andrew J. Curry and Herket & Meisel Trunk Co., all of St. Louis, Missouri, U.S.A., 5th February, 1900; 6 years. (Filed 24th January, 1900.)

Claim.—1st. A hat rack, comprising a supporting frame, a cloth bottom carried by said frame, and a plurality of annular receptacles supported above the said bottom, substantially as specified. 2nd. A hat rack, comprising a supporting frame, a plurality of transverse strips carried by said frame, a cloth bottom secured to said strips, and a plurality of annular receptacles supported above the said strips, substantially as specified. 3rd. A hat rack, comprising a supporting frame, a plurality of transverse strips carried by said frame, upwardly extending arms carried by the said strips, annular receptacles supported by the said arms, and a cloth bottom below the said transverse strips, substantially as specified. 4th. A hat rack, comprising a supporting frame, a plurality of transverse strips carried by said frame, upwardly extending arms carried by the said strips, annular receptacles supported by the said arm, and a cloth bottom below the said strips there being a plurality of intersecting slits in the said cloth bottom in vertical alignment with each of the said annular receptacles.

No. 66,095. Dust Guard for Railway Axle Journals. (Garde-poussière pour boîtes à graisse.)

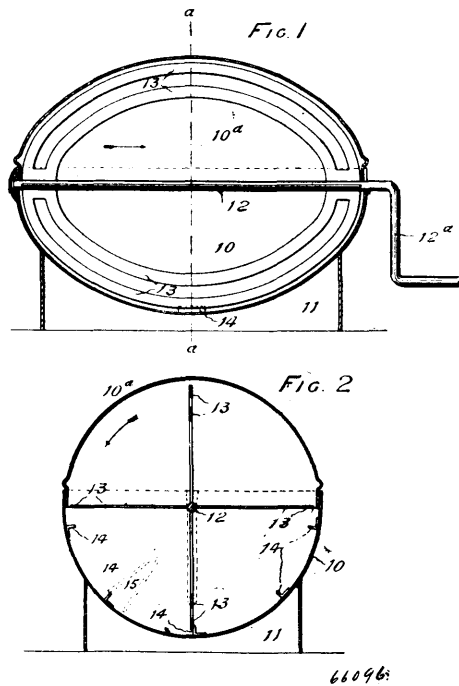
Frank B. Harrison, Toledo, Ohio, U.S.A., 5th February, 1900; 6 years. (Filed 24th January, 1900.)

Claim.—1st. A dust guard for car axle journals comprising a dust guard frame proper, having a central circular opening, and annular channel in the wall of the opening, a packing ring located in the channel, a spring encircling the same, whereby the packing ring is normally compressed, a keeper adapted to embrace and join both ends of the packing ring, means for securing firmly one of the ends of the packing ring, the spring and the keeper, whereby the free end of the packing ring and spring are movably held within the keeper, and means for securing firmly the free end of the packing and spring. 2nd. In a dust guard for car axle journals, a dust



spring secured near the opposite end of the packing ring, a portion of the packing ring telescoped within the keeper, and a plurality of anti friction balls housed in the channel and bearing upon the contractile spring. 3rd. In a dust guard for car axle journals, a dust guard proper provided with a central annular channel formed of one or more supplemental attached portions, and a contractile packing ring housed within the channel and adapted to revolve with the axle journal within the channel.

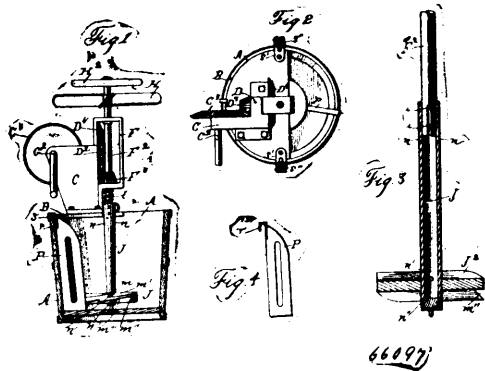
No. 66,096. Cream Whisking Device. (Vergette de cuisine.)



Caleb Bingham Mansell, Vancouver, British Columbia, Canada, 5th February, 1900; 6 years. (Filed 24th January, 1900.)

Claim.—1st. In a cream whipper, the combination of an oval vessel divided into two sections, a shaft passing therethrough blades on such shaft of elliptical form arranged to move in close proximity with the walls of the vessel and projections fixed at intervals to the lower section of the vessel, as specified. 2nd. In a whipper for cream, eggs and the like composed of a vessel of oval form with a shaft passing through the major axis of same having blades of elliptical form fixed thereto to move in proximity to the inner walls of the vessel, in combination with retarding projections fixed to the blades, substantially as and for the purposes set forth.

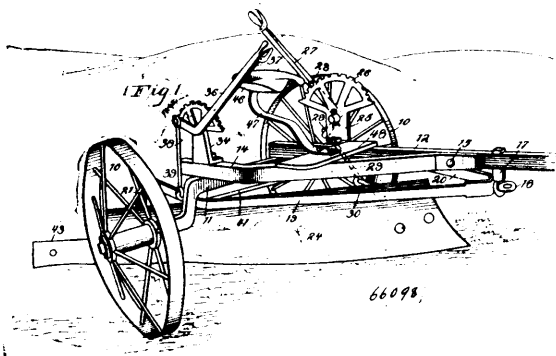
No. 66,097. Churn. (*Baratte.*)



Benjamin F. Emery, Des Moines, Iowa, U.S.A., 5th February, 1900; 6 years. (Filed 25th January, 1900.)

Claim.—1st. A churn dasher consisting of a tubular shaft adapted to admit air at its top, a circular dasher disc having a plurality of radial concaves and shoulders on its top surface and vents in the shafts intersecting said concaves and corresponding concaves and shoulders on its under side and vents in the shaft intersecting said concaves, to operate in the manner set forth for the purposes stated. 2nd. A churn dasher consisting of a tubular shaft adapted to admit air at its top, a circular dasher disc having a plurality of radial concaves and shoulders on its top surface and vents in the shaft intersecting said concaves and corresponding concaves and shoulders on its under side and vents in the shaft intersecting said concaves, in combination with an open topped vessel and means to rotate the shaft and dasher to agitate and aerate milk for the purposes stated.

No. 66,098. Ditch Grader. (*Appareil de réglage de fossé.*)



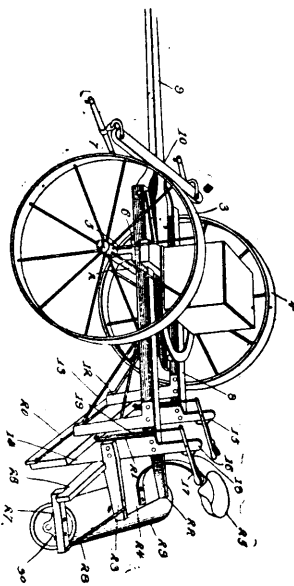
Julius John Helling, Union, Missouri, U.S.A., 5th February, 1900; 6 years. (Filed 25th January, 1900.)

Claim.—1st. In a grading machine, the combination with the wheels, axle and frame beams supported therefrom, of a V-shaped metallic frame suspended at its forward angle below the main frame beam, a scraper arranged diagonally and adjustably suspended at its front and rear ends from the bars of the V-shaped frame, and a diagonal brace rod connecting the rear end of the scraper with the opposite end of the axle, substantially as described. 2nd. In a grading machine, the combination with the diagonally placed scraper and the axle, of the supporting bar 20 bolted to the scraper near its forward end, the main frame supporting on the axle, the rod 29 adjustably suspended from said main frame, and the angular hooked bracket 31 connected to said rod, the scraper and the bar 20, substantially as described. 3rd. In a grading machine, the combination with the scraper, the supporting bar 21 and the axle, of the hook 40, the bolt 24^a connecting the scraper rod 21 and said hook, the eyebolt 41^a secured in the axle, and the brace rod connecting

hook 40 and eyebolt 41^a, substantially as described. 4th. In a grading machine, the combination with the wheels and axle of the main tongue beam bolted on top the axle, the brace beam bolted to the side of the tongue beam and on top the axle, the V-shaped metallic frame comprising a long and a short bar with their angle to the front, an eyebolt depending from the tongue beam on front of said angle, a second eyebolt through the eye of the first and the angle of said frame, the scraper diagonally located below the frames, and adjustable connection between the forward end of the scraper and the short bar, and the rear end of the scraper and the long bar, substantially as and for the purpose set forth.

No. 66,099. Road Scraper and Roller.

(*Grattoir et rouleau pour chemins.*)



George W. Miller, Indian Orchard, Massachusetts, U.S.A., 5th February, 1900; 6 years. (Filed 25th January, 1900.)

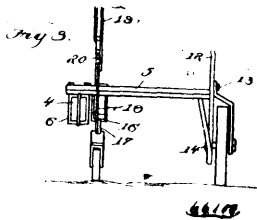
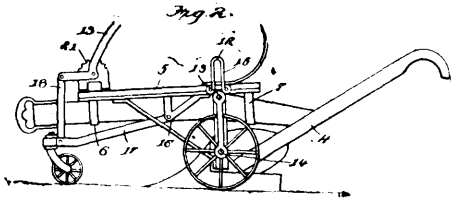
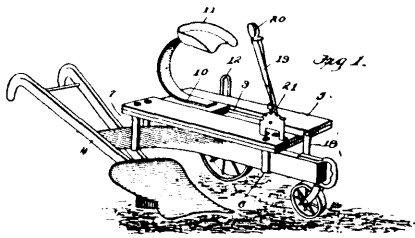
Claim.—1st. In a road scraper and roller, the combination with an axle of two rearwardly extending beams secured thereon, downwardly projecting parallel guide arms secured to the rear end of said beams, a vertically adjustable scraper in said guides, and a roller secured to the beams, substantially as described. 2nd. In a road scraper and roller, the combination with traction wheels and axle upon which they are mounted, of two rearwardly extending beams carrying vertical guides at their rear ends, a hand lever, a vertically adjustable scraper secured thereto and working in said guides, a rearwardly extending beam projecting from the guides, and a roller connected thereto, substantially as described. 3rd. In a road scraper and roller, the combination with the traction wheels and the axle upon which they are mounted, of the rearwardly projecting beams, guide arms extending therefrom, a vertically adjustable scraper board working therebetween, braces extending from said arms, a transverse beam secured thereon and carrying a roller bearing beam at each end, substantially as described.

No. 66,100. Plough. (*Charrue.*)

Edwin G. Woodmansee, Salt Lake City, Utah, U.S.A., 5th February, 1900; 6 years. (Filed 25th January, 1900.)

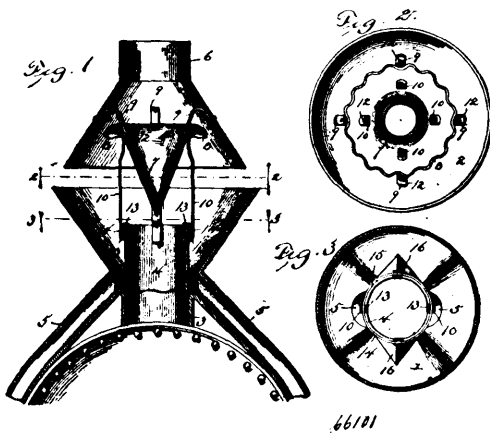
Claim.—1st. As an attachment for a plough, a platform adapted to be secured thereto, a vertically slotted guide on said platform, an axle bearing carrying a stub axle and adjustably engaging said bearing, a forwardly projecting arm pivotally secured to the said platform and carrying a coulter at its free end, substantially as described. 2nd. The combination with a plough, of a removable attachment therefor, consisting of a platform, a guide on the side of said platform, an axle bearing carried by said guide, a stub axle, one end of which engages the guide and the other end engaging the guide and an adjustable, forwardly extending arm projecting from the platform and carrying a smaller wheel, the raising or lowering of which will regulate the angle of the plough point, substantially as described. 3rd. The combination with a plough, of an attachment comprising a platform, an adjustable seat on said platform, a slotted guide on one side of the platform, an axle bearing carrying a

traction wheel vertically adjustable in the guide, a forwardly projecting arm pivoted to the platform and carrying a wheel at the free



end thereof, a bell crank lever working in a segmental rank on the top of the platform and connected to the arm by a link, substantially as described.

No. 66,101. Spark Arrester (Arrête-étincelle.)

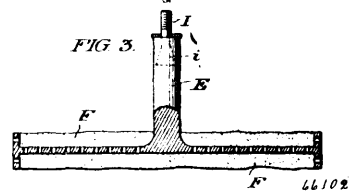
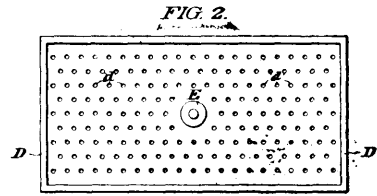
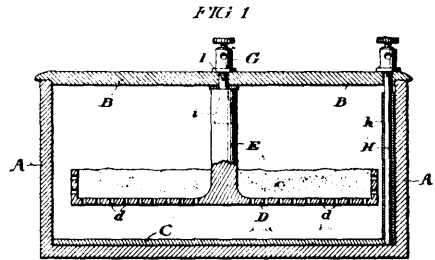


James W. Harrelson, Belton, Missouri, U.S.A., 5th February, 1900; 6 years. (Filed 25th January, 1900.)

Claim.—1st. A spark arrester comprising a lower tapering section designed to be mounted on a smoke stack, an upper section spaced from the adjacent edges of the lower section to form an opening, and provided at its top with an opening, and a conical deflector located above the smoke stack, connected therewith and supporting the upper section of the casing, substantially as described. 2nd. A spark arrester comprising a casing having upper and lower sections spaced apart, the lower section being mounted on a smoke stack, a conical deflector supporting the upper section of the casing and located centrally of the stack at a point above the same, rods depending from the conical deflector and provided at their lower ends with double U-shaped bends forming outer hooks and inloops, the outer hooks engaging the sack, and a clamping ring supported in the inner loops, substantially as described. 3rd. A spark arrester comprising the lower tapering section of the casing designed to surround a stack and provided with depending

tubes, an upper tapering section spaced from the lower section, a conical deflector provided at its top with a corrugated flange, the substantially V-shaped braces or bars secured to the upper section of the casing and to the conical deflector, and rods depending from the conical deflector and provided with means for engaging a sack, substantially as described.

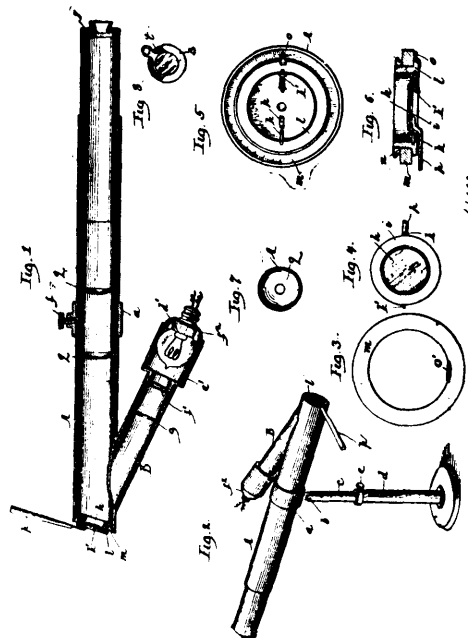
No. 66,102. Galvanic Battery. (Pile galvanique.)



James D. Darling, Philadelphia, Pennsylvania, U.S.A., 5th February, 1900; 6 years. (Filed 17th April, 1899.)

Claim.—The combination with an enclosing vessel, of an element in the form of a horizontal conducting plate having a surface of peroxide of lead applied thereto, and an element of amalgamated zinc disposed in the form of a horizontal plate of comparatively small vertical height and fitting closely against the interior sides of the enclosing vessel, said elements being arranged with their proximate surfaces at substantially uniform distance throughout.

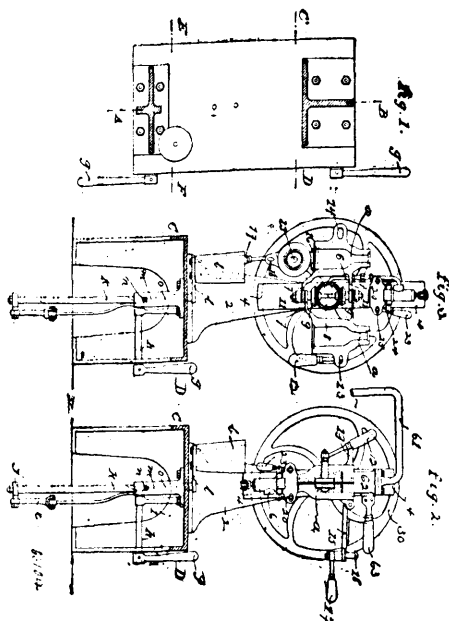
No. 66,103. Retinoscope. (Retinoscope.)



Chalmers Prentice, Chicago, Illinois, U.S.A., 5th February, 1900; 6 years. (Filed 13th June, 1899.)

Claim.—1st. In retinoscopes, the combination with the focal tube, of the light supply tube united at an angle thereto, and the tilting mirror with suitable aperture therein, said mirror being internally located to receive the light rays and project the same along the focal tube to the patient's eye-piece, substantially as described. 2nd. In retinoscopes, the combination with the focal tube, of the light supply tube united at an angle thereto, and the inclined, rotatable, tilting mirror with suitable aperture therein, said mirror being internally located to receive the light rays and project the same along the focal tube to the patient's eye-piece, substantially as described. 3rd. In retinoscopes, the combination with the focal tube, of the light supply tube united at an angle thereto, the inclined, tilting mirror to receive the light rays and project the same along the focal tube, and the diaphragm or diaphragms interposed in said tube to obstruct and absorb the dispersed rays, substantially as described. 4th. In retinoscopes, the combination with the focal tube and with the annular socket set therein, of the ring frame rotatably mounted in the socket, and the mirror disc secured by pintles to obstruct and rock in said frame, substantially as described.

No. 65,104. Machine for Making Blown Glass Articles.
(*Machine pour la fabrication d'objets en verre soufflé.*)

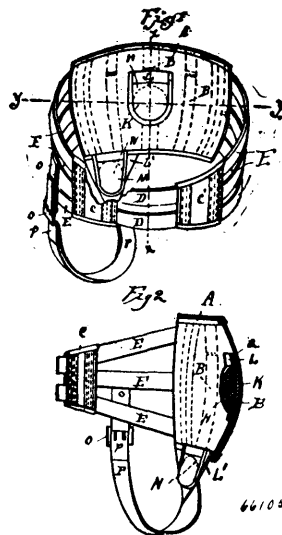


Claude Boucher, Cognac, France, 5th February, 1900; 6 years.
(Filed 19th April, 1899.)

Claim.—1st. In a machine for manufacturing bottles and other articles of blown glass the combination of a measuring mould intermediate mould and a finishing mould, substantially as described. 2nd. In a machine for manufacturing bottles and other articles of blown glass, an intermediate mould into which is placed the rough bottle removed from the first mould and in which it is blown in order to solidify the glass in a uniform manner throughout before enclosing it in the finishing mould, said intermediate mould consisting of a simple mould or one having the complete shape of the glass bottle and adapted to be opened longitudinally from the bottom to top or composed of a mould and two shoulders, the shape of these moulds varying according to the products to be obtained and being used if desired in series of gradually increasing size in order to increase gradually the size of the bottle and to obtain a good distribution of the glass, substantially as described. 3rd. In a machine for manufacturing bottles and articles of blown glass, the arrangement of a neck mould surrounded by a non-conductor of heat in combination with a rod adapted to be forced in and withdrawn from it automatically, substantially as described. 4th. In a machine for manufacturing bottles and other articles of blown glass, a divided mould in combination with bevel gearing acting on the arms of the moulds in order to open and to close them, substantially as described. 5th. In a machine for the manufacturing bottles and other articles of blown glass of the kind described, a balance lever 4, serving to move the measuring mould and the neck mould into the different positions that they have to occupy, substantially as described. 6th. In a machine for the manufacturing bottles and other articles of blown glass, of the kind described, a series of articulated levers for raising and maintaining in place and locking the bottom 47, of the finishing mould and also the mould *b*, substantially as described. 7th. In a machine for manufacturing bottles and other articles of blown glass, of the kind described means for forming a hollow bottom

on bottles comprising bottom 47, of clay or other non-conducting material for the rough formation and a projection *p*, for giving them the finished shape, substantially as described. 8th. In a machine for manufacturing bottles and other articles of blown glass, of the kind described, the use of the semi-moulds in which the articles removed from the finishing mould are placed, substantially as and for the purpose described.

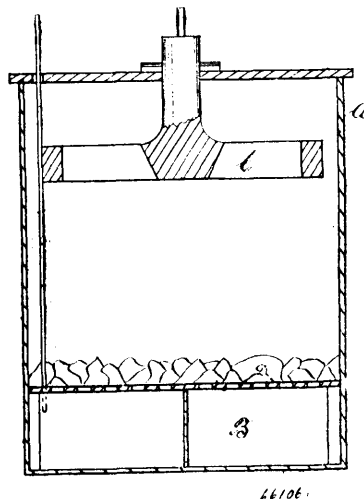
No. 66,105. Abdominal Bandage. (*Bandage abdominal.*)



Sarah E. Cook, New Haven, Connecticut, U.S.A., 5th February, 1900; 6 years. (Filed 2nd June, 1899.)

Claim.—The herein described abdominal support, comprising the fitted front section having the flexible vertically extending stiffening straps, the two fitted back and side sections, the elastic parallel back straps which connect the said sections, the two sets of fastening straps and the corner extension of the said front section provided on its inner side with an open pad receiving pocket, together with a strap attached to said extension and means whereby the free end portion thereof after being passed between the thighs may be connected to one of said fastening straps, substantially as specified.

No. 66,106. Primary Electric Battery.
(*Pile primaire électrique.*)

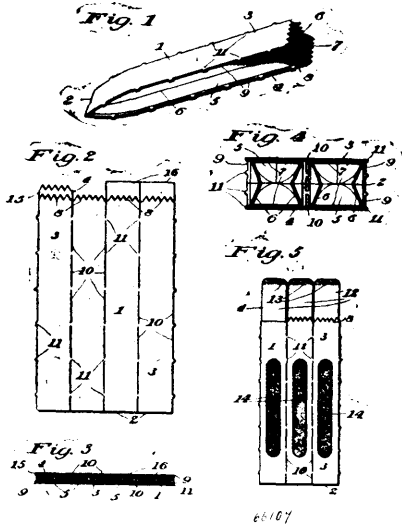


Edward Baines, Toronto, Ontario, Canada, 5th February, 1900; 6 years. (Filed 26th June, 1899.)

Claim.—In a primary electric generating battery having a negative electrode B, located in the lower part of a jar A, and having a positive electrode C, located in the upper part of the jar A, a grid

D, located between the electrodes B, and C, and crystals of copper sulphate occupying the whole of the sectional area of the jar A, substantially as and for the purpose specified.

No. 66,107. Cigar Pouch. (Etui à cigare.)



John Joseph Dittgen, Madisonville, Ohio, U.S.A., 5th February, 1900; 6 years. (Filed 22nd July, 1899.)

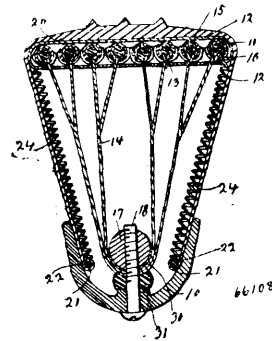
Claim.—1st. As a new article of manufacture, cigar receptacles or pouches in connected or sheet like form and comprising a sheet of stiff paper or the like bent or folded over to form two plies or sections forming, respectively, the front and back walls of the respective pouches or receptacles, combined with thin paper body portions, separate and independent of each other, arranged between said plies, and each having its front and back cemented to the said plies, and each having its opposite sides formed with inturned single folds, the inner edges of which are closely adjacent when the pouch or receptacle is collapsed to give the pouches or receptacles an even thickness through their entire width, said stiff paper sheet having formed in its two plies transverse series of elongated cuts located at points between the body portions, and the cuts of each series being separated by narrow bonds or ligaments connecting the several pouches or receptacles together, substantially as set forth. 2nd. As a new article of manufacture, cigar receptacles or pouches in connected or sheet-like form and comprising a sheet of stiff paper or the like bent to form two plies forming, respectively, the front and back walls of the respective pouches or receptacles combined with thin paper body portions spaced apart and arranged between said plies, and each having its front and back cemented to the said plies and having its opposite sides formed with inturned folds, said stiff paper sheet having formed in its two plies transverse series of elongated cuts or slits located at points between the body portions, and the cuts of each series being separated by narrow bonds or ligaments connecting the several pouches or receptacles together, the width of the body portions being less than the distance between the two series of cuts between which it lies, whereby the front and back walls of each pouch or receptacle are provided with projecting and serrated lateral edges at each side, substantially as set forth. 3rd. As a new article of manufacture, cigar pouches or receptacles in connected or sheet-like form comprising a sheet of stiff material folded to form two plies or outer walls flexible body portions cemented between said plies, the plies having transverse series of cuts located between the body portions, and one ply having portions independent of each other and projecting beyond the mouths of the body portions between the transverse series of cuts and adapted to be closed over the open mouths of the pouches, substantially as set forth. 4th. As a new article of manufacture, cigar receptacles or pouches in connected or sheet-like form and comprising a stiff paper or the like bent to form two plies, one provided on its outer surface with a transverse series of parallel sanded stripes, the two plies having formed in them parallel series of cuts between said sanded stripes, and flexible body portions cemented between the plies between the series of cuts, substantially as set forth.

No. 66,108. Tire. (Bandage.)

Charles G. Robertson, James J. Robertson, Leeds, York, England, and George E. Robertson, Montreal, Quebec, Canada, 6th February, 1900; 6 years. (Filed 10th August, 1899.)

Claim.—1st. In a wheel, the combination with the rim and tire thereof, of a pair of open rings each having its ends formed with an eye, and a helical retractile spring having its ends connected to the eyes in the separated ends of each ring, said rings circumferentially

encircling the rim, and a flexible cover taking over the tire and having its side edges connected to said rings, substantially as described



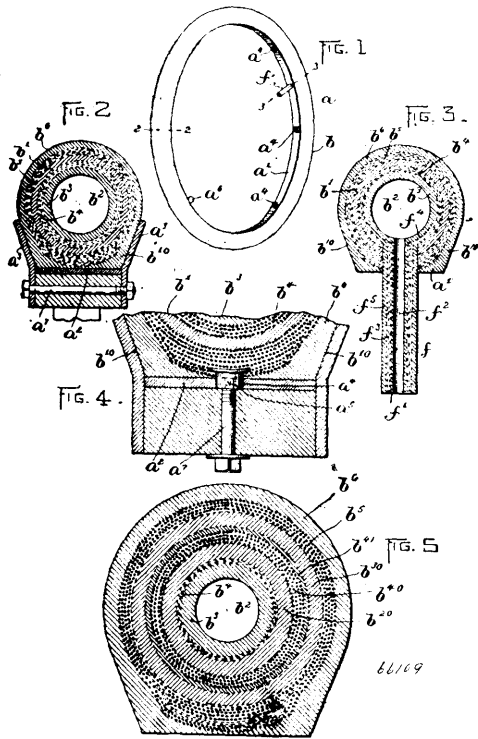
and for the purpose set forth. 2nd. In a wheel, the combination with the rim and tire thereof the tire being of greater width than the rim, of a series of coiled springs connecting the side edges of said tire to the adjacent side edges of the rim and said springs converging towards the centre of the wheel in a plane at right angles to the axis thereof, substantially as shown. 3rd. In a wheel, the combination with the rim and tire thereof the tire being of greater width than the rim of a cover for the tread of the tire, and a series of coiled springs connecting the side edges of said cover to the adjacent edges of said rim, substantially as shown. 4th. In a wheel, the combination with the rim and tire thereof, of a pair of rings circumferentially encircling said rim, a series of coiled springs connecting the side edges of said tire to said rings, and a cover taking over said tire and coiled springs and having its side edges connected to said rings, for the purpose set forth. 5th. In a wheel, the combination with the rim and tire thereof, of a pair of open rings circumferentially encircling said rim, a coiled spring for connecting the ends of each of said rings, a series of coiled springs connecting the side edges of said tire to said rings, and a cover taking over said tire and coiled springs and having its side edges connected to said rings for the purpose set forth. 6th. In a wheel, the combination with the rim and tire thereof, the tire consisting of a series of rings of U-shape in cross-section and arranged side by side, of a series of flexible guy strips extending from said rim to said rings, a series of short lengths of wire taking into the cavities of said rings, a series of clips adapted to retain said short lengths of wire in place, said guy strips being connected at their outer ends to said short lengths of wire, and means for connecting the inner ends of said guy strips to the rim, substantially as and for the purpose set forth. 7th. In combination with the rim and tire of a wheel, a series of short rods, a series of screws carried by said rim and threaded into said rods, and a series of textile guy strips taking over said rods and connected at their ends to said tire, substantially as set forth and for the purpose set forth. 8th. In combination with the rim and tire of a wheel a series of short rods, a series of screws carried by said rim and taking freely through the rim and threaded into said rods, a series of textile guy strips taking over said rods connected at their ends to said tire, and a series of flexible pads taking over said screws and located between said rods and to the rim, substantially as set forth and for the purpose set forth.

No. 66,109. Pneumatic Tire. (Bandage pneumatique.)

The Rubber Tire Company of America, New York City, New York, assignee of Eleazer Kempshall, Newton, Massachusetts, U.S.A., 6th February, 1900; 6 years. (Filed 21st December, 1899.)

Claim.—1st. A cushioned vehicle tire comprising an inner yielding member backed by a tube of reinforcing fabric, an outer envelope backed by a separate tube of reinforcing fabric, and an intermediate motion absorbing rubber cushion interposed between said reinforcing fabrics, said parts being vulcanized together. 2nd. A cushioned vehicle tire comprising an inner yielding member, and a series of surrounding layers vulcanized together and including a backing of reinforcing fabric surrounding the inner yielding member, a motion absorbing cushion surrounding the said cushion, and an outer facing of rubber. 3rd. A cushioned vehicle tire comprising an inner tube of rubber, a backing of reinforcing fabric surrounding the same, a motion absorbing cushion surrounding said backing, a backing of reinforcing fabrics surrounding the said cushion, and an outer facing of rubber, said parts being vulcanized together. 4th. A cushioned vehicle wire comprising an inner yielding member backed by a reinforcing fabric, an outer envelope backed by a reinforcing fabric, and having an outer tread face and a substantially flat inner face, and an intermediate motion absorbing cushion interposed between and united with said reinforcing fabrics. 5th. A cushioned three part vehicle tire comprising an inner yielding member backed by a reinforcing fabric, an outer envelope backed by a reinforcing fabric, and having an outer tread face, a substantially flat inner face, and oppositely inclined or bevelled sides between the inner and outer faces

said sides imparting a wedge form to the cross section of the tire, and an intermediate motion absorbing cushion interposed between and

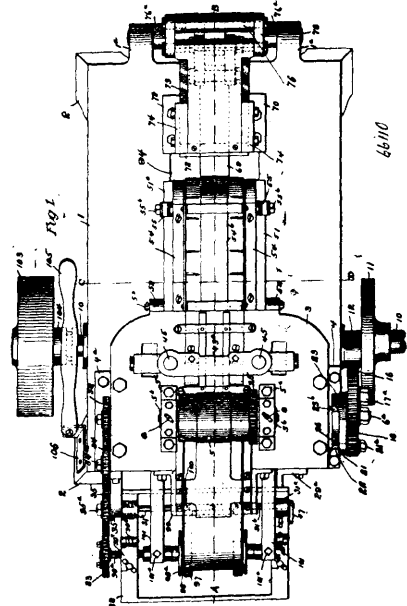


united with said reinforcing fabrics, the said reinforcing fabrics extending inwardly between the bevelled sides of the tire. 6th. A cushioned vehicle tire comprising an inner yielding air chamber backed by a reinforcing fabric, an outer envelope backed by a reinforcing fabric, an intermediate motion absorbing cushion interposed between the said reinforcing fabrics, and a valve stem formed as an integral extension of the walls of the air chamber and extending through the said cushion and reinforcing fabrics. 7th. A cushioned vehicle tire comprising an inner yielding air chamber backed by a reinforcing fabric, an outer envelope backed by a reinforcing fabric, an intermediate motion absorbing cushion interposed between the said reinforcing fabrics, a valve stem comprising a core of rubber formed as an integral extension of the walls of the air chamber and having an air passage, a multiple tube of fabric surrounding and connected to said core, portions of said tube being extended and anchored in the wall of the air chamber, and a rubber facing surrounding and connected to said tube and formed also as an integral extension of the wall of the air chamber, the said valve stem extending through and being closely embraced by the said cushion and re-inforcing fabrics. 8th. A cushioned vehicle tire, comprising an inner yielding member backed by multiple ply tubes of fabric, an outer envelope backed by multiple ply tubes of fabric, and a motion absorbing cushion arranged between and connected to the inner and outer fabric tubes, the laps and joints of said plies of fabric being arranged in the inner side of the tube. 9th. A cushioned pneumatic vehicle tire comprising a relatively small air chamber formed by a relatively thick tube of rubber and surrounded and backed by a tube of re-inforcing fabric, an outer enclosing envelope composed of a rubber facing connected to and supported by a separate tube of re-inforcing fabric, and an elastic motion absorbing rubber cushion interposed between said re-inforcing tubes and vulcanized thereto. 10th. A tire comprising an inner yielding member confined and backed by an inner tube of re-inforcing fabric, an exterior enclosing envelope composed of rubber facing backed and supported by an outer tube of re-inforcing fabric, a motion absorbing rubber cushion adjoining the inner fabric tube, a motion absorbing rubber cushion adjoining the outer fabric tube, and an intermediate tube of re-inforcing fabric between the said cushions, the said tubes being separately formed and the parts vulcanized together. 11th. A tire comprising an inner yielding member formed with an air chamber and a valve stem integral with the walls of said air chamber, said member being confined and backed by an inner tube of re-inforcing fabric, an exterior enclosing envelope composed of a rubber facing backed and supported by an outer tube of re-inforcing fabric, a motion absorbing rubber cushion adjoining the inner fabric tube, a motion absorbing rubber cushion adjoining the outer fabric tube, and an intermediate tube of re-inforcing fabric between the said cushions, the said tubes being separately formed and the parts vulcanized together. 12th. A tire comprising an inner yielding

member formed with an air chamber, said member being confined and backed by an inner tube of re-inforcing fabric, an exterior enclosing envelope composed of a rubber facing backed and supported by an outer tube of re-inforcing fabric, a motion absorbing rubber cushion adjoining the inner fabric tube, a motion absorbing rubber cushion adjoining the outer fabric tube, and an intermediate tube of reinforcing fabric between the said cushions, the said tubes being separately formed and the parts vulcanized together, the walls of said air chamber being relatively near together so that in the event of a puncture the walls of the air chamber will engage and permit the tire to be used, notwithstanding the puncture.

No. 66,110. Machine for making Paper Boxes.

(Machine pour faire les boites de papier.)

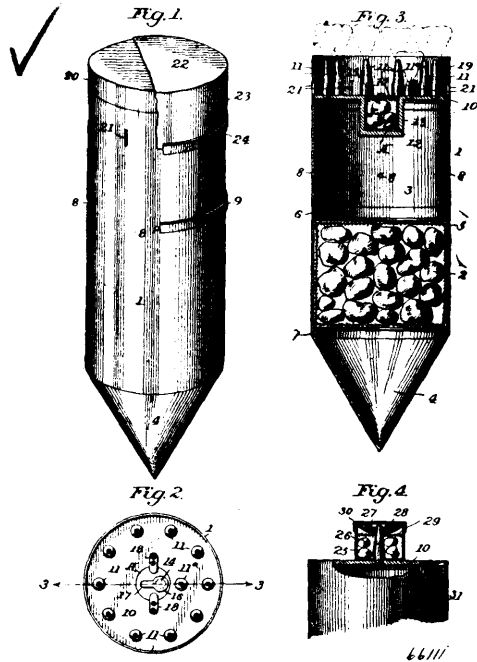


George Asa Barnes, New Haven, Connecticut, U.S.A., 6th February, 1900; 6 years. (Filed 25th November, 1899.)

Claim. - In a machine of the character described, the combination of a roll having a pad or raised portion thereon with rounded or sloping ends, and adapted to intermittently take up glue and deposit it on the paper, of a scraper adapted to pass over the face of said pad and those portions of the surface adjacent thereto, and in unbroken contact therewith and thereby remove the excess of glue both from the face of the pad and the surfaces adjacent thereto, as herein set forth. 2nd. In a machine of the character described, the combination of a rotary gluer roll having upon its periphery raised portions or pads with rounded or sloping ends, and a spring scraper bearing against the periphery of said roll and adapted to remain in uninterrupted contact with the periphery and adjacent surfaces of said roll, as set forth. 3rd. In a machine of the character described, the combination of an intermittently revoluble gluer roll having upon periphery raised portions or pads with rounded or sloping ends, and a spring scraper bearing against the periphery of said roll and adapted to remain in uninterrupted contact with the periphery and adjacent surfaces of said roll, as set forth. 4th. In a machine of the character described, the combination of gluer rolls having upon their peripheries raised portions or pads with rounded or sloping ends, scrapers bearing against the peripheries and the adjacent surfaces, means for intermittently rotating said rolls and means for adjusting the position of the said rolls in relation to the paper carrying roll, as set forth. 5th. In a machine of the character described, the combination with gluer rolls having upon their peripheries raised portions or pads with rounded or sloping ends, scrapers bearing with uninterrupted contact upon the peripheries and adjacent surfaces of said rolls, and means for regulating the pressure of the scrapers upon the peripheral surfaces of the rolls, as set forth. 6th. In a machine of the character described, the combination of gluer rolls having upon their peripheries raised portions or pads with rounded or sloping ends, a shaft carrying said rolls, means for intermittently rotating the shaft, scrapers bearing with uninterrupted contact upon the peripheries and adjacent surfaces of said rolls, a bar to which said scrapers are attached, and a tension adjusting device consisting of an arm fixed to said bar, a swivel pin pivotally secured to said arm and a threaded thumb screw adapted to depress said arm by contact with said swivel pin, substantially as set forth. 7th. In a machine of the character described, the combination of gluer rolls hav-

ing projections or pads on its periphery, the said pads being of the same width as the rolls with faces concentric with the axis of the rolls, having rounded or sloping ends, of spring scrapers adapted to bear with uninterrupted contact on the peripheral face of the rolls and the sides adjacent thereto, as set forth. 8th. In a machine of the character described, in combination with the blank folding mechanism, a guide table pivotally secured at its rear end, the front end of which is bent downward to change the path of travel of the paper strip from a horizontal to a vertical, and means for adjusting vertically the front end of said table, substantially as set forth. 9th. In a blank folding mechanism for a machine of the character described, the combination of a stationary bottom block, a reciprocating former plunger, reciprocating side folders and end folders adapted to move longitudinally through guides around the bottom block and along the sides of the former plunger in sliding contact with the under surface of the sides and ends respectively of the blank, as set forth. 10th. In blank folding mechanism for a machine of the character described, the combination of a stationary bottom block, a reciprocating former plunger, longitudinally movable side folders and end folders adapted to pass along the sides of the former plunger in sliding contact with the under surface of the sides and ends of the blank, and means for independently and successively advancing the side and end folders while the former plunger is at rest, as set forth. 11th. In blank folding mechanism for a machine of the character described, the combination of a stationary bottom block, a reciprocating former plunger, longitudinally movable side folders and end folders, corner folding blades pivoted to the side folders and engaging with the end folders, and means for successively advancing the side and end folders along the sides of the former plunger and in sliding contact with the sides and ends of the blank, as set forth. 12th. In a machine of the character described, the combination with the stationary bottom block, of a guide block having a central recess within which is secured the said bottom block, a cap covering said guide block and enclosing the said bottom block, side and end folders operatively retained within the said guide block and surrounding the said bottom block, with means for imparting movement to said side folders for the purposes set forth, substantially as described. 13th. In a machine of the character described, the combination with the former plunger, of a bottom block, side folders, means for advancing said folders over the end of said plunger, corner folders, means for tripping the said corner folders when the said side folders have completed their forward movement, end folders and means for advancing them over the end of said former plunger not covered by said folders, substantially as set forth. 14th. In a machine of the character described, the combination with the former plunger, of a bottom block, side and end folders surrounding said bottom block, means for advancing said folders over the end portion of said plunger and means for drawing together the ends of two of said folders after the said advance movement is completed, substantially as set forth. 15th. In a machine of the character described, the combination with the former plunger, of a bottom block, side folders, means for advancing said folders over the end of said plunger, corner folders, means for drawing the ends of the oppositely located corner folders together when the said side folders have completed their forward movement, end folders means for advancing them over the end of said former plunger not covered by said side folders, and means for raising the corner folders to their original position before the said end folders have completed their forward movement, substantially as set forth. 16th. In a machine of the character described, the combination with the stationary bottom block and reciprocating former plunger, of side folders movable longitudinally along the sides of the former plunger, corner folding blades carried by said side folders and longitudinally movable end folders independently operated, and having parts extending into the path of movement of the corner folders, as set forth. 17th. In a machine of the character described, the combination with the bottom block, of side and corner folders, a folder head to which said folders are secured, means for actuating said folder head and folders, end folders, means for actuating said end folders, means for drawing the ends of the oppositely located corner folders together, and means for bringing the same to their original positions before the advance movement of said end folders is completed, substantially as set forth. 18th. In a machine of the character described, the combination with the bottom block, of side, corner and end folders, means for actuating the same and means as a toggle joint, for drawing the front portions of the said end folders together, substantially as set forth. 19th. In a machine of the character described, the combination with feeding rolls and means for imparting an intermittent movement thereto, of a stationary bottom block, reciprocating folder blades passing through slots therein, means for advancing and withdrawing the folders along the sides of the central portion of said block, a movable former plunger adapted to be moved toward and away from the said bottom block, and cutting knives for severing the blank from the strip, substantially as set forth. 20th. In a machine of the character described, the combination with the stationary bottom block, reciprocating folder blades, means for advancing and withdrawing the same through the bottom block, and a former plunger operating in conjunction therewith, of a feed table above said bottom block having the front end turned outward, and devices for adjusting vertically the front of said table, substantially as described. 21st. In a blank folding mechanism of the kind described, the combination with a stationary bottom block, a reciprocating former plunger, reciprocating folder blades adapted to pass through slots in the bottom blocks, and means for advancing and withdrawing the said folder blades along the sides of the former plunger in sliding contact with the sides and ends of the blank, as and for the purpose set forth.

No. 66,111. Marine Torch. (Torche marine.)



William H. Rose and Gwyllym R. Holmes, both of Baltimore, Maryland, U.S.A., 6th February, 1900; 6 years. (Filed 18th December, 1899.)

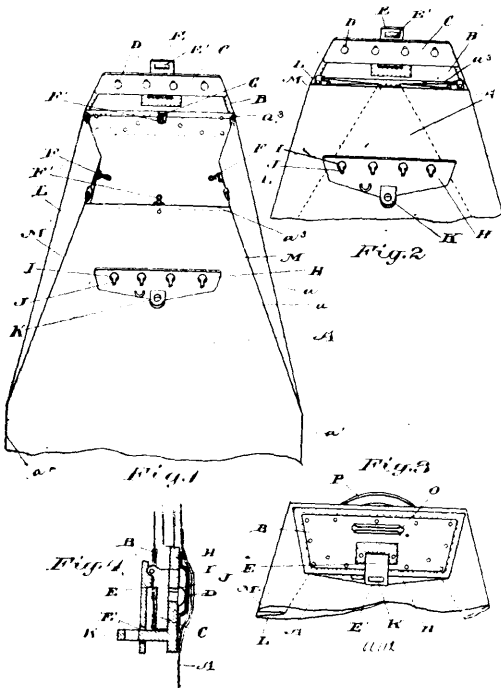
Claim.—1st. The combination with a shell having a gas chamber, of a burner communicating with the gas chamber, and a pilot light for the burner, comprising a vessel charged with phosphide of calcium or equivalent material, the said vessel having an outlet close to the burner and being adapted to receive a charge of water, for the purpose set forth. 2nd. The combination with a shell having a compartment charged with carbide of calcium, of a gas burner in communication with said compartment, and a pilot light for said burner, comprising a relatively small vessel charged with phosphide of calcium or equivalent material, said vessel having an opening adjacent to the burner, and means for admitting water to the carbide and phosphide receptacles when the shell is submerged, for the purpose set forth. 3rd. The combination with a shell having a compartment charged with carbide of calcium, and having openings to admit water to the said carbide compartment when the shell is partially submerged, of a gas burner communicating with the carbide compartment, and a pilot light for said burner, comprising a vessel charged with phosphide of calcium or equivalent material, said vessel having an opening adjacent to the burner, and means for temporarily sealing the carbide compartment and the phosphide vessel from communicating with the atmosphere, for the purpose set forth. 4th. The combination with a shell having a chamber charged with carbide of calcium or equivalent material adapted to produce illuminating gas in the presence of water, and having a second chamber for air or gas to render the shell buoyant, of a burner communicating with said carbide chamber, and a pilot light comprising a vessel charged with phosphide of calcium or equivalent material, said vessel having an opening through which the gas evolved may escape, and said opening being adjacent to said burner, for the purpose set forth.

No. 66,112. Mail Bag. (Sac de malle.)

John E. Lancelley, Toronto, Ontario, Canada, 6th February, 1900; 6 years. (Filed 20th July, 1899.)

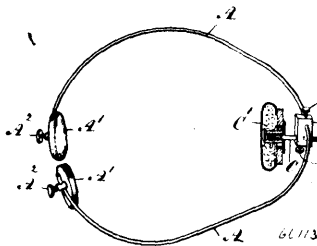
Claim.—1st. A mail bag consisting of a body portion having its top edge concaved from the sides to the middle, and creased at the front and back from the top edge diagonally to the sides to allow of the top of the sides being folded in a flap connected to the top of the middle of the back of the mail bag, a plate fastened to the inner side of the flap having a series of studs projecting inwardly from its inner face, a hasp hinged to the outer face of the mail bag, a locking plate secured to the middle of the front of the mail bag having a series of sockets to receive the studs, a staple to register with the hasp of the other plate, and hooks connected to the inner side of the

bag to interlock and hold the folds securely in place, substantially as specified. 2nd. A mail bag consisting of a body portion having



its top edge concaved from the sides to the middle and creased at the front and back from the top edge diagonally to the sides to allow of the top of the sides being folded in, and hooks connected to the inner side of the bag to interlock and hold the folds securely in place, substantially as specified.

No. 66,113. Surgical Truss. (*Bandage chirurgical.*)



Hugh McPhee, Ottawa, Ontario, Canada, 6th February, 1900; 6 years. (Filed 14th June, 1899.)

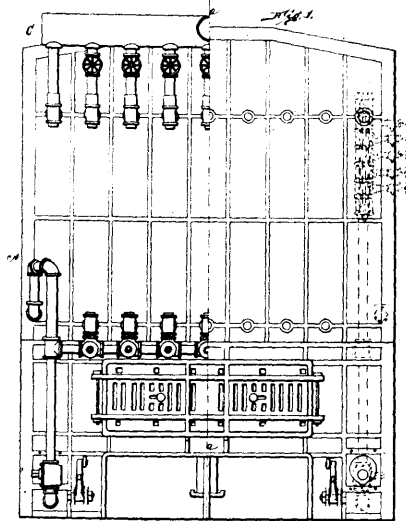
Claim.—The combination with the body spring A, provided with pads A¹, of the block B sliding adjustably on said spring and provided with a clamp screw B¹, said block having a hole, one end of said hole receiving the end of a shank C of a pad C¹, and the other end of said hole screw-threaded and provided with a set screw D to endwise engage the end of shank C, and a clamp screw E engaging the shank, as and for the purpose set forth.

No. 66,114. Steam Boiler. (*Chaudière à vapeur.*)

Oscar T. Earle and Charles W. Newton, both of Washington, U.S.A., 6th February, 1900; 6 years. (Filed 13th March, 1899.)

Claim.—1st. The combination in a sectional steam generator of the multi-axial water tube with the double manifold, said manifold terminating in a pipe common to both, as set forth. 2nd. The combination in a sectional steam generator of the multi-axial water tubes, the double manifold as set forth of the down flow pipe. 3rd. The combination in a sectional steam generator of the varied sized water pipes, the down flow pipe, the water and steam drum G, and the steam drum I, as set forth. 4th. The combination in a steam generator of the suspended multi-axial water tubes, the steam, and steam and water drums, the down flow pipes, and the surface blow-off pipe, as set forth. 5th. The combination in a sectional steam generator of the suspended multi-axial water tubes, their water and steam drum connections, the horizontal and vertical connection pipe, said pipe being provided with cut off cocks for each section, substantially as set forth. 6th. The combination in a sectional steam

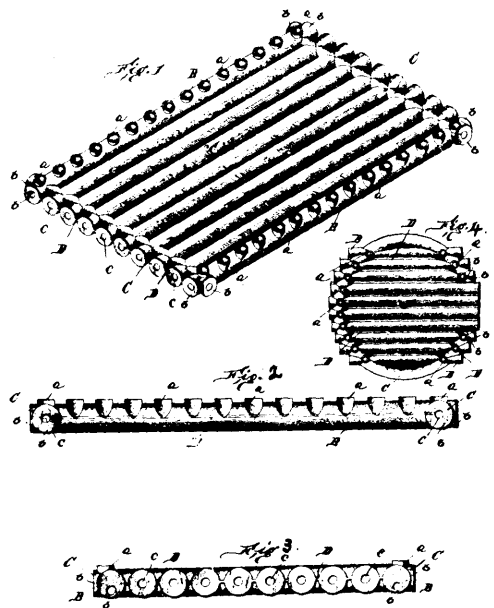
generator of the suspended drop tubes, the steam and water drums, the down flow pipe F, connected to said drop tubes, the said sections of



circulating water tubes and the water heating tubes around the fire box, all combined and arranged to rapidly generate steam, substantially as set forth. 7th. The combination in a steam generator of a number of independent sections, each section being provided with a suspended attachment preferably T-shaped in cross section, with a beam provided with correspondent T-shaped grooves, whereby each section may readily be removed and others substituted, for the purpose herein described. 8th. The combination in a sectional water tube steam generator, of the central tubes connected as described, of the water tubes heater having a connecting web between the tubes, the walls of said tubes being offset of making one straight side, substantially as set forth.

No. 66,115. Water Bottom for Steam Boilers.

(*Fond à eau pour chaudières à vapeur.*)



Oscar T. Earle and Charles W. Newton, both of Washington, District of Columbia, U.S.A., 6th February, 1900; 6 years. (Filed 11th December, 1899.)

Claim.—1st. A water bottom and bed plate for steam generators, consisting of a series of tubes cast integral with a connecting web, and with side and end manifolds, substantially as described. 2nd. A hollow water bottom and bed plate cast integrally with a connecting web, the sides forming manifolds with their connecting bosses

opening upward and the end bosses opening horizontally for either lateral or vertical connections, substantially as set forth. 3rd. A hollow water bottom comprising the central tubular portion, the side and end manifolds portions as described, having vertical and horizontal openings for vertical and horizontal connections, the corners of said bottom having suitable openings for transverse longitudinal and vertical connections respectively as set forth

No. 66,116. Meat Curing Process.

(Procédé pour mariner les viandes.)

John H. Ginge, London, Ontario, Canada, 6th February, 1900; 6 years. (Filed 23rd May, 1898.)

Claim.—The process herein described for rapidly and evenly curing bacon or other meat, which consists in cooling the bacon, and inclosing it in an air tight receptacle, forming a vacuum in said receptacle and then applying a cold aqueous solution of brine to the bacon contained in said receptacle, substantially as and for the purpose set forth.

No. 66,117. Cigarette Wrapper. *(Enveloppe à cigarettes.)*

Fig. 1.

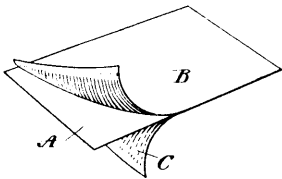
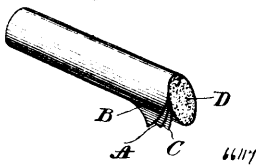


Fig. 2.



Cassius Montezuma Richmond, New York City, New York, U.S.A., 6th February, 1900; 6 years. (Filed 20th April, 1899.)

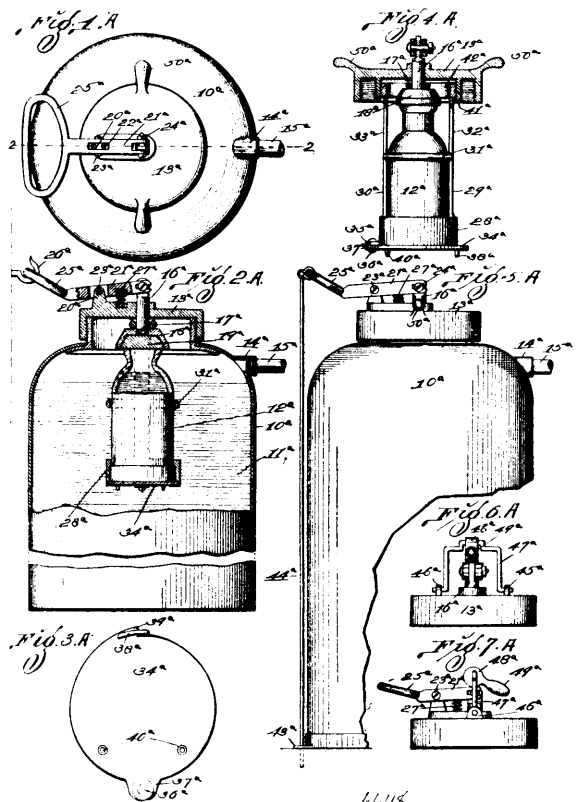
Claim.—1st. The herein described article for use as a cigarette wrapper and for other purposes, composed of metal and translucent fibrous films, connected, substantially as shown and described. 2nd. The herein described article for use as a cigarette wrapper and for other purposes, composed of a metal film, and translucent fibrous films on the opposite sides of the metal film, substantially as shown and described.

No. 66,118. Fire Extinguisher. *(Extincteur d'incendie.)*

Edward Schaefer, St. Louis, Missouri, U.S.A., 6th February, 1900; 6 years. (Filed 25th November, 1899.)

Claim.—1st. In a fire extinguisher, a bottle supporting rack pivotally mounted within the tank, means for holding the bottle in an upright position, means for closing and unclosing the bottle, and means for releasing the bottle to allow it to swing upon its pivots, whereby the bottle is discharged without inverting the tank, substantially as specified. 2nd. In a fire extinguisher, a bottle pivotally mounted within a tank and normally held in an upright position, and means of releasing and discharging said bottle without inverting the tank, substantially as specified. 3rd. In a fire extinguisher, the combination with a suitable tank and a cap removably screw-seated in position to close the tank, of an acid bottle pivotally connected to said cap, a sliding bolt operating through said cap, a stopper upon the lower end of said sliding bolt and engaging the mouth of the bottle, means of holding said stopper in position in the mouth of the bottle and means of releasing the stopper, thereby opening the bottle and allowing it to swing upon its pivots as required to discharge the bottle without inverting the tank, substantially as specified. 4th. In a fire extinguisher, the combination with a suitable tank and a cap removably seated in position to close the tank, of a bottle supporting rack adjustably connected to said cap to allow of its being raised and lowered to accommodate bottles of different lengths, a sliding bolt operating through said cap, a stopper carried by the lower end of said bolt and engaging in the mouth of the bottle, means of operating the stopper to open and close the bottle and thereby hold the bottle in an upright position until it is desired to discharge the extinguisher and then release the bottle to allow it to swing upon its pivots thereby discharging the extinguisher without inverting the tank, substantially as specified. 5th. In a fire extinguisher, a sliding bolt operating through the wall of the extinguisher, a hard rubber bushing screw-seated in said

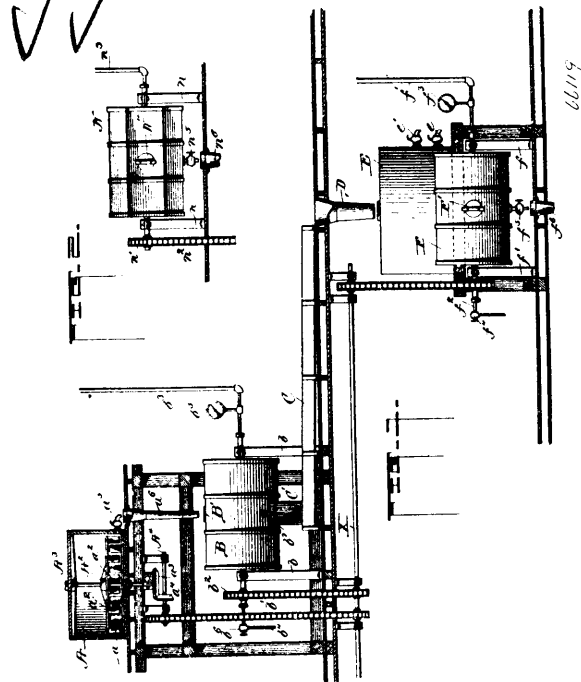
wall around said sliding bolt, a conical packing ring around said sliding bolt outside of the wall, a conical spring around said pack-



ing ring, and a stopper upon the inner end of said sliding bolt substantially as specified. 6th. In a fire extinguisher, a bottle pivotally mounted, a sliding bolt operating through a wall of the extinguisher, a stopper upon the inner end of said sliding bolt, and means of operating said stopper to open and close the bottle and to hold and release the bottle, substantially as specified. 7th. In a fire extinguisher, a bottle pivotally mounted within a tank, a sliding bolt operating through the wall of the extinguisher, a stopper upon the inner end of said sliding bolt, arms projecting inwardly from the wall of the extinguisher, and having inclined concentric cam faces, lugs projecting from said stopper and engaging said cam faces, and means of operating said sliding bolt to cause said lugs to engage said cam, thereby operating the stopper to open and close the bottle and to hold and release the bottle, substantially as specified. 8th. In a fire extinguisher, arms projecting inwardly from the wall of the extinguisher, a bottle supporting rack pivotally connected to said arms, a bolt slidingly mounted through the walls of the extinguisher, a stopper upon the inner end of said bolt and engaging the mouth of the bottle, a packing ring around said sliding bolt and between said stopper and the wall of the extinguisher, and means of operating said sliding bolt, substantially as specified. 9th. In a fire extinguisher, a bottle supporting rack pivotally mounted within a tank and having a horizontally sliding door operating to open and close the lower end as required to admit the bottle within the rack and hold the bottle in position, substantially as specified. 10th. In a fire extinguisher, a suitable tank, a cap removably closing said tank, a rack depending downwardly from said cap into said tank, an acid bottle removably positioned in said rack and supported thereby, a sliding bolt operating through said cap, a stopper carried by the lower end of said bolt and operating to close the mouth of said bottle, and a lever pivotally connected to said cap and slidingly connected with the upper end of said bolt, substantially as specified. 11th. In a fire extinguisher, a suitable tank, a cap removably closing said tank, a rack depending downwardly from said cap into said tank, an acid bottle removably positioned in said rack and supported thereby, a sliding bolt operating through said cap, a stopper carried by the lower end of said bolt and operating to close the mouth of said bottle, a lever pivotally connected to said cap and slidingly connected with the upper end of said bolt, and a spring operating to pull said stopper away from the mouth of said bottle, substantially as specified. 12th. In a fire extinguisher, a suitable tank, a cap removably closing said tank, a rack depending downwardly from said cap into said tank, an acid bottle removably positioned in said rack and supported thereby, a sliding bolt operating through said cap, a stopper carried by the lower end of said bolt and operating to close the mouth of said bottle, a lever pivotally connected to said cap and slidingly con-

nected with the upper end of said bolt, a spring operating to pull said stopper away from the mouth of said bottle, and a handle upon the free end of said lever for depressing said stopper, substantially as specified. 13th. In a fire extinguisher, a suitable tank, a cap removably screw-seated in position to close said tank, a rack depending downwardly from said cap into said tank, an acid bottle removably positioned in said rack and supported thereby, a sliding bolt operating vertically through said cap, a stopper carried by the lower end of said bolt and operating to open and close the said bottle, a lever pivotally connected to said cap and slidingly connected with the upper end of said bolt, a spring operating to pull said stopper away from the mouth of said bottle, ears projecting upwardly from said cap, a bail mounted with its ends operating in said ears, an eccentric mounted upon the centre of said bail and in position to engage the upper end of said sliding bolt as required to lock the device and hold said sliding bolt in its depressed position, substantially as specified. 14th. In a fire extinguisher, a suitable tank, a cap removably screw-seated in position to close said tank, a rack depending downwardly from said cap into said tank, an acid bottle removably positioned in said rack and supported thereby, a sliding bolt operating vertically through said cap, a stopper carried by the lower end of said bolt and operating to open and close said bottle, a lever pivotally connected to said cap and slidingly connected with the upper end of said sliding bolt, a spring operating to pull said stopper away from the mouth of said bottle, a rod slidingly mounted in a vertical position outside of said tank with its lower end normally extending below said tank, and connections between the upper end of said sliding rod and said lever, whereby said lever is operated by the sliding of said rod, substantially as specified. 15th. In a fire extinguisher, a suitable tank, an acid bottle securely mounted within said tank, a sliding bolt operating through a wall of said tank, a stopper carried by the lower end of said sliding bolt and operating to open and close said acid bottle, a lever pivotally mounted outside of said tank and slidingly connected to the outer end of said sliding bolt, a rod slidingly mounted in position outside of said tank with its end normally extending below said tank, and connections between the upper end of said sliding rod and said lever, substantially as specified.

No. 66,119. Process of Making Lead Oxide and White Lead. (*Procédé pour la fabrication d'oxyde de plomb et blanc de plomb.*)

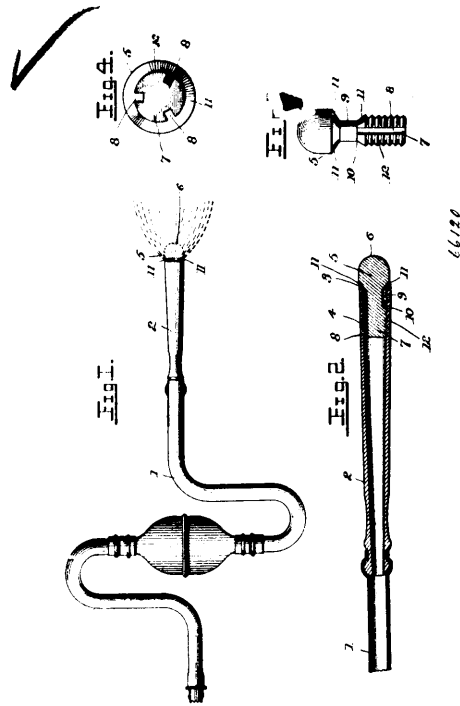


William Even S. Bunn and Ensley Jay Case, both of Peoria, Illinois, U.S.A., 6th February, 1900; 6 years. (Filed 30th November, 1899.)

Claim.—1st. The hereindescribed improvement in the art of making lead oxide and white lead, continuously, which consists in, first, reducing metallic lead by attrition and agitation in water, second, conducting the comminuted lead, mixed with water, into a separate vessel and therein subjecting the same to a rolling and tumbling motion in the presence of compressed air, third, settling the non-oxidized metallic lead and floating off the lead oxide, and then subjecting the lead oxide, mixed with water, to a further roll-

ing and tumbling motion and to the action of carbon dioxide under pressure, substantially as specified. 2nd. In apparatus for making lead oxide and white lead, the combination of a rotary cylinder supported on hollow trunnions and provided with an inlet and an outlet, an induction pipe for compressed air connected with one of the cylinder trunnions and an eduction pipe connected with the other trunnion, a flume to receive water and lead oxide from said cylinder, a settling tank to receive the discharge from the flume, a rotary cylinder supported on hollow trunnions and arranged to receive lead oxide and water from the settling tank, an induction pipe for carbon dioxide connected with one of the trunnions of said cylinder and an eduction pipe connected with the other trunnion, substantially as and for the purposes described. 3rd. In apparatus for making lead oxide and white lead, the combination of a reducing vessel or tub open at the top and provided with an outlet and with stationary and movable agitators, a rotary cylinder provided with an inlet and outlet and arranged to receive water and comminuted lead from the said reducing vessel, means for introducing compressed air into said cylinder, a flume to receive discharge of water and lead oxide from the said oxidizing cylinder, a settling tank to receive the discharge from said flume, a rotary cylinder arranged to receive water and lead oxide from said settling tank, and means for introducing carbon dioxide under pressure into and last-named cylinder, substantially as and for the purposes described.

No. 66,120. Syringe Nozzle. (*Lance de seringue.*)



Elish L. Day, and Robert E. Gaul, both of Brenham, Texas, U.S.A., 7th February, 1900; 6 years. (Filed 20th February, 1899.)

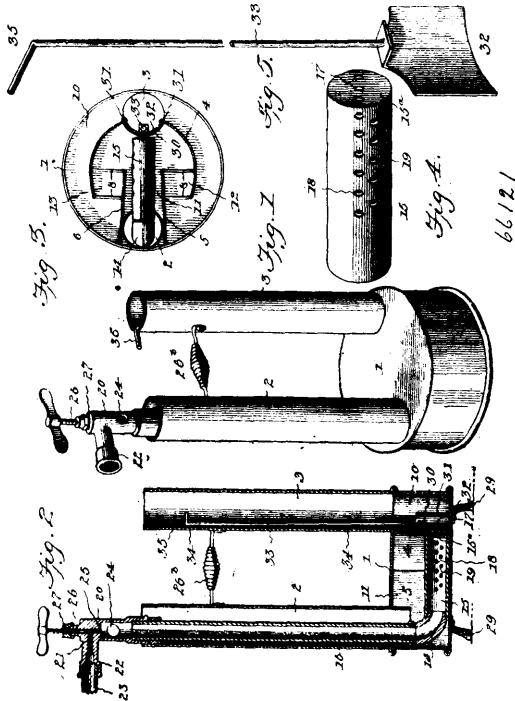
Claim.—1st. In a syringe, the nozzle, and a tip fitted within the nozzle and provided with a rounded head overhanging the contiguous end of the nozzle, and at one side of said head with a plurality of exterior longitudinal grooves in communication with the interior of the nozzle, said tip being further provided at one side of the head with a bevelled deflecting wall, substantially as described. 2nd. In a syringe, the combination with the nozzle having a threaded socket within one end, and a nozzle tip consisting of a body having at one end, a spheroidal head, and an exteriorly threaded cylindrical stem extended from one side of the head and provided with a plurality of spaced longitudinal grooves and a contracted annular neck groove directly adjoining the head and having its annular side walls flared, substantially as described.

No. 66,121. Submerged Heater. (*Chauffeur submergé.*)

William Henry Harrison Stevenson, Baltimore, Maryland, U.S.A., 7th February, 1900; 6 years. (Filed 8th January, 1900.)

Claim.—1st. A submerged heater, comprising a shell having a heating chamber, a burner tube situated within said chamber and provided at its lower side with the downwardly facing flame openings, an air inlet tube extending into said chamber of the casing to discharge the incoming current of air upon the burner tube, an out-

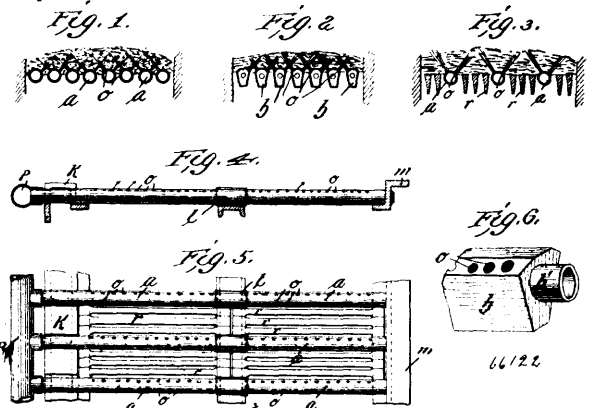
let tube coupled to said casing, and a fuel supply tube extending through the inlet tube and coupled to the burner tube, substantially



as described. 2nd. A submerged heater, comprising an interiorly divided casing having a heating chamber and a circulating flue communicating with said chamber by unobstructed and damper controlled openings or ports, a burner tube situated within the heating chamber, an air inlet tube extending into the heating chamber to discharge its current of air upon the burner tube, a fuel supply tube leading through the air inlet tube and coupled to the burner tube, and an outlet tube communicating with the circulating flue of said chamber, substantially as described. 3rd. In a submerged heater, a shell provided with the interior partitions forming a burner chamber and the circulating flues, one of said partitions having a port communicating with said chamber, and a burner tube housed within the chamber, combined with the air inlet tube discharging to said chamber over the burner tube, a circulating tube attached to said casing to communicate with the circulating flue, a damper in the circulating tube and adapted to close the port in said partition, and means in the inlet tube to supply fuel to the burner, substantially as described. 4th. In a submerged heater, a shell having its interior divided into flues by the curved partition 4, and the short partitions 5, 6, combined with a burner situated in the space formed by and between said partitions, an air inlet flue coupled to the shell to supply air to the central space of the shell and above the burner, and an outlet tube coupled to the shell to communicate with the flue which surrounds the partition 4, substantially as and for the purpose described. 5th. In a submerged heater, a shell provided with the interior partition 4, and with the partitions 5, 6, and also provided with an opening 30, in said partition 4, combined with a burner contained within the central space of the shell and arranged adjacent to the opening 30, a slidable damper mounted on the partition 4, to close or expose the opening 30, circulating flues communicating with the flues in said shell, and means for operating the damper, substantially as described, for the purposes set forth. 6th. In a submerged heater, the combination of a shell having the circulating tubes, a series of metal partitions or deflectors secured within the shell to weight the same and to divide its chambers into tortuous flues, a burner housed within the chamber of the shell, a damper situated within one of said circulating tubes to change the course of the heat through the casing, and means situated within the other circulating flue for supplying gaseous fuel to the burner, substantially as and for the purposes described. 7th. In a submerged heater, the combination of a shell, having its interior divided to form tortuous flues, circulating tubes attached to the shell to communicate with different flues in the shell, a burner housed within the shell, on a horizontal plane below said circulating flues and provided in its lower side with the downwardly facing openings, means for supplying gaseous fuel to said burner, and a damper contained within the shell and operated by means extending through one of the circulating tubes, substantially as described, for the purposes set forth. 8th. In a submerged heater, the combination of an interiorly divided shell, the air inlet and outlet tubes coupled to the shell, a burner contained within one of the flues in the shell, a mixing tube extending through the air inlet tube and coupled at one

end to the burner, a mixer attached to the mixing tube, and a damper contained within the shell and having an operating stem which passes through the air outlet tube, substantially as and for the purposes described. 9th. In a submerged heater, the combination with a chamber and circulating flues connected therewith, of an upright mixing flue communicating with said chamber, a burner located in said chamber, and air and gas inlets to said flue and located to insure the free ingress of air thereto, substantially as described, for the purposes set forth. 10th. In a submerged heater, the combination with a chamber and a burner, of an air inlet flue communicating with said chamber, an outlet flue also connected to said chamber, an upright mixing flue connected to the burner, air and fuel inlets connected to said mixing flue and located at a point to insure free ingress of air to said flue, and a damper arranged to cut off direct communication between said chamber and the outlet flue, or to establish unbroken communication between said chamber and flue, substantially as described. 11th. In a submerged heater, the combination with a chamber, and a burner therein, of air inlet and outlet flues connected to said chamber, an upright mixing flue extending through the inlet flue and connected to the burner, an inlet to the mixing flue located at a point to insure free ingress of air to said flue, and a fuel supply connected to the mixing flue contiguous to the air inlet, for the purpose described, substantially as set forth. 12th. A submerged heater, comprising a chamber, a burner located in said chamber and having flame openings on all sides thereof to direct the flame against the bottom, walls and top of said chamber, a mixing flue connected to said burner, substantially as described, and air and gas inlets to said flue and located to insure the free ingress of air thereto.

No. 66,122. Furnace. (Fournaise.)



Cornelius-Feuerung Actien-Gesellschaft, Berlin, Prussia, 7th February, 1900; 6 years. (Filed 18th January, 1900.)

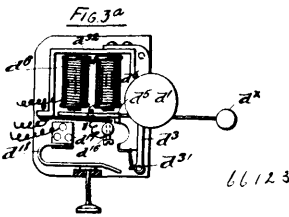
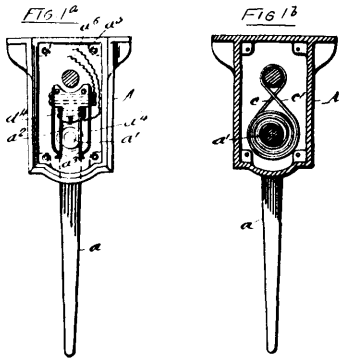
Claim.—1st. A furnace having a grate comprising a series of hollow bars and perforators therein discharging in diverging radial lines, substantially as described. 2nd. A furnace having a grate comprising a series of hollow grate bars having perforations therein, discharging in diverging radial lines and solid bars interposed between the hollow bars, substantially as described. 3rd. A furnace having a grate comprising a series of hollow bars with openings or perforations therein, a supply pipe connected to one end of said bars, said openings or perforations gradually increasing from one end to the other, substantially as described. 4th. In a furnace, the air chamber, the hollow grate bars perforated and removable plugs fitted to the ends of said grate bars, substantially as described.

No. 66,123. Railway Signal. (Signal de chemin de fer.)

Wynford Brierley, Carr Hall Villa, Nelson, Lancaster, England, 7th February, 1900; 6 years. (Filed 24th December, 1898.)

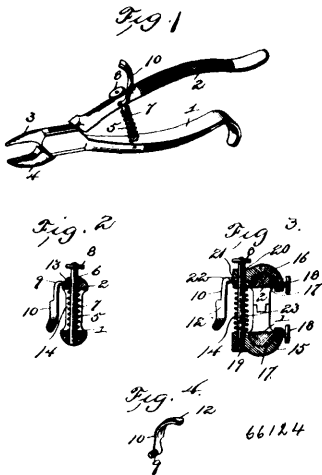
Claim.—1st. In a railway signaling apparatus, the combination of two electric signals on an engine with two spring levers also on the engine or train, and connections between the levers and signals, with a rocking contact bar on the permanent way, having two contact arms, one adapted to deflect one of said levers when the line is clear and the other arm to deflect the other lever when the line is blocked, all substantially as described. 2nd. The combination of two signaling electromagnets and their respective armatures carrying clappers with a gong or bell common to the two clappers, and visible signals controlled by said electromagnets, all within an inclosing case, substantially as described. 3rd. The combination of the electromagnets and armature of a signalling apparatus with a signal lever controlled by said armature and a push button adapted to act on said signal lever and also to close the circuit for testing,

substantially as described. 4th. In a railway signalling apparatus, the combination of a pair of levers on the engine or train to control



signals thereon with a weighted rocking bar on the permanent way, having two contact arms for the respective levers, substantially as described.

No. 66,124. Dental Forceps. (Pince dentaire.)

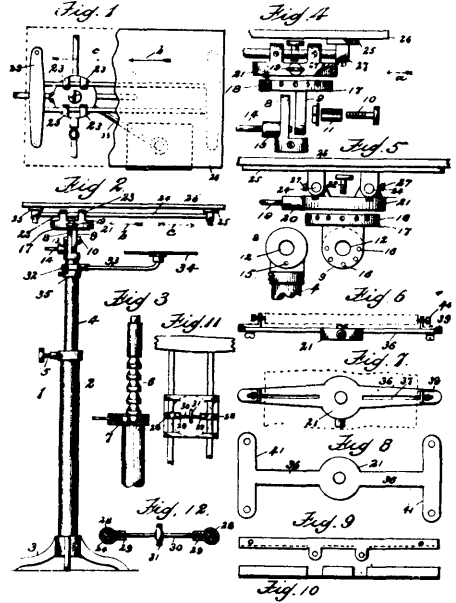


Nicholas B. McThee, Orange, California, U.S.A., 7th February, 1900 ; 6 years, (Filed 12th October, 1899.)

Claim.—1st. The combination with an implement of the class described, having a bar extending laterally from one of the hand levers and passing loosely through an opening provided in the opposite hand lever, of set screw carried by the latter lever, adapted to engage the transverse bar and provided with a laterally extending lever having an actuating thumb piece located in convenient reach of the hand operating the implement, substantially as and for the purpose set forth. 2nd. The combination with an implement of the class described, of a pair of opposite clamps adapted to be detachably fitted to the respective hand levers of the implement, one of the clamps being provided with a transverse bar adapted to extend loosely through an opening provided in the other clamp, and a set screw carried by the latter clamp and provided with an operating thumb piece, said set screw being adapted to engage the transverse bar, whereby the hand levers may be locked, substantially as shown and described. 3rd. The combination with an implement of the class described, of a pair of opposite clamping members, each being provided with a bifurcation or socket adapted to receive the respec-

tive handles of the implement and a set screw whereby the clamp may be detachably connected to the handle, one of the clamps having a transverse bar adapted to pass loosely through an opening provided on the other clamp, the latter clamp being provided with a set screw having an operating thumb piece and adapted to engage the transverse bar whereby the handles of the implement may be locked, substantially as shown and described.

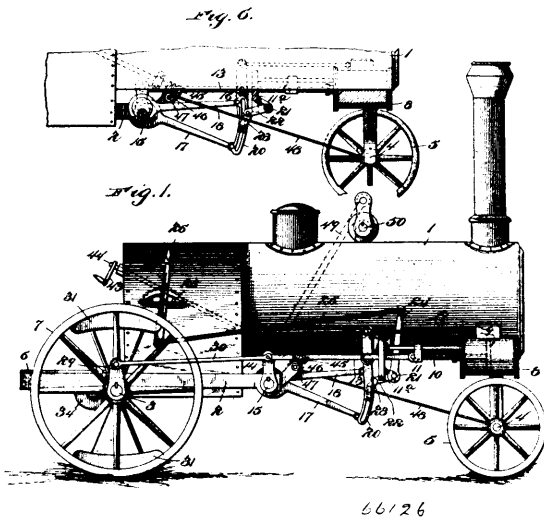
No. 66,125. Support for Tops of Tables. (Support pour dessus de table.)



Nervin B. LeFevre, Philadelphia, Pennsylvania, U.S.A., 7th February, 1900 ; 6 years. (Filed 25th January, 1900.)

Claim.—1st. A support for the tops of tables, stands, etc., comprising a standard, a head thereon, a casting hinged to said head to move thereon, a fitting movably connected to said casting, a device connected to move freely on said fitting and to be rigidly secured to the top of a stand, table, etc., and means to hold said top at any desired angle on said standard, substantially as described. 2nd. A support for the tops of tables, stands, etc., comprising a standard having a stationary member 2, and a movable member 4, a head rigid with said movable member, a casting hinged to said movable head to move thereon, a fitting hinged to said casting, a device connected to move freely on said fitting and to be rigidly connected to the top of a table, stand, etc., and means to hold said device rigid with the fitting, substantially as described. 3rd. In a support for the tops of tables, stands, etc., a standard comprising a tubular portion having supporting feet, a movable portion to move in said tubular portion, and a device to hold said movable portions at different elevations in combination with a support connected to a table top, and discs hinged together and to said standard and to said support, substantially as described. 4th. In a support for the tops of tables, stands, etc., a standard, a shelf hinged to said standard, a head rigid with said standard and provided with a disc 8, having a spring controlled locking bolt connected therewith, a disc 9, hinged to said disc 8, and provided with a series of apertures to be engaged by said locking bolt, a fitting carried by said disc 9, a top for tables, stands, etc., rigidly connected to said fitting, and adjusting devices connected to said fitting, and discs to incline the top as desired, substantially as described. 5th. In a support for tops of tables, stands, etc., a standard, a head rigid with said standard, a disc 8, rigid with said head, a disc 9, hinged to said disc 8, a disc 17, rigid with said disc 9, at right angles thereto and provided with a series of peripheral apertures, a cup-shaped fitting to cover said disc 17, connected thereto and provided with a spring controlled locking rod to engage the apertures in said disc 17, a device rigid with the top of tables, stands, etc., and adapted to move freely on the cup-shaped fitting, and means to hold the top at different angles with the standard, substantially as described. 6th. A casting to support a top for tables, stands, etc., said casting comprising a cup-shaped fitting 21, and attached parts to be rigidly to a top for tables, stands, etc., a locking rod upon said fitting 21, a disc 8, rigid with the top supporting standard, a locking rod on said disc 8, and discs 9, and 17, rigidly connected together at right angles to each other hinged to said disc 8, and fitting 21, respectively, and provided with apertures to be engaged by the locking rods on the disc 8, and fitting 21, substantially as described.

No. 66,126. Traction Engine. (Machine à traction.)

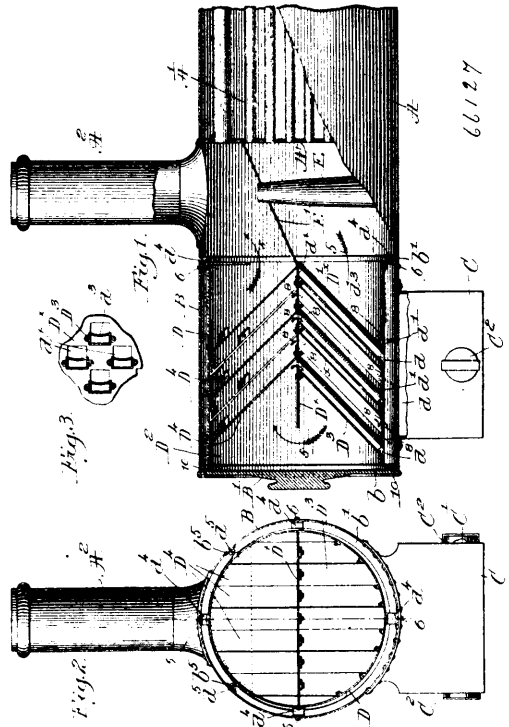


John M. Chappel, Ennis, Texas, U.S.A., 7th February, 1900; 6 years. (Filed 25th January, 1900.)

Claim.—1st. In a traction-engine, the combination with a crank-shaft and means for imparting rotary motion thereto, of valve mechanism including an intermediately-fulcrumed rocking lever, a compensating lever mounted for sliding movement upon a pivot at the extremity of one arm of the rocking lever, eccentric-rods, actuated by eccentrics on said crank-shaft, connected with the arms of the compensating lever at opposite sides of its fulcrum, a rock-shaft having a crank-arm connected by a link with the compensating lever, and means including a hand-lever for communicating motion to the rock-shaft, substantially as specified. 2nd. In a traction-engine, the combination with a crank-shaft, and means for communicating rotary motion thereto, of a driving-axle having crank-arms, connecting rods between said crank arms and corresponding arms on the crank shaft, driving wheels, and clutch mechanism for connecting the driving wheels with the driving shafts, substantially as specified. 3rd. In a traction engine, the combination with a crank shaft and means for communicating rotary motion thereto, of main and auxiliary driving shafts having crank arms, driving-wheels loosely mounted upon the main driving shaft, connecting-rods for communicating motion from the crank shaft to one of said driving shafts, and clutch mechanism for locking the driving wheels to the main driving shaft, substantially as specified. 4th. In a traction engine, the combination with a crank shaft and means for communicating rotary motion thereto, a driving shaft having crank arms, connecting rods between said crank arms and the crank shaft, driving wheels loosely mounted upon the driving shaft, and independent clutch mechanism for locking the driving wheels to the driving-shaft, substantially as specified. 5th. In a traction-engine, the combination with a crank shaft and means for communicating motion thereto, of a single driving-shaft having crank arms connected respectively with said crank shaft, independent driving wheels loosely mounted upon the driving shaft, and independent clutch mechanism for locking the driving wheels to the driving shaft, substantially as specified. 6th. In a traction engine, the combination with a driving shaft and means for communicating rotary motion thereto, of independent driving wheels loosely mounted upon the driving shaft, clutches each having oppositely-disposed clutch shoes, a clutch collar mounted for axial movement upon the driving shaft, and yielding thrust rods connecting each clutch shoe with the clutch collar, a clutch cylinder having independent piston chambers, and pistons operatively connected respectively with the clutch collars, and means for actuating either of said pistons, substantially as specified. 7th. In a traction engine, the combination with a driving shaft and means for communicating rotary motion thereto, of driving wheels mounted upon the driving shaft, and a clutch in connection with each driving wheel, the same having diametrically opposite clutch shoes for contact with the inner surface of the co-operating driving wheel rim, a clutch collar mounted for axial movement upon the driving-shaft and keyed thereto, and yielding thrust rods connecting each clutch shoe with the collar and adapted to separate the clutch shoes for contact with the wheel rim when the clutch collar is moved toward the plane of the wheel, substantially as specified. 8th. In a traction engine, the combination with a driving shaft and means for communicating rotary motion thereto, of driving wheels loosely mounted upon the driving shaft, clutch collars mounted for axial movement upon the driving shaft, separable clutch shoes connected with each clutch collar and adapted to be spread into contact with the inner periphery of one of the driving wheels, a clutch cylinder having independent piston chambers, pistons operating in said chambers and having

their rods connected respectively with said clutch collars, and pairs of conductors in communication with the piston chambers of the cylinder at opposite ends, each pair of conductors having a controlling valve arranged in operative relation with a feed port and an exhaust port, and reversible to introduce motive fluid into either piston-chamber at either side of the plane of the piston located therein, substantially as specified.

No. 66,127. Spark Arrester. (Arrête étincelle.)

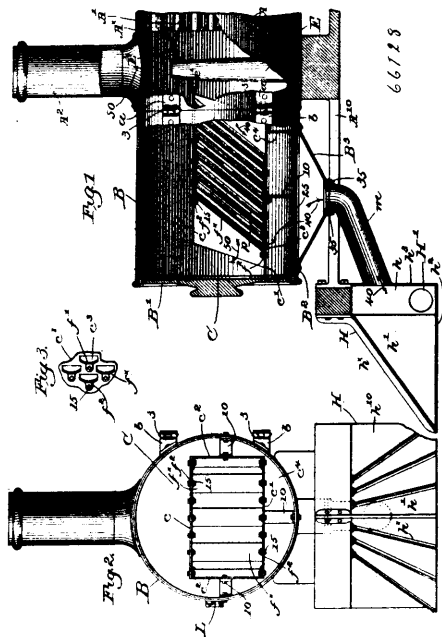


Natan Page Stevens, Concord, New Hampshire, U.S.A., 7th February, 1900; 6 years. (Filed 25th January, 1900.)

Claim.—1st. A spark arrester having receiving and discharge chambers for the products of combustion communicating at a point remote from the inlet of the former, a series of staggered tubular baffles in the receiving chamber, to form a tortuous passage there-through, and communicating with the discharge chamber, staggered baffle plates in the latter chamber, and cinder outlets in each chamber adjacent the lower ends and at the inlet sides of the baffles, substantially as described. 2nd. A spark arrester having receiving and discharge chambers for the products of combustion, communicating at a point remote from the inlet of the former, a series of staggered, tubular baffles in the receiving chamber, communicating at their upper ends with the discharge chamber, staggered baffle plates in the latter chamber, their lower ends being interposed between the inlets of the tubular baffles and the main outlet of said chamber, and cinder outlets in the receiving chamber, at the inlet sides of and adjacent the lower ends of said tubular baffles. 3rd. A spark arrester comprising a tubular shell having a closure at its outer end, a transverse diaphragm dividing it into a lower receiving and an upper discharge chamber for the products of combustion, said chamber communicating at the closed end of the shell, staggered baffles in the discharge chamber, cinder outlets in the diaphragm at the inlet side of and adjacent the lower ends of said baffles, staggered baffle tubes leading from said outlets through the receiving chamber to the exterior of the shell at its lower portion, and cinder outlets in the said chamber at the inlet sides of and adjacent the lower ends of the baffle tubes. 4th. A spark arrester comprising a tubular shell having external, longitudinal supporting and positioning ribs, superposed discharge and receiving chambers within it, the latter having an inlet and the former an outlet for the products of combustion from a boiler, baffles in each chamber, and cinder outlets for said chambers, located adjacent the lower ends and at the inlet sides of the respective series of baffles, the chambers communicating at the outer, closed end of the shell beyond the baffles. 5th. A locomotive boiler having a projecting smoke box beyond the exhaust outlet, and an inclined directing plate to deflect the products of combustion to the lower part of the box, combined with a removable spark arrester in the smoke box, said arrester comprising a tubular shell closed at its outer end and having a lower receiving and an upper discharge chamber for the products of combustion, communicating at the closed end of the shell, staggered baffle plates in the discharge chamber, cinder outlets adjacent the lower ends and at the inlet

side of said plates, staggered baffle tubes leading from said outlets through the receiving chamber to the exterior of the shell at its lower portion, and cinder outlets in the said chamber at the inlet sides of and adjacent the lower ends of the baffle tubes, the directing plate separating the main inlet and outlet openings of the receiving and discharge chambers.

No. 66,128. Spark Arrester. (*Arrête étincelle.*)



Natan Page Stevens, Concord, New Hampshire, U.S.A., 7th February, 1900; 6 years. (Filed 25th January, 1900.)

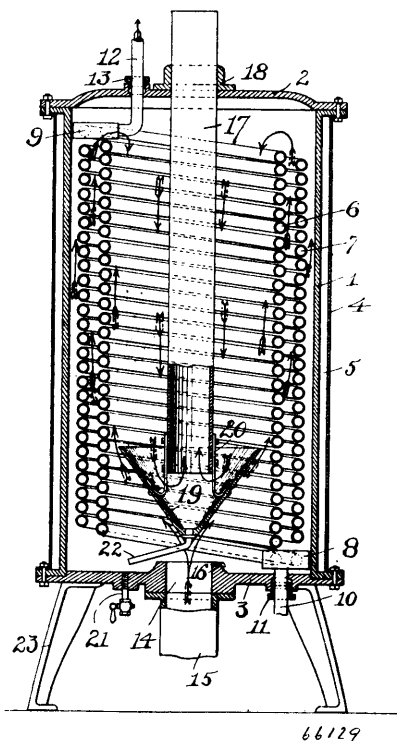
Claim.—1st. A spark arrester comprising a chamber to receive the products of combustion and having inlet and outlet openings, a series of laterally staggered imperforate baffles intermediate said openings and concave on their inlet sides, and cinder outlets in the chamber adjacent the lower ends and at the inlet sides of the baffles. 2nd. A spark arrester comprising a chamber to receive the products of combustion and having inlet and outlet openings, a series of laterally staggered, concavo-convex imperforate baffles inclined from the top to the bottom of said chamber with their concave sides toward the inlet, and cinder outlets in said chamber adjacent the lower ends and at the inlet sides of the baffles. 3rd. A spark arrester comprising an open ended elongated chamber having its top and bottom parallel, to receive products of combustion at one end and having an outlet at its other end, laterally staggered imperforate baffles inclined from the top to the bottom of the chamber and concave at their inlet sides, and cinder outlets adjacent the lower ends and at the inlet sides of the baffles. 4th. A spark arrester comprising a chamber to receive the products of combustion and having inlet and outlet openings, a series of laterally staggered imperforate baffles intermediate said opening and extended from the top to the bottom of the chamber, and cinder outlets in the chamber adjacent the lower ends and at the inlet sides of the baffles. 5th. In a locomotive, a spark arrester having inlet and outlet opening for the products of combustion, staggered baffles intermediate said openings, cinder outlets adjacent the lower ends and at the inlet sides of the baffles, a box-like cow catcher, and a connection between it and the several cinder outlets, to convey cinders to the said cow catcher. 6th. In a locomotive, a spark arrester into which the products of combustion pass, and enclosed box-like cow catcher, and means to convey cinders from the spark arrester to the cow catcher. 7th. In a locomotive, a smoke box, a spark arrester therein having cinder outlets communicating with a chamber in the bottom of the smoke box, an enclosed cow catcher, and a connection between said chamber and the cow catcher, to convey cinders to the latter from the chamber.

No. 66,129. Feed Water Heater. (*Réchauffeur d'eau d'alimentation.*)

Lewis Cass Lemphear, Boston, Massachusetts, U.S.A., 7th February, 1900; 6 years. (Filed 23rd January, 1900.)

Claim.—1st. A feed water heater comprising a casing, pipes for the feed water, extending through the casing, a steam inlet, and a steam outlet consisting of a pipe extending into the casing and having a baffle plate on its inner end in the path of the steam from

the inlet, the escape passage into the outlet pipe being adjacent to the said baffle plate, substantially as described. 2nd. A feed water



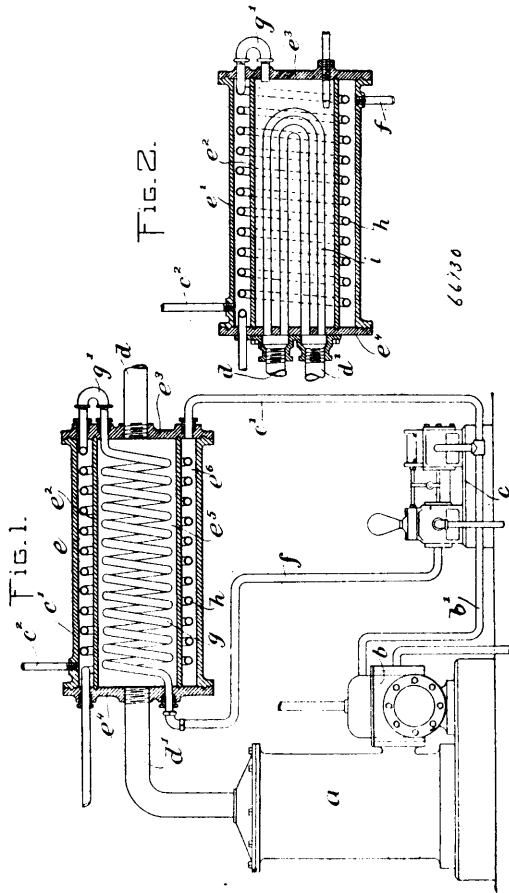
heater comprising a casing, pipes for the feed water, extending through the casing, a steam inlet, and a steam outlet consisting of a pipe projected into the casing and having on its end a conical deflected plate arranged to intercept the steam which passes in through the outlet, the escape passage into the outlet pipe being adjacent to the said baffle plate. 3rd. A feed water heater comprising a cylindrical casing, feed water pipes extending from end to end of said casing, a steam inlet at one end of said casing, a steam outlet consisting of a pipe projected inwardly from the other end of said casing, and ending a relatively short distance from the inlet, an inverted conical baffle plate connected to the end of the said pipe, but separated therefrom to form a steam passage, and a drip pipe leading laterally from the apex of said baffle plate.

No. 66,130. Feed Water Heater. (*Réchauffeur d'eau d'alimentation.*)

Lewis Cass Lemphear, Boston, Massachusetts, U.S.A., 7th February, 1900; 6 years. (Filed 23rd January, 1900.)

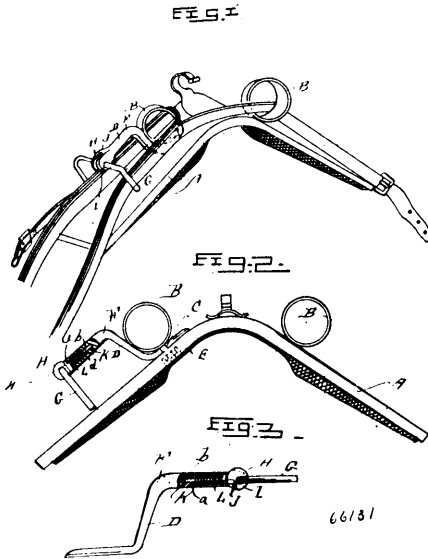
Claim.—1st. A feed water heater having an inner chamber, an outer annular chamber uncommunicating with said inner chamber, conduits for the feed water leading from one chamber to the other, means for delivering steam into the inner chamber and exhausting it therefrom, and means for delivering steam into the outer chamber and exhausting it therefrom, whereby the water is initially heated in one chamber and receiving a supplemental heating in the other chamber. 2nd. A feed water heater comprising two casings, one within the other and forming an inner chamber and an outer chamber which are separate and uncommunicating, separate means for introducing steam into and exhausting it from each of said chambers into the other chamber and delivering it from said last mentioned chamber. 3rd. A feed water heater comprising two casings, one within the other and forming two separate uncommunicating chambers, a pipe extending through each casing, an inlet and an exhaust pipe to introduce steam into and discharge it from each of the chambers, a feed water inlet extending into one of said chambers, a feed water outlet extending out from the other of said chambers, and a coupling for conducting the feed water from one of said chambers to the other whereby exhaust steam from a main engine may be passed through one chamber to initially heat the water, and exhaust steam from auxiliary engines or pumps may be passed through the other chamber to increase the temperature of the water. 4th. A feed water heater comprising two tubular casings, one within the other, a plate at each end of the heater for closing the two casings whereby there are formed two separate uncommunicating chambers, a separate steam inlet for each chamber, and a separate

outlet therefor, whereby steam from separate sources may be admitted to said chambers respectively, and conduits for passing



feed water first through one chamber and then through the other chamber whereby the water is initially heated in the first chamber and receives a supplemental heating in the second chamber.

No. 66,131. Rein Holder. (Porte-rines.)

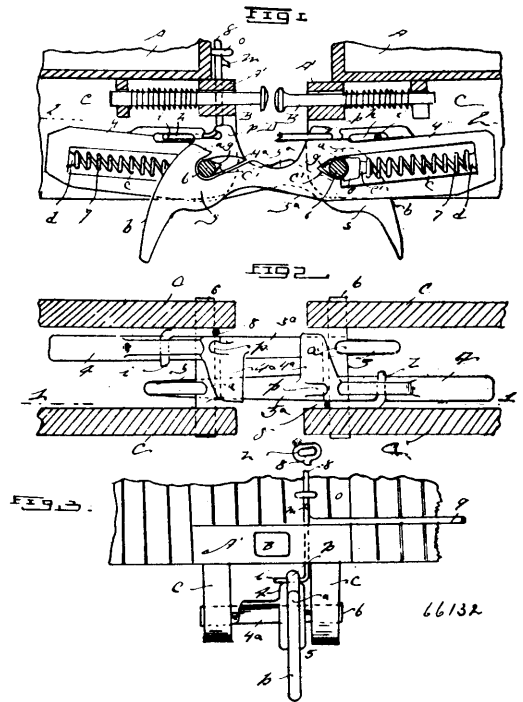


Jeremiah M. Ruse, Tiffin, Ohio, U.S.A., 7th February, 1900; 6 years. (Filed 10th January, 1900.)

Claim.—1st. In a line holder for harness, the combination with a bracket having a bifurcated projection extending therefrom, as also

a recess therein, a presser foot adapted to project within said recesses, a spring for operating said presser foot, and a fork having a cam stop fixed thereon, and mounted within said bifurcated projection, said fork held by the bifurcated projection being bent around said fork, substantially as shown and described. 2nd. In a line holder for harness, the combination with a bracket having a bifurcated projection extending therefrom as also a recess therein, a shoulder in said recess, a presser foot having a stem fitting within said recess, a helical spring adapted to bear against said presser foot at one end and against said shoulder at its other end, a fork pivotally mounted carried by said bifurcated projection, an annular cam stop mounted on said projection between said bifurcations and having a portion of its periphery flattened, and adapted to be pressed by said presser foot, and means for securing said bracket to said harness, substantially as shown and described.

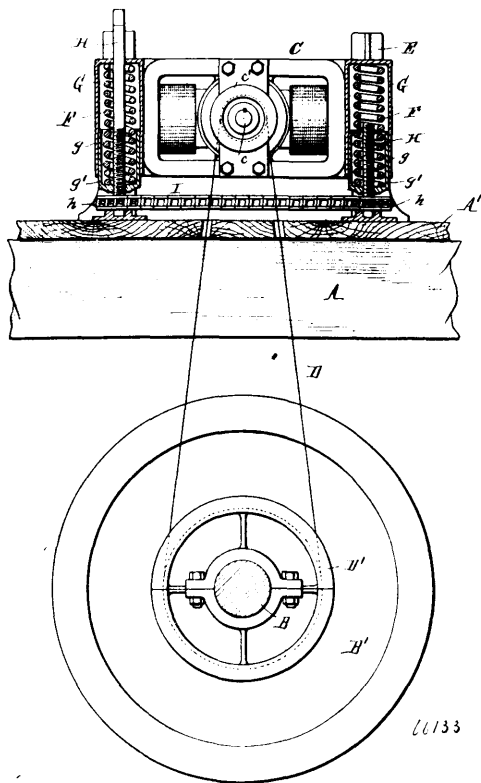
No. 66,132. Car Coupler. (Attelage de chars.)



Alfred Riley Heath, Covington, Indiana, U.S.A., 7th February, 1900; 6 years. (Filed 3rd January, 1900.)

Claim.—1st. In a car-coupling, the combination with a body having a hook member at one end, and a slotted draw bar at the opposite end, of a supported rock shaft at the forward end of the slot, a fulcrum box engaging the rear side of the rock shaft, and a buffer spring in the slot having its ends respectively pressing upon the draw bar and fulcrum box. 2nd. In a car coupling, the combination with a body having a hook member at one end, and an integral longitudinally slotted draw bar at the opposite end, the front end of the draw bar slot being angularly notched, of a supported rock shaft having a lateral lug which fits in the angular notch, a fulcrum box concaved on one side which engages the rear side of the rock-shaft, and a coiled buffer spring held in the draw bar slot so as to press upon the fulcrum box. 3rd. In a car coupling, the combination with a body having a hook member at one end, an integral longitudinally slotted draw-bar at the opposite end, the front end of the draw bar slot being angularly notched, and a guide flange laterally projected from the draw-bar near the front end of the slot therein, of a supported rock-shaft having a lateral lug that fits in the angular notch, a fulcrum box concaved on one side which engages the rear side of the rock shaft body, and a coiled spring held in the draw bar slot so as to press upon the fulcrum box. 4th. In a car coupling of the character described, the combination with a coupling body supported to rock near its longitudinal centre along with a rock shaft, and a buffer spring carried in the slot of said body rearward of the rock shaft, and pressing a fulcrum box thereon, the coupling body having a hook on its forward end, of a lifting rod projecting upwardly from the coupling body near the rock shaft, a handle on the upper portion of the lifting rod, a hook thereon adapted to engage a staple on the car-body, and a lateral handle bar on the lifting-rod.

No. 66,133. Electric Lighting Apparatus for Railway Cars. (*Appareil de lumière électrique pour chars de chemin de fer.*)



66133

Charles Albert Gould, New York City, New York, U.S.A., 7th February, 1900; 6 years. (Filed 25th July, 1898.)

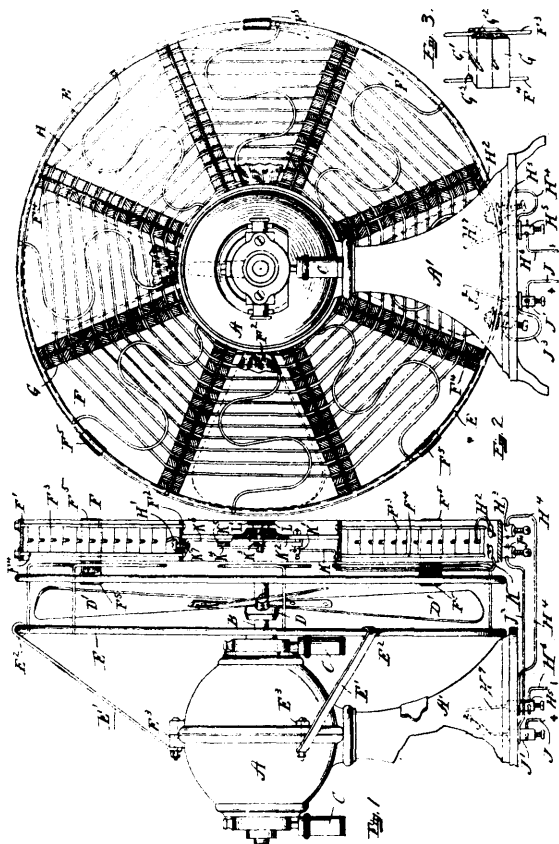
Claims.—1st. The combination with a railway car having one of its axles provided with a pulley, of a dynamo yieldingly mounted on the car above said axle, so as to be capable of moving vertically toward and from the same, and a driving belt running around said pulley and the pulley of the dynamo shaft, substantially as set forth. 2nd. The combination with a car body having upright guides arranged above one of the axles of the car, of a dynamo sliding on said guides, a spring or springs which tend to move said dynamo away from said axle, and a driving belt for transmitting motion from said car axle to the dynamo shaft, substantially as set forth.

No. 66,134. Electric Heater. (*Chauffeur électrique.*)

The Bay State Electric Heat and Light Co., New Jersey, assignee of Robert Lundell, New York City, New York, both in the U.S.A., 3th February, 1900; 6 years. (Filed 15th June, 1898.)

Claim.—1st. In an electric heating apparatus, a fan, a motor for operating said fan, an electric heater located in front of said fan and consisting of one or more heat developing electrical conductors or resistances forming an open screen through which the air from said fan passes, insulating blocks having grooves in which the conductors or resistances are located and supported, an inner and an outer ring between which said insulating blocks are located, and rods located in grooves in the ends of said insulating blocks and connected to said rings for holding the blocks in position. 2nd. In an electric heating apparatus, a fan, a motor for operating said fan, an electric heater located in front of said fan and consisting of one or more heat developing electrical conductors or resistances forming an open screen through which the air from said fan passes, insulating blocks for supporting the electrical conductors or resistances, an inner and an outer ring between which said insulating blocks are located, and rods located on the ends of said blocks and connected to said rings for holding said blocks in position. 3rd. In an electric heating apparatus, a fan, a motor for operating said fan, an electric heater consisting of one or more heat developing electrical conductors or resistances forming an open screen through which the air to be heated passes, insulating blocks for supporting the electrical conductors or resistances, an inner and an outer ring between which said insulating blocks are located, and rods located on the ends of said blocks and connected to said rings for holding said blocks in position. 4th. In an electric heating apparatus, a fan, a motor for operating said fan, an electric heater mounted upon the same support as the fan, and consisting of one or more heat developing

electrical conductors or resistances forming an open screen through which the air to be heated passes, insulating blocks for supporting



66134

the electrical conductors or resistances, an inner and an outer ring between which said insulating blocks are located, and rods located on the ends of said blocks and connected to said rings for holding said rings in position.

No. 66,135. Electric Lighting Apparatus for Railway Cars. (*Appareil de lumière électrique pour chars de chemin de fer.*)

Charles M. Gould, assignee of Willard Fillmore Richards, all of Buffalo, New York, U.S.A., 8th February, 1900; 6 years. (Filed 30th December, 1898.)

Claim.—1st. The combination with a railway car having one of its axles provided with a pulley, of a dynamo pivotally supported at one end on the railway car, whereby its opposite free end is capable of moving vertically with reference to said car axle, a yielding support which carries the free end of the dynamo, and a frictional driving mechanism whereby the dynamo is driven from said axle, substantially as set forth. 2nd. The combination with a railway car having one of its axles provided with a pulley, of a dynamo pivotally supported at one end of the railway car, whereby its opposite free end is capable of moving vertically with reference to said car axle, an adjustable pressure device which tends to move the opposite free end of the dynamo away from the driving axle, and a frictional driving mechanism whereby the dynamo is driven from said car axle, substantially as set forth. 3rd. The combination with a railway car having one of its axles provided with a pulley, of a dynamo arranged above said axle and pivotally supported at one end on the railway car, a spring which supports the opposite free end of the dynamo, an adjusting device for changing the tension of said spring, and a belt for driving the dynamo from the pulley of the driving axle, substantially as set forth. 4th. The combination with a railway car having one of its axles provided with a pulley, of a dynamo arranged above said axle and pivotally supported at one end on the railway car, an upright telescopic cylinder having one of its sections attached to the opposite free end of the dynamo, a vertical adjusting screw for moving the other section of the cylinder lengthwise on the first named section and a spring arranged in said cylinder, substantially as set forth. 5th. The combination with a railway car having one of its axles provided with a pulley, of a dynamo arranged above said axle and pivotally supported at one end on the railway car, an upright telescopic

cylinder having its upper section attached to the opposite free end of the dynamo by a swiveling connection, an upright adjusting

Fig. 1.

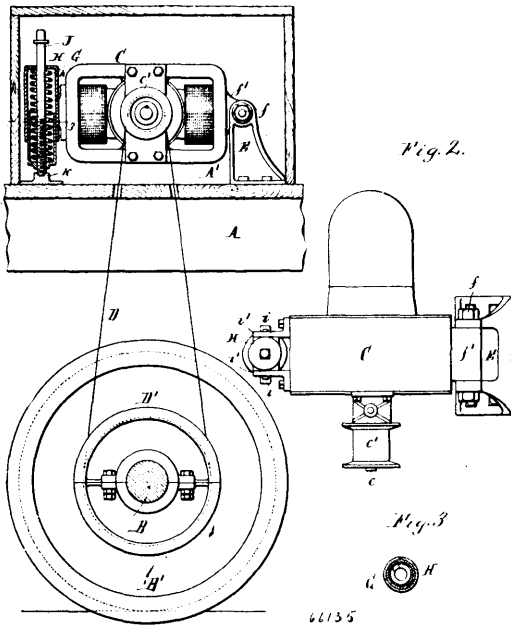


Fig. 2.

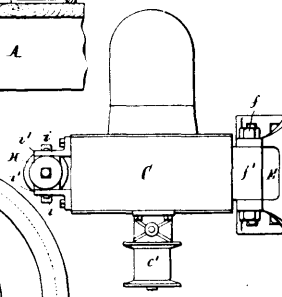


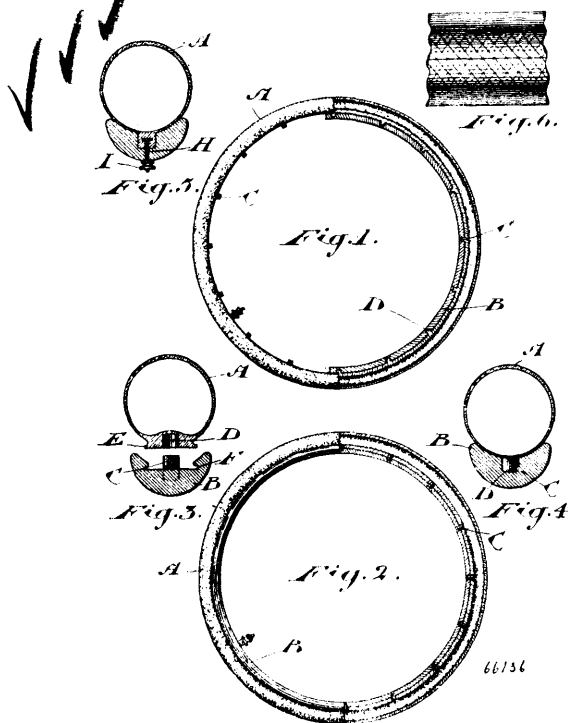
Fig. 3.



66135

screw extending through said cylinder and engaging with the lower section thereof, and a spring arranged in said cylinder and bearing against the ends of the same, substantially as set forth.

No. 66,176. Vehicle Tire. (Bandage de vehiele.)



66136

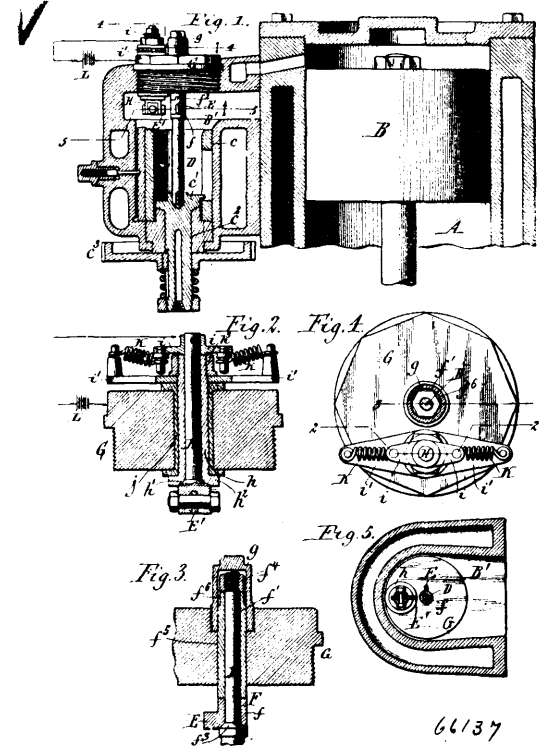
Hartley G. Authors, Annie Brazill and Frederick T. Sear, all of Toronto, Ontario, Canada, 8th February, 1900; 6 years. (Filed 25th September, 1899.)

Claim.—1st. A single tube tire formed of a textile material cut on the bias so as to contract on the rim when inflated, in combination with a series of radial studs of hardened rubber formed on the tire on a line immediately opposite the centre line of the tread, and a rim provided with holes or sockets of substantially the same cross-section and depth as the studs, and adapted to receive the studs and

hold the tire securely in operative position, substantially as and for the purpose specified. 2nd. A single tube tire in combination with a rim, a series of studs upon the one adapted to enter corresponding holes within the other, and flanges formed upon the rim side of the tire adapted to enter grooves formed in the rim, substantially as and for the purpose specified. 3rd. A single tube tire in combination with a rim, a series of studs formed on the tire and adapted to enter corresponding holes in the rim, bolts with their heads moulded in the said studs adapted to pass through the rim, and nuts screwed on the said bolts, substantially as and for the purpose specified.

No. 66,137. Electric Igniter for Gas Engines.

(Allumoir électrique pour machines à gaz.)



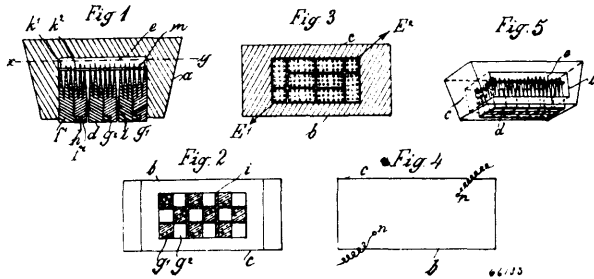
66137

The Standard Automatic Gas Engine Company, assignee of John Walter Raymond, all of Oil City, Pennsylvania, U.S.A., 8th February, 1900; 6 years. (Filed 6th October, 1899.)

Claim.—1st. The combination with the chamber and the two cooperating contacts of the electric igniter arranged in the chamber, of a rotary driving spindle arranged in said chamber and extending through an opening in the head thereof, a sleeve carrying one of said contacts and extending through said openings in the head, a clamping device whereby the sleeve is secured to the spindle, and a cap which closes said opening in the chamber head, substantially as set forth. 2nd. The combination with two contacts of an electric igniter and the rotary driving spindle, of a sleeve mounted on said spindle and carrying one of said contacts, a shoulder formed on said spindle and engaging with one end of the sleeve, and a clamping screw nut arranged on the spindle and bearing against the other end of the sleeve, substantially as set forth. 3rd. The combination with the two contacts of an electric igniter and the rotary driving spindle, of an adjustable supporting sleeve mounted on said spindle and composed of an inner section which carries one of the contacts and an outer section which is interlocked with the inner section, a shoulder arranged on the driving spindle and bearing against the inner sleeve section, and a clamping screw nut arranged on the driving spindle and bearing against the outer sleeve section, substantially as set forth. 4th. In an igniter, the combination with a support, a rock spindle journaled in said support and having a shoulder which bears against the inner end thereof, a contact at the inner end of the spindle adapted to be engaged by another contact, and a spring connected at its inner end with an arm on the outer end of the spindle and at its outer end to a support, the spring being arranged obliquely with reference to the axial line of the spindle and at its inner end nearer the shoulder of the spindle than at its outer end, whereby the spring holds the spindle yieldingly against turning and also presses the spindle with its shoulder against the inner end of the spindle support, substantially as set forth. 5th. In an igniter, the combination with a bushing or support, of a rock spindle journaled in the bushing or support and provided with a shoulder bearing against the inner end of said bushing or support, a laterally projecting contact arranged on the inner end of the rock spindle and adapted to be

engaged by another movable contact, two rock arms secured to the outer end of the spindle and projecting from diametrically opposite sides thereof, two supporting arms secured to the bushing or support adjacent to the rock arm, and obliquely arranged springs connected with their outer ends to the supporting arms and with their inner ends to the rock arms, the outer ends of the springs being arranged more remote from the shoulder of the spindle than the inner end of the springs, substantially as set forth.

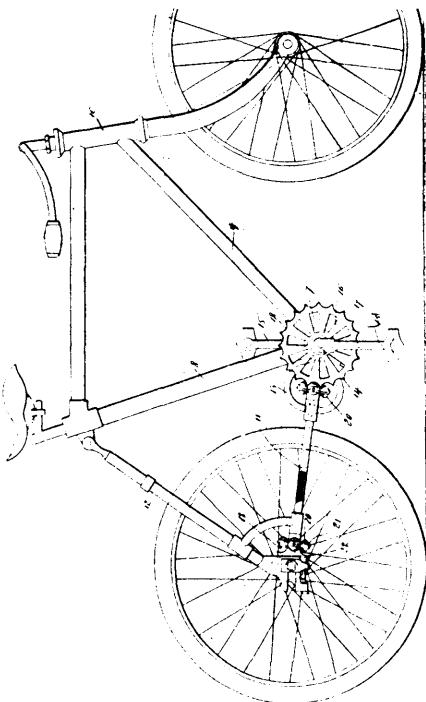
No. 66,138. Thermo-Electrical Building Brick.
(*Brique de construction thermo-electrique.*)



Joseph Matthias, Stuttgart, Germany, 8th February, 1900; 6 years.
(Filed 20th December, 1898.)

Claim.—1st. For the thermo-electrical utilization of waste heat hollow building bricks or blocks in the interior of which are arranged the electrodes of a thermo-electrical battery, the one end of these electrodes together with the insulating material between them closing one side of the brick completely and the other pointed ends terminating within the interior of the hollow brick, two opposite sides of the brick being open thus forming an air channel leading through the brick. 2nd. For the thermo-electrical utilization of waste heat hollow building bricks or blocks in the interior of which are arranged the electrodes of a thermo-electrical battery, the one end of these electrodes together with the insulating layers of the material of the brick or still of other insulating layers between them closing one side of the brick completely and the other pointed ends terminating within the interior of the hollow brick, two opposite sides of the brick being open, thus forming an air channel leading through the brick.

No. 66,139. Chainless Bicycle. (*Bicycle sans chaîne.*)



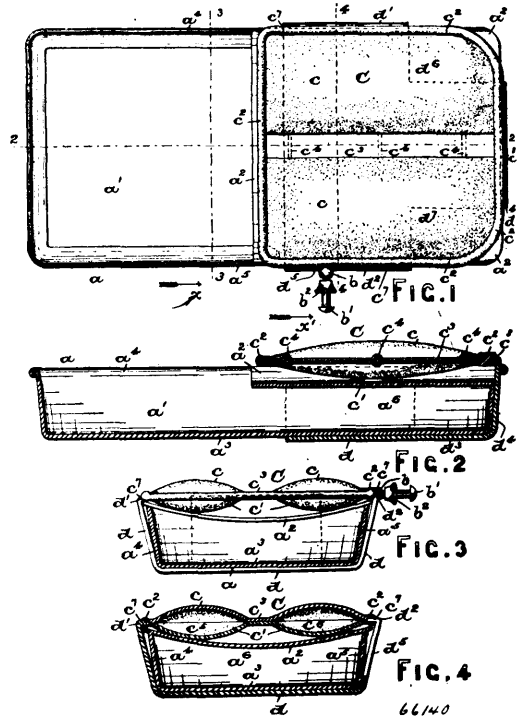
66139

Robert H. Hennemeier, New York City, New York, U.S.A.,
8th February, 1900; 6 years. (Filed 25th February, 1899.)

Claim.—1st A face gear wheel provided with radially mounted anti-friction rollers which are conical in form, and the bases of which are directed outwardly, substantially as shown and described.

2nd. A face gear wheel comprising a central hub, a circular disc or plate connected therewith and provided with radial openings which are conical in form, and radially mounted anti-friction rollers which are also conical in form, and which are adapted to turn in said openings, substantially as shown and described. 3rd. A face gear wheel comprising a central hub, a circular disc or plate connected therewith and provided with radial openings which are conical in form, and radially mounted anti-friction rollers which are also conical in form, and which are adapted to turn in said openings, the bases of said openings and said rollers being directed outwardly, substantially as shown and described. 4th. The combination with a face gear provided with radially mounted anti-friction rollers which are conical in form, and the bases of which are directed outwardly, of a sprocket wheel which is adapted to operate in connection with said face gear, said sprocket wheel being provided with teeth which are also separated by segmental spaces, substantially as shown and described. 5th. In a gearing of the class described, the combination with a face gear provided with radially mounted anti-friction rollers which are cylindrical in cross section, of a sprocket wheel provided with teeth which are separated by segmental spaces, substantially as shown and described. 6th. A bicycle provided with the usual pedal shaft and sprocket wheel mounted thereon, and a sprocket wheel mounted on the hub of the drive wheel, said sprocket wheels being provided with teeth separated by segmental spaces, and a shaft suitably mounted between said sprocket wheels and provided at each end with face gears which are adapted to operate in connection therewith, said face gear being provided with radially mounted anti-friction rollers in connection with which the teeth of said sprocket wheels operate, substantially as shown and described. 7th. A bicycle provided with the usual pedal shaft and sprocket wheel mounted thereon, and a sprocket wheel mounted on the hub of the drive wheel, said sprocket wheels being provided with teeth separated by segmental spaces, and a shaft suitably mounted between said sprocket wheels and provided at each end with face gears which are adapted to operate in connection therewith, said face gears being provided with radially mounted anti-friction rollers in connection with which the teeth of said sprocket wheels operate, said anti-friction rollers being radial in form, and the bases thereof being directed outwardly, substantially as shown and described.

No. 66,140. Back Rest for Douche or Bed Pans.
(*Appui-dos pour douches ou bassinoires.*)



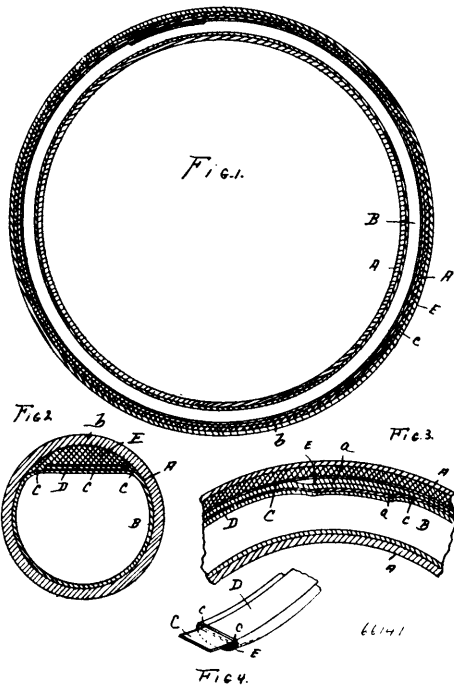
66140

Carrie Traband, Newark, New Jersey, U.S.A., 8th February, 1900;
6 years. (Filed 16th January, 1900.)

Claim.—1st. A rest or back protector for douche or bed pans, consisting of a pair of closely located air cushions, a longitudinally arranged and narrow central depression between said cushions, for integrally uniting said cushions, and forming a groove conforming with the position of the spine of a patient, and means connected therewith for the inflation of said cushions, substantially as and for the purposes set forth. 2nd. A rest or back protector for douche or bed pans, consisting of a pair closely located air cushions, a longi-

tudinally arranged and narrow central depression between said cushions, integrally uniting said cushions, and forming a groove conforming with the position of the spine of a patient, means connected therewith for inflation of said cushions, and a fastening means connected with the said rest or back protector for securing it in position upon a douche or bed pan, substantially as and for the purposes set forth. 3rd. A rest or back protector for douche or bed pans, consisting of a pair of closely located air cushions, a longitudinally arranged and narrow central depression between said cushions, integrally uniting said cushions, and forming a groove conforming with a position of the spine of a patient, means connected therewith for the inflation of said cushions, and a fastening means connected with the said rest or back protector for securing it in position upon a douche or bed pan, consisting of a pair of straps or bands, made in the manner of a T-bandage, substantially as and for the purpose set forth. 4th. In a rest or back protector for douche or bed pans, a pair of closely located air cushions, consisting of a pair of flexible layers *c* and *c*¹, integrally united marginal edges *c*², and central portions *c*³, connected with said layers, an inflating means connected with said layers, and a central depression between said cushions forming a groove, conforming with the position of the spine of a patient, substantially as and for the purposes set forth. 5th. In a rest or back protector for the douch or bed pans, a pair of closely located air cushions, consisting of a pair of flexible layers *c* and *c*¹, integrally united marginal edges *c*², and central portions *c*³, connected with said layers, an inflating means connected with said layers, and a central depression between said cushions forming a groove, conforming with the position of the spine of a patient, and a pair of straps or bands, made in the manner of a T-bandage, for securing said rest or back protector in position upon a douche or bed pan, substantially as and for the purposes set forth. 6th. In a rest or back protector for douche or bed pans, a pair of closely located air cushions, consisting of a pair of flexible layers *c* and *c*¹, integrally united marginal edges *c*², and central portions *c*³, connected with said layers, an inflating means connected with said layers, and a central depression between said cushions forming a groove, conforming with the position of the spine of a patient, and a duct or ducts in said integrally united portions *c*³, for an air communication between said cushions, substantially as and for the purposes set forth. 7th. In a rest or back protector for douche or bed pans, a pair of closely located air cushions, consisting of a pair of flexible layers *c* and *c*¹, integrally united marginal edges *c*², and central portions *c*³, connected with said layers, an inflating means connected with said layers, and a central depression between said cushions forming a groove, conforming with the position of the spine of a patient, a duct or ducts in said integrally united portions *c*³, for an air communication between said air cushions, and a pair of straps or bands, made in the manner of a T-bandage, for securing said rest or back protector in position upon a douche or bed pan, substantially as and for the purposes set forth.

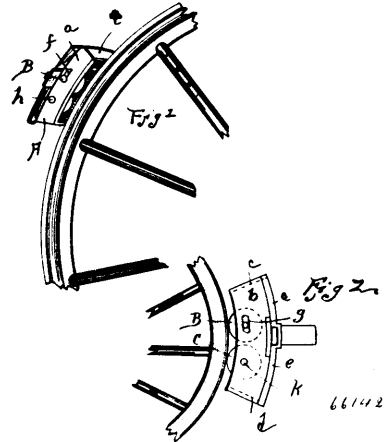
No. 66,141. Pneumatic Tire. (*Bandage pneumatique.*)



Guy F. Laws, James N. Randle, Sanford H. Hauser, all of Eugene, Oregon, U.S.A., 8th February, 1900; 6 years. (Filed 12th July, 1899.)

Claim.—1st. In a pneumatic or inflatable tire for vehicles, the combination of the outer case, the inner air tube, the felt cushion interposed between said casing and tube, and the circular spring also interposed between said tube and casing and embedded in said felt cushion. 2nd. In an inflatable tire for vehicles, the combination of the outer tread, the inner air tube, the cushion interposed between said casing and tube, the circular spring embedded in said cushion traversing the interior of the tire circumferentially, the free ends of said spring lapping substantially as set forth. 3rd. In an inflatable tire for vehicles, the combination of the outer casing, the inner air tube, the cushion of felt interposed between said cushion and tube, a fabric casing attached to said cushion, a circular steel spring inserted in said casing and having lapping ends, substantially as set forth. 4th. In an inflatable tire for vehicles, the combination of the outer casing, the inner air tube, a flat steel spring interposed between said casing and tube and curved concentric with the circle of the tire, the meeting ends of said spring lapping one on the other, substantially as set forth.

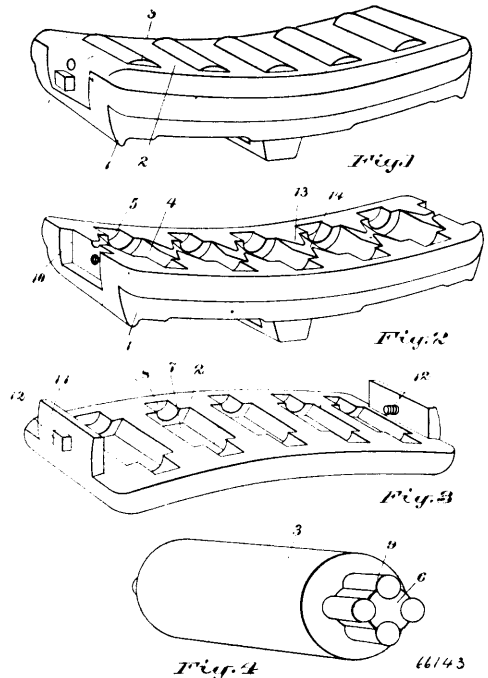
No. 66,142. Waggon Brake. (*Frein de wagon.*)



Albert F. Sanders, Monroe, Texas, U.S.A., 8th February, 1900; 6 years. (Filed 15th May, 1899.)

Claim.—In a brake shoe, the combination of the casing A, having the slots *f, g*, and the bearings *h, k*, formed in the side walls thereof, and the rollers B, C, journaled in said slots and bearings and adapted to engage the periphery of the wheel, and to engage with each other, substantially as described.

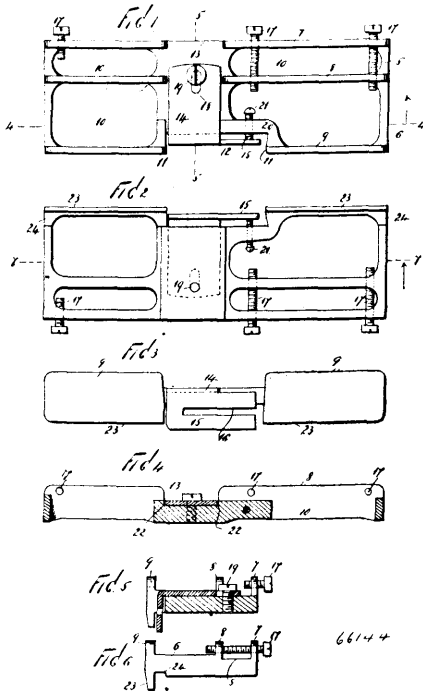
No. 66,143. Brake Shoe. (*Sabot de frein.*)



George Harcourt, Owen Sound, Ontario, Canada, 8th February, 1900; 6 years. (Filed 24th April, 1899.)

Claim.—1st. A brake shoe embracing in its construction a body portion consisting of a back body section having a series of lateral recesses extending across its front face, longitudinal grooves communicating with the lateral recesses, a front body section having lateral recesses opposed to the lateral recesses of the back body section and friction rollers journalled in the lateral recesses projecting through the front body section, substantially as specified. 2nd. A brake shoe embracing in its construction, a body portion consisting of a back body section having a series of lateral recesses extending across its front face, longitudinal grooves communicating with the lateral recesses, a front body section having lateral recesses opposed to the lateral recesses of the back body section, friction rollers journalled in the lateral recesses projecting through the front body section, a lug projecting rearwardly from each end of the front body section, and a groove in the ends of the back body section to contain the lugs of the front body section, substantially as specified. 3rd. A brake shoe embracing in its construction a body portion consisting of a back body section having a series of lateral recesses extending across its front face, longitudinal grooves communicating with the lateral recesses, a front body section having lateral recesses opposed to the lateral recesses of the back body section, friction rollers journalled in the lateral recesses projecting through the front body section bearings at the ends of the lateral recesses in which are contained the grooved journals of the friction rollers and anti-friction rollers contained in the grooves in the journals of the friction rollers, substantially as specified. 4th. A brake shoe embracing in its construction a body portion consisting of two separable sections, a series of friction rollers boxings formed in the separable sections in which are contained the friction rollers and bearings contiguous to the boxings in which are contained the journals of the friction rollers and anti-friction rollers contained in the grooves in the journals of the friction rollers, substantially as specified. 5th. A brake shoe embracing in its construction a body portion consisting of two separable sections, a series of friction rollers boxings formed in the separable sections in which are contained the friction rollers and bearings contiguous to the boxings in which are contained the journals of the friction rollers, anti-friction rollers contained in the grooves in the journals of the friction rollers and grooves formed in the partitions between the boxings, substantially as specified.

No. 66,141. Saw Tool. (Outil.)

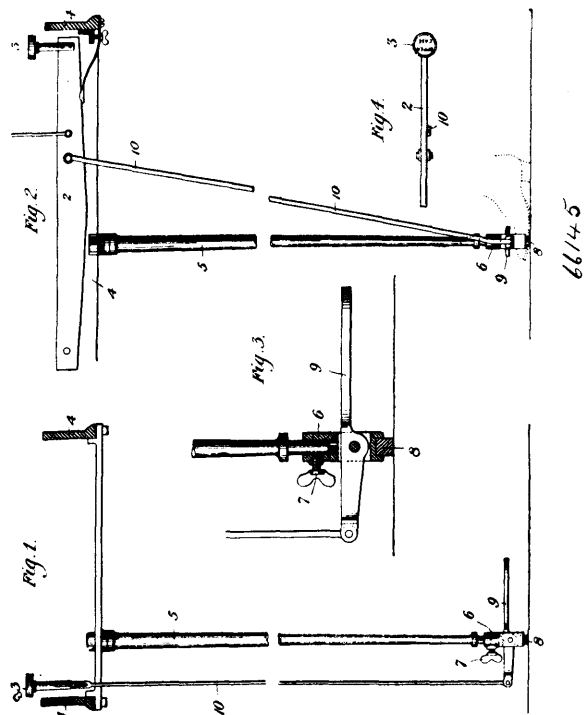


Ezra Lord Post, New York City, New York, U.S.A., 8th February, 1900; 6 years. (Filed 3rd August, 1899.)

Claim.—1st. A saw tool which is oblong in form and which comprises a top, a bottom, front and back portions, said tool being provided at the front with three parallel longitudinal flanges, two of which are flush with the top and bottom portions respectively, and between which are two longitudinal spaces, one of which is wider than the other, the narrower space being adjacent to the top of the tool, a plurality of screws which are passed through the top flanges and adapted to be passed through the adjacent flange by which the narrower longitudinal space is formed, the back of the tool being also provided at the bottom thereof with a longitudinal flange, and said bottom being cut out centrally to form an oblong space, and the front flanges being also cut out transversely to form

a transverse space which communicates with the bottom space, and a transversely movable plate mounted in the said transverse space and provided with an angular portion or flange which projects backwardly and fits in the bottom space, and in which is formed a longitudinal slot, and means for adjusting the said transversely movable plate, substantially as shown and described. 2nd. In a tool of the class described, a body portion provided at one edge of one side with a pair of flanges divided by a space, a plate movably mounted upon the other side and provided with an angularly directed extension at one end which fits in the space between said flanges, and is provided with a slot through which the teeth of a saw may be passed, said plate being connected with said body portion by means of an adjustable device which passed through a slot formed there in, and a second adjustable device connected with said body portion and operating in connection with said angularly directed extension, substantially as shown and described. 3rd. The herein described means for side dressing and evening the set of the teeth of a saw which comprises a body portion provided at either end with a bearing ledge or surface, and with flanges directed at right angles to said bearing ledges, the bearing surface of one of said bearing ledges being in an altitude nearer the outer edge plane of said flanges than the other, the relative arrangement and construction being such that when a file of ordinary construction is seated upon said bearing ledges, the base or body of the file will at all times be above the outer edges of said flanges and that the point of said file may be in no point of its adjustment be below the outer edges of said flanges, substantially as shown and described.

No. 66,145. Typewriter. (Clavigraphic.)



Frederick George Barber, Washington, District of Columbia, U.S.A., 9th February, 1900; 6 years. (Filed 6th June, 1899.)

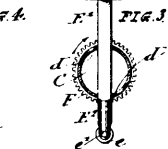
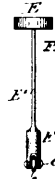
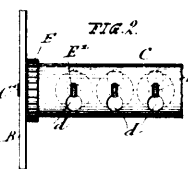
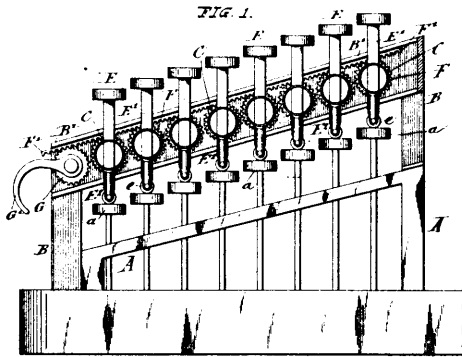
Claim.—1st. In a shifting attachment for typewriters, phonographs and similar devices, the combination with a shifting mechanism, of a foot lever arranged to receive the toe portion of the foot beneath it and to shift the platen by an upward lift. 2nd. In a shifting attachment for typewriters, phonographs, and similar devices, the combination with a shifting device, of a foot lever arranged to receive the forward part of the foot beneath its projecting end, the other end of the lever having a direct link connection to the shifting device so that an upward lift of the foot will shift the platen. 3rd. In a shifting attachment for typewriters, phonographs, and similar devices, the combination with a shifting device, of a foot lever arranged to receive the toe portion of the foot beneath its projecting end, an adjustable fulcrum for said lever, and a connection between the lever and the shifting device.

No. 66,146. Typewriter Ciphographs. (Clavigraphic.)

Eugene Albert Bofinger, New York City, New York, U.S.A., 9th February, 1900; 6 years. (Filed 30th October, 1899.)

Claim.—1st. In a ciphograph, the combination with a suitable frame adapted to be supported on the keyboard of key operated

instruments, of interchangeable auxiliary keys or finger pieces mounted on said frame and adapted to be depressed upon the keys



66146

of the said instruments, suitably guided shanks on which said keys or finger pieces are arranged, and means for detachably connecting said keys or finger pieces with their support, substantially as described. 2nd. In a ciphograph, the combination with a suitable frame adapted to be supported on the keyboard of key operated instruments, of auxiliary keys or finger pieces, and movable key supports fixed to said frame and from which the said keys or finger pieces are detachable, said key supports being provided with suitable means for guiding the auxiliary keys or finger pieces, substantially as described. 3rd. In a ciphograph, the combination with a suitable frame adapted to be supported on the keyboard of key operated instruments, of oscillatory key supports journaled in said frame and provided with suitable guide holes, auxiliary keys or finger pieces, the shanks of which are guided through said guide holes and are adapted to be detachably connected with said key supports, and means for oscillating said key supports, substantially as described. 4th. In a ciphograph, the combination with a suitable frame adapted to be mounted on the keyboard of key operated instruments, of oscillatory key supports journaled in said frame and provided at one end with gear wheels, a reciprocating rack engaging said gear wheels, means for operating said rack, and interchangeable keys or finger pieces, the shanks of which are guided through suitable openings in said key supports, substantially as described. 5th. In a ciphograph, the combination with a suitable rigid frame adapted to be supported above the keyboard of key operated instruments, of laterally shiftable auxiliary keys or finger pieces movable to or from each other, and means for adjusting and setting said auxiliary keys or finger pieces in position according to the diagram of the keyboard, substantially as described. 6th. In a ciphograph, the combination with a suitable rigid frame adapted to be supported above the keyboard of key operated instruments, of auxiliary keys or finger pieces movable to or from each other, means for laterally adjusting said keys or finger pieces relatively to the diagram of the key board, and means for vertically adjusting the auxiliary keys or finger pieces according to the height of the keys of the keyboard, substantially as described. 7th. In a ciphograph, the combination with a suitable rigid frame, adapted to be supported above the keyboard of key operated instruments, of auxiliary keys or finger pieces adapted to act on the keys of the keyboard, and means for vertically adjusting and setting said auxiliary keys or finger pieces higher or lower according to the height of the keys of the instrument, substantially as described. 8th. In a ciphograph, the combination with a suitable frame adapted to be supported above the keyboard of the key operated instruments, and guide rails on said frame, of transverse key supports arranged between the guide rails, means for adjusting the key supports along the guide rails, and auxiliary keys or finger pieces, supported by the key supports, substantially as described. 9th. In a ciphograph, the combination with a suitable frame, adapted to be supported above the keyboard of key operated instruments, of a transverse key support supported on said frame, auxiliary keys or finger pieces, and means for adjusting the auxiliary keys or finger pieces to or from each other and longitudinally of said key support, substantially as described. 10th. In a ciphograph, the combination with a suitable frame, adapted to be supported above the keyboard of key operated instruments, of a transverse key support arranged on said frame, laterally shiftable guide blocks, means for adjusting the guide

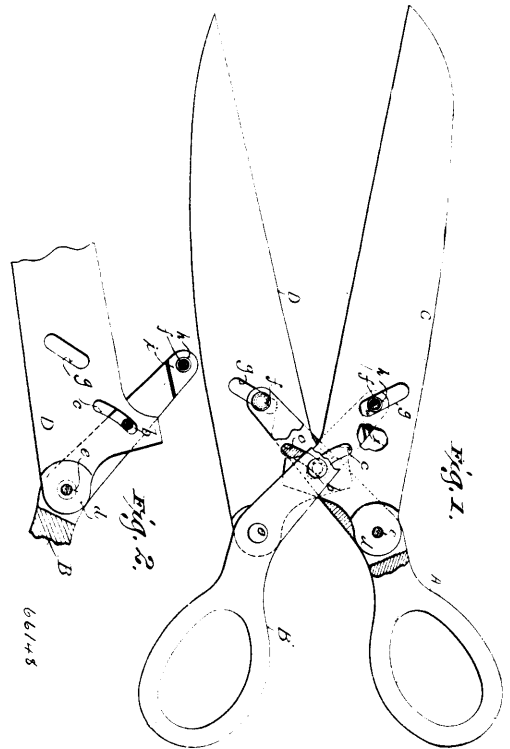
blocks along said key support, and auxiliary keys or finger pieces, the shanks of which are guided in the guide blocks, substantially as described.

No. 66,147. Method of Assimilating Printed and Typewritten Work. (*Methode d'assimiler les matieres imprimees et clavigraphiques.*)

Samuel A. Neidich, Philadelphia, Pennsylvania, U. S. A., 9th February, 1900; 6 years. (Filed 26th December, 1899.)

Claim.—1st. The method of producing combined and assimilated printed and typewritten work, which consists in making a mechanically printed impression through a textile fabric, from which the ink for said impression is solely derived, and, manually typewriting a portion of the work through an identical textile fabric from which the ink for said portion is solely derived, employing for the respective impressions type productive of corresponding peculiarities therein, and using ink for the printed impressions, which, when applied to the paper, will resemble the ink of the typewritten impressions, substantially as set forth. 2nd. The method of producing combined and assimilated printed and typewritten work, which consists in making a mechanically printed impression of irregular depth in predetermined regions, and manually typewriting a portion of the work, employing type of corresponding appearance for the respective impressions, and using, for the printed impression, ink which, when the work is dry, will resemble the ink of the typewritten impressions, substantially as set forth. 3rd. The method of producing combined and assimilated printed and typewritten work, which consists in making a mechanically printed impression of irregular depth in pred-termined regions, and manually typewriting a portion of the work, employing type of corresponding appearance for the respective impressions, making the respective impressions through fabrics of similar texture, and using, for the printed impression ink which, when the work is dry, will resemble the ink of the typewritten impressions, substantially as set forth.

No. 66,148. Hand Shears. (*Forces.*)



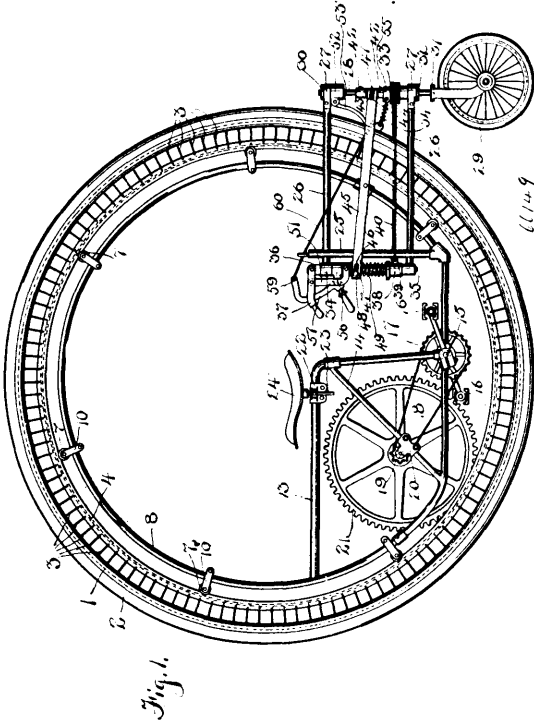
87199

Ernest Henry Trieschmann, Milwaukee, Wisconsin, U.S.A., 9th February, 1900; 6 years. (Filed 8th January, 1900.)

Claim.—1st. The handles having forward branches in crossed pivotal connection, the blades, each of which has pivotal connection with a handle back of the crossing of the handle-branches, and a slide and play-shot for same constituting a connection between each blade and forward end of the branch pertaining to the handle other than that to which said blade is pivoted. 2nd. The handles having forward branches that are crossed on a pivot, the blades, each of which has pivotal connection with a handle back of the crossing-pivot but is provided with a curved slot engaged by said pivot, and a slide and play-slot for same constituting a connection between each blade and forward end of the branch pertaining to the handle other than that to which said blade is pivoted. 3rd. The handles having forward branches that are crossed on a pivot, the blades,

each of which is widened at the rear and provided with an offset tang having pivot connection with a handle back of the crossing-pivot, said blade being also provided with a curved slot engaged by said pivot, and a slide and play-slot for the same constituting a connection between each blade and forward end of the branch pertaining to the handle other than that with which said blade has pivotal connection.

No. 66,149. Unicycle. (Unicycle.)

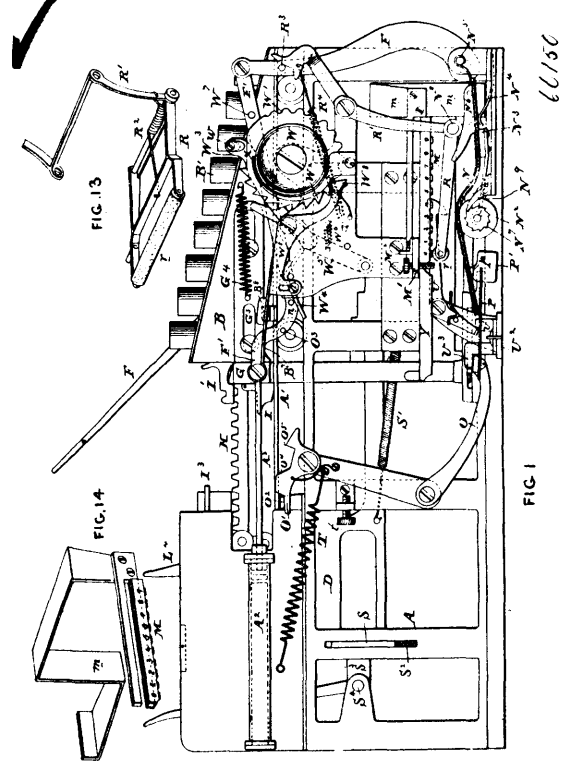


Theophile Edouard Ayotte, Montreal, Quebec, Canada, 9th February, 1900; 6 years. (Filed 24th March, 1899.)

Claim.—1st. A unicycle, comprising a stationary frame, an outer rotatable frame movable on said inner stationary frame, means mounted on said inner frame for imparting a rotary movement to said outer frame, and a steering wheel yieldingly mounted on said inner stationary frame, substantially as described. 2nd. A unicycle, comprising an inner stationary frame, an outer frame rotatably mounted on said inner frame, means connected to said inner frame for imparting a rotary movement to said outer frame, a steering wheel mounted on said inner frame, and means for imparting a vertical movement to said steering wheel, substantially as described. 3rd. A unicycle, comprising an inner stationary frame, an outer frame rotatable mounted on said inner frame, means, connected to inner frame, for imparting a rotary movement to said outer frame, a steering wheel mounted on said inner frame, said wheel having a yielding vertical movement, and a brake connected to said inner frame and having an operative contact with said outer frame, when desired, substantially as described. 4th. A unicycle, comprising an inner stationary frame, an outer frame rotatably mounted thereon, means, connected to said inner frame, for imparting a rotary movement on said outer frame, a steering wheel mounted on said inner frame, means for imparting a pivotal movement to said steering wheel, and means for imparting a vertical movement to said steering wheel in its bearing, substantially as described. 5th. A unicycle, having an inner frame, an outer frame rotatably mounted thereon, means for imparting a rotary movement to said outer frame, a steering wheel mounted on said inner frame, said steering wheel having a vertical movement, means for yielding holding said steering wheel in its lowermost position, and means for moving said steering wheel to a raised position, substantially as described. 6th. A unicycle, comprising an inner frame, an outer frame rotatably mounted thereon, means for imparting a rotary movement to said outer frame, a steering wheel mounted on said inner frame, said wheel having a vertical movement, means for imparting a revoluble movement to said steering wheel, and means for moving said wheel vertically, said means being operated without disturbing the positions of said revoluble movement imparting means, substantially as described. 7th. A unicycle, comprising an inner frame, an outer frame rotatably mounted thereon, means for imparting a rotary movement to said outer frame, a steering wheel mounted to have a vertical movement on said inner frame, means for yieldingly holding said steering wheel in its lower position, means for imparting a pivotal movement to said steering wheel, whereby said unicycle

may be steered, and means for raising said steering wheel, said means being operated without disturbing the relations of said pivotally moving means, substantially as described. 8th. A unicycle, comprising an inner frame, an outer frame rotatably mounted thereon, means for imparting a rotary movement to said outer frame, a steering wheel connected to said inner frame, said steering wheel having a vertical movement, means for yieldingly holding said steering wheel in its lowermost position, means for raising said steering wheel to its upper position, and means for automatically returning said steering wheel to its lowermost position, substantially as described. 9th. A unicycle comprising an inner frame, an outer frame rotatably mounted thereon, means for imparting a rotary movement to said outer frame, an auxiliary frame secured to said inner frame, a shaft mounted to have vertical movement in said auxiliary frame, said shaft being adapted to support the steering wheel, means for yieldingly holding said shaft its lowermost position, means for raising said shaft to an upper position, and means for returning said shaft to its normal position, substantially as described. 10th. A velocipede, comprising an inner frame, an outer frame rotatably mounted thereon, means for imparting a rotary movement to said outer frame, a steering wheel mounted in said inner frame, said steering wheel being adapted to have a vertical movement, means for normally holding said steering wheel in its lowermost position, means for imparting a pivotal movement to said steering wheels, means for raising said steering wheel to an upper position, means for returning said steering wheel to its lowermost position, said raising and lowering means being operated without disturbing the positions of said pivotally moving means, substantially as described.

No. 66,150. Calculating Machine. (Machine à calculer.)



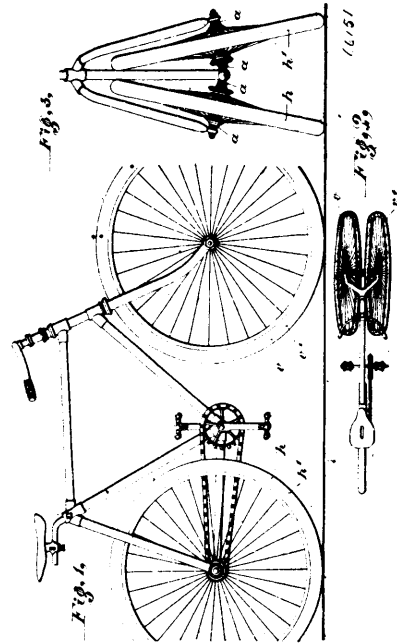
Charles Condit Clifford, Philadelphia, Pennsylvania, U.S.A., 9th February, 1900; 6 years. (Filed 6th April, 1899.)

Claim.—1st. In a calculating machine of the character described, a key carrying frame combined with registering devices and having a relative movement, one to the other and connecting mechanism whereby the registering devices are operated when the keys are depressed and the relative movement between the parts produced. 2nd. In a calculating machine, a series of registering devices for registering numbers of different orders and operated by hand controlled key devices, in combination with connecting mechanism, substantially as described between the adjacent registering devices, whereby the registering device of the higher order, is moved only upon the completion of a given extent of movement of the registering devices of the lower order, and mechanism under the control of the hand operated key devices which move the registering devices to cause said connecting devices to operate after the full movement of the registering devices of the lower order in registering. 3rd. In a calculating machine of the character described, movable step bars adapted to be operated by any one of a series of keys, and interposed between the said keys and the registering devices which they operate. 4th. In a calculating machine of the character described, the con-

bination of registering devices and a series of sets of keys for operating the registering devices of different orders, locking mechanism for locking any one of the keys of each set, and common releasing mechanism operating upon the locking devices or simultaneously releasing all of the keys of the several sets upon completion of the registration. 5th. The combination of a series of registering devices with a movable key carrying frame or carriage for operating the registering devices movable to or from them, and a cushioning device for the movable carriage or frame. 6th. In a machine of the character described, the combination of a series of registering wheels, transferring devices for moving the registering wheel of a higher order upon the completion of a given registering movement of a registering wheel of a lower order, and a shield controlled by the transferring devices to shield the numbers of the registering wheels from view in case the transferring device fails to register or has not completed its registration. 7th. In a machine of the character described, the combination with registering mechanism and keys for operating said mechanism relatively reciprocable to and from each other, with locking devices for locking the keys in operative position, and automatic mechanism for automatically controlling the key locking mechanism to release and unlock the keys so as to put them out of action only after a given number of reciprocations, whereby multiplication may be effected. 8th. In a calculating machine of the character described, intermediate mechanism such as step bars between the registering devices and the keys and adapted to reciprocate, combined with printing bars adapted to be moved over an impression surface whereby numbers are printed corresponding to the number registered on the registering mechanism. 9th. In a calculating machine, the combination of sliding type bars, each having a series of numbers and movable over an impression surface, combined with means to move said bars independently by the keys in the act of registering. 10th. In a calculating machine, the combination of registering devices and printing mechanism, with a series of sets of keys for operating both the registering devices and printing mechanism, and hand controlled means for throwing either the printing mechanism or the registering devices out of action when desired. 11th. In a calculating machine, the combination of a series of step bars to which are attached type bars, each having a series of numbers, namely, from zero to nine, and means for throwing the printing bars into position to print the zero for all unoperated sets of keys below the set of keys of the highest order in which a key has been operated. 12th. In a calculating machine, the combination of a series of registering wheels, a series of sets of keys for operating the several registering wheels, one set being adapted to control a single registering wheel, transferring devices adapted to act upon the registering wheels and be thrown into operative condition by the action of the registering wheel of the next lower order, and hand power devices for operating the transferring devices to positively move them in performing the act of registration as in carrying the maximum amount of one registering wheel to the next registering wheel of a higher order. 13th. In a calculating machine, the combination of a series of sets of keys, a keyboard for said keys, a series of step bars operated by the keys, a series of registering devices respectively operated by the step bars, means for moving the keyboard, means to lock the keyboard against return movement until its full movement is completed in registering, and printing devices under the control of the step bars for printing consecutively on a strip of paper the successive amounts which have been added upon the registering devices. 14th. In a calculating machine, the combination of a series of sets of keys, a keyboard for said keys, a series of step bars operated by the said keys, a series of registering devices respectively operated by the step bars, means for moving the keyboard, and means to lock the keyboard against return movement until its full movement is completed in registering. 15th. In a calculating machine, the combination of the registering devices having the highest registering wheel or dial provided with a pin, a sight opening for reading the registering devices, a shield movable for the purpose of closing the sight opening when the maximum capacity of the machine has been registered, a mechanically actuated part for moving the shield to close the sight opening, and a lock to hold the mechanically actuated part out of operation adapted to be released by the pin or projection on the registering device. 16th. In a calculating machine, a series of sets of keys and registering devices relatively movable to and from each other to insure the operation of the registering devices, locking devices for holding one or more of the keys in operative position, and automatic devices for causing the said locking devices to be operated to release the keys only after a predetermined number of reciprocations. 17th. In a calculating machine, a series of sets of keys and registering devices relatively movable to and from each other to insure the operation of the registering devices, locking devices for holding one or more of the keys in operative position, and automatic devices for causing the said locking devices to be operated to release the keys only after a predetermined number of reciprocations consisting of a movable lock releasing part adapted to be thrown into or out of operative position, a movable rack having an irregular surface adapted to hold the movable lock releasing part out of operative position except for one position of adjustment of said movable rack, and means such as a pawl to intermittently move the rack with each relative reciprocation of the keys and registering devices. 18th. In a calculating machine, the combination with registering devices, of movable type controlled by the keys for operating the registering devices, a movable impression

hammer for pressing the paper against the type, a spring to throw the hammer into operation to print, a trip to release the hammer immediately after the registration has been made and type moved, and a lock to hold the impression hammer out of operation. 19th. In a calculating machine, the combination of a series of type bars controlled by a series of sets of movable keys, a frame for moving the keys and type bars, an impression surface, and means controlled by the movable frame for causing the type bars and impression surface to be brought into contact or moved relatively toward each other to print. 20th. In a calculating machine, the combination of registering devices, a keyboard, connecting devices controlled by the keys and adapted to operate the registering devices, hand operated means for moving the connecting devices, means independent of the hand operated means which move the connecting devices for throwing the connecting devices into operative connection with the registering devices but without registering, a lock independent of the hand operated means to hold the connecting devices out of operative connection, and automatic tripping devices independent of but actuated by the hand operated means for releasing the lock to throw the connecting devices into operative connection. 21st. In a calculating machine, the combination of registering devices, a reciprocating transfer frame, hand devices for reciprocating said transfer frame, a keyboard having a series of sets of keys, connecting devices whereby said keys operate the registering devices, and a locking device for alternately connecting the keyboard to the transfer device and main frame, whereby the keyboard is first moved with the transfer frame for a portion of its movement and then locked to the main frame in a stationary position during the further movements of the transfer frame and until its return.

No. 66,151. Tricycle. (Tricycle.)



Otto Heitz, Chemnitz, Saxony, Germany, 9th February, 1900; 6 years. (Filed 29th May, 1899.)

Claims.—1st. A narrow tread tricycle embracing in its construction a driving or back wheel, and two front or steering wheels obliquely arranged, and a suitable frame and bearings for the said wheels, substantially as specified. 2nd. A narrow tread tricycle embracing in its construction a front or steering wheel, and two driving or back wheels obliquely arranged, and a suitable frame for the said wheels, substantially as specified.

No. 66,152. Baby Walker. (Chariot d'enfant.)

Thomas Sloan, Slocan City, British Columbia, Canada, 9th February, 1900; 6 years. (Filed 3rd June, 1899.)

Claims.—1st. A baby walker having a flexible band adapted to be secured around the child under its arms, legs secured to said band to sustain the child in an erect position, and a hoop connecting said legs near their lower end to keep them from spreading apart, as set forth. 2nd. A baby walker comprising a flexible body band A, provided with end connections adapted to fasten the band around the body of a child under its arms, legs B, secured at the upper end to the exterior of said band by rivets or like means, and a hoop C, secured to said legs near their lower end, substantially as set forth. 3rd. A baby walker, consisting of a flexible body band A, having

end connections to draw in close around the child, legs B, attached to said band and comprising sections to lengthen and shorten the

Fig. 1.

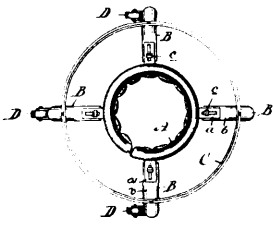
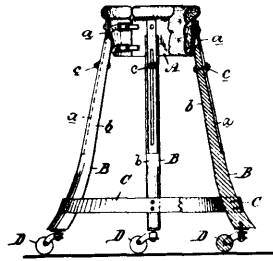


Fig. 2.



66152

legs, and a hoop C, secured to said legs to prevent them spreading at the bottom, as set forth.

No. 66,153. Typewriting Machine. (Clavigraphic.)

Fig. 1.

Fig. 2.

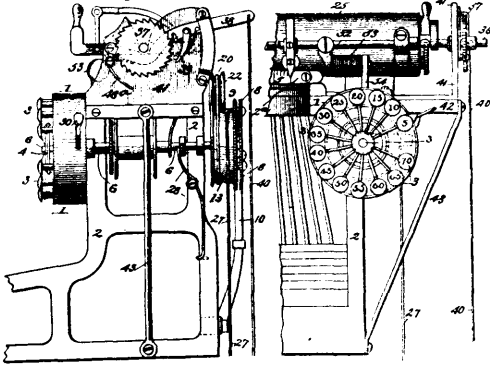
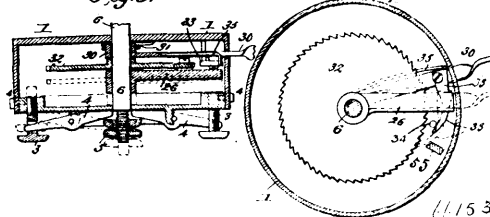


Fig. 3.

Fig. 4.



66153

Corval Novello Westwood, Nanaimo, British Columbia, Canada, 9th February, 1900; 6 years. (Filed 9th October, 1897.)

Claim.—1st. In a typewriting machine, the combination with a platen carriage or frame adapted to slide endwise, of mechanism for releasing said frame and allowing it to move to a selected point and there stopping it, which consists of a transverse shaft, a ratchet disc mounted on the latter, a pawl engaging the disc, means for shifting the shaft and disc to release the latter from engagement with the pawl, means for connecting the platen frame and aforesaid shaft so that the latter rotates as the former slides, and a stop mechanism applied to the shaft, for arresting its rotation as the frame reaches the predetermined point, substantially as shown and described. 2nd. In a typewriting machine, the combination with a platen carriage or frame adapted to slide endwise, of mechanism for releasing said frame and allowing it to move to a selected point and there stopping it, which consists of a transverse shaft, a ratchet disc mounted on the latter, a pawl engaging the disc, a lever engaging

the shaft for drawing it forward, a push pin bearing a numeral corresponding to one on the ordinary scale of the machine, a stop arm on said shaft which such push pin is adapted to engage, when the shaft is drawn forward, a pulley on the shaft, and a cable connecting the pulley and platen frame, substantially as shown and described. 3rd. In a typewriting machine, the combination with a platen carriage or frame adapted to slide endwise, of mechanism for releasing said frame and allowing it to move to a selected point and there stopping it, which consists of a transverse shaft, a ratchet disc mounted on the latter, a pawl engaging the disc, a series of pivoted levers arranged radially around said shaft, at the front of the machine, and loosely engaging the same at their inner ends, a radial, rotary arm on said shaft, a series of push pins working in a horizontal guide, each being arranged beside one of said levers and adapted to engage, when pushed in, with the rotary arm aforesaid, a pulley on the shaft, and a cord extending therefrom to the platen frame, substantially as shown and described. 4th. In a typewriting machine, the combination with a slidable platen, of a transverse slidable shaft, and means for drawing the same forward and stopping it at a predetermined point when rotated, of a pulley mounted on the latter, a cable connecting the pulley and platen, two ratchet discs arranged side by side on the shaft, and a pawl from which the discs are disengaged when the shaft is drawn forward, said pawl being rigidly attached to a rock bar forming part of the typewriter mechanism, and one of said discs being adapted to yield and rotate backward a part of a revolution, and a spring for holding it in normal position, substantially as shown and described. 5th. In a typewriting machine, the combination with a slidable platen, a transverse slidable shaft and means for rotating and stopping the latter, of two ratchet discs, one of which is fixed and the other loose on said shaft, a spring and stop for retracting and limiting the rotation of such loose disc, a pulley and cable connecting it with the platen, and a pawl adapted to engage and disengage from said discs as shown and described. 6th. In a typewriting machine, the combination with a slidable platen, a transverse slidable shaft and means for rotating and stopping the latter, of two ratchet discs, one of which is fixed and the other loose on said shaft, a spring and stop for retracting and limiting the rotation of such loose disc, a cable connecting said pulley with the platen and a spring interposed between sections of said cable, as and for the purpose specified. 7th. In a typewriting machine, the combination with a slidable platen of a transverse slidable shaft, means for drawing the latter forward, a pulley on the shaft and a cable connecting said pulley with the platen, of a ratchet disc mounted on the shaft, a thumb lever arranged radially to the latter, and a pawl pivoted to the lever and adapted to engage the disc, for rotating the shaft for the purpose of back spacing and the pawl check to ensure proper spacing, substantially as shown and described. 8th. In a typewriting machine, the combination with a slidable platen of transverse slidable shaft, means for drawing the latter forward, a pulley on the shaft and a cable connecting said pulley with the platen, of a ratchet disc mounted on the shaft, a thumb lever arranged radially to the latter, and a pawl pivoted to the lever and adapted to engage the disc, a spring for throwing the pawl into engagement with the disc, a fixed pin for holding it out of such engagement when the lever is being retracted, and a spring for retracting said lever after the manual depression required to effect back spacing, as shown and described. 9th. In a typewriting machine, the combination with a slidable platen carriage, a shaft, and a connection between said platen carriage and a shaft whereby the latter will rotate when the former is slid, of a ratchet disc mounted on said shaft, a thumb lever arranged radially on the latter, and a pawl pivoted to said lever and arranged to engage the disc, whereby to rotate the shaft backward for the purpose of back spacing, as shown and described.

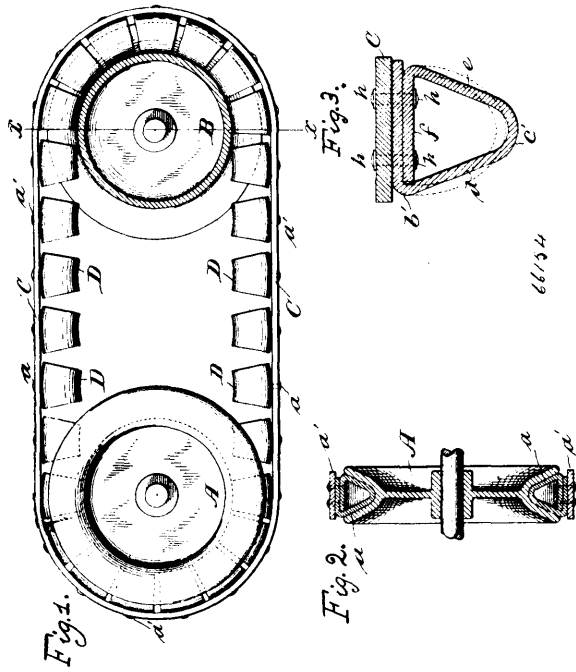
66,154. Driving Belt. (Courroie de transmission.)

Patrick Kennedy, New York City, New York, U.S.A., 9th February, 1900; 6 years. (Filed 10th July, 1899.)

Claim.—1st. As a new article of manufacture a lug for power transmitting belts triangular or substantially so in cross section, made hollow and with resilient walls, substantially as herein set forth. 2nd. The combination with an endless strap of a series of hollow lugs triangular or substantially so in their cross section having resilient walls and adapted to run on pulleys having circumferential channels of like section, substantially as herein set forth. 3rd. The combination with an endless strap of a series of curved hollow lugs having resilient walls and means for securing the lugs to the strap, at or near the middle of their convex sides, substantially as herein set forth. 4th. The combination with an endless strap of hollow lugs having resilient walls each composed of a sheet or strip of material folded upon itself to form the lug and to provide inwardly turned end portions for attachment to the strap, substantially as herein set forth. 5th. The combination with an endless strap of a series of hollow lugs having resilient walls and each composed of a sheet of material folded to form the lug with the end portions of said material lapped one upon the other, and rivets which secure said lapped portions to the strap, substantially as herein set forth. 6th. As a new article of manufacture a lug for power transmitting belts composed of a metal plate or back, a shell of the requisite shape having which rest against the metal plate, and means for attaching said flanges to the plate, the whole combined substantially as herein set forth. 7th. The combination in a lug for power trans-

mitting belts of a shell composed of sheet material and having opposing flanges, *f f*, and a metallic back or plate having integral

ity of transmitting devices acting on the revoluble intermediate mechanism, intermittently acting means for connecting each trans-

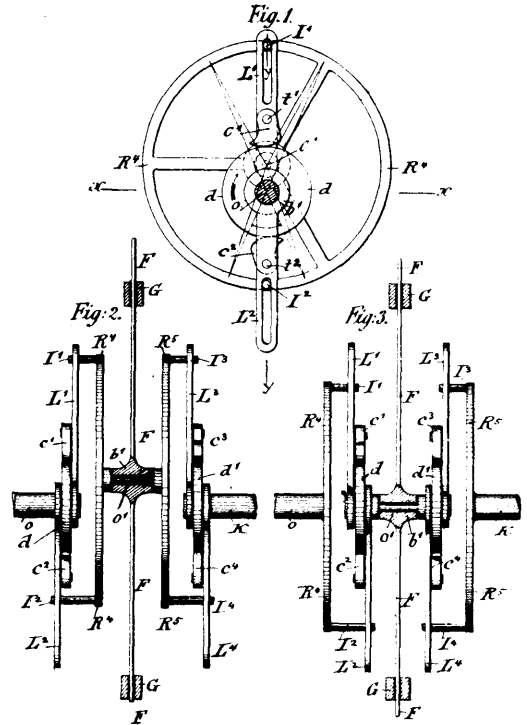


therewith clips which are passed through and clinched upon the flanges to secure the shell to the plate, substantially as herein set forth. 8th. The combination with an endless strap, of a metal plate having integral therewith clips which are passed through and clinched upon the strap, a shell composed of sheet material provided with inwardly turned flanges which rest against the plate, and means for attaching said flanges to the plate, substantially as herein set forth. 9th. The combination with an endless strap and a shell composed of sheet material having inwardly turned flanges *f f*, of a metal plate having integral therewith clips for attaching the plate to the strap and clips for attaching the flanges to the plate, substantially as herein set forth. 10th. The combination with an endless strap and a resilient shell composed of sheet material having flanges *f f*, of a metallic plate having integral therewith clips which attach said plate to said flanges, substantially as herein set forth.

No. 66,155. Power Transmitter. (*Transmetteur de pouvoir.*)

The Dietrich Gear Company, New York City, New York, U.S.A., 9th February, 1900; 6 years. (Filed 31st August, 1899.)

Claim.—1st. The combination, with a driving mechanism, and a driven mechanism, of orbitally movable means for transmitting power from the driving mechanism to the driven mechanism, and means for permitting the adjustment of said transmitting means whereby the speed ratio between the driving and driven mechanisms may be altered. 2nd. The combination, with a revoluble driving mechanism, and a revoluble intermediate mechanism, of a plurality of transmitting devices connected to the said revoluble intermediate mechanism, detachable connecting devices between the transmitting devices and the driving mechanism, and a driven mechanism operated by the intermediate mechanism. 3rd. The combination, with a revoluble driving mechanism, and a revoluble intermediate mechanism having their axes of a revolution non-concentric, of a plurality of transmitting devices connected to the said revoluble intermediate mechanism, detachable connecting devices between the transmitting devices and the driving mechanism and a driven mechanism operated by the intermediate mechanism. 4th. The combination, with a revoluble driving mechanism, and a revoluble intermediate mechanism, of a plurality of transmitting devices connected to the said revoluble intermediate mechanism, detachable connections between the transmitting devices and the driving mechanism, means for permitting the alteration of the receiving positions of the axes of rotation of the power applying mechanism and of the intermediate mechanism, and a driven mechanism operated by the intermediate mechanism. 5th. The combination with a revoluble driving mechanism, and a revoluble intermediate mechanism, of a plurality of transmitting devices connected to the said revoluble intermediate mechanism, automatic detachable connections between the transmitting devices and the driving mechanism, means for changing the relative position of the axes of rotation of the driving mechanism, and a driven mechanism operated by the intermediate mechanism. 6th. The combination, with a revoluble driving mechanism, and a revoluble intermediate mechanism, said mechanism having their axes capable of eccentric location relative to each other, of a plural-



mitting device to the driving mechanism during a portion of the rotation of the latter and then disconnecting it therefrom, and a driven mechanism operated by the intermediate mechanism. 7th. The combination, with a revoluble driving mechanism, and a revoluble intermediate mechanism, of a plurality of transmitting devices acting on the revoluble intermediate mechanism, intermittently acting means for connecting each transmitting device to the driving mechanism during a portion of the rotation of the latter and then disconnecting it therefrom, means for permitting the alteration of the relative positions to the axis of the power supplying mechanism and the intermediate mechanism, and a driven mechanism operated by the intermediate mechanism. 8th. The combination, with a revoluble driving mechanism, and revoluble intermediate mechanism whose axis is capable of an eccentric location relative to that of the driving mechanism, of a plurality of transmitting devices acting on the revoluble intermediate mechanism, frictionally controlled mechanism for detachably connecting each transmitting device to the driving mechanism during a portion of the rotation of the latter and a driven mechanism operated by the intermediate mechanism. 10th. The combination, with a revoluble driving mechanism, a revoluble driven mechanism, and a revoluble intermediate mechanism, of two sets of transmitting devices, the first set between the driving mechanism and the intermediate mechanism, the second set between the intermediate mechanism and the driven mechanism, and means for permitting the adjustment of the axis of the intermediate mechanism relative to that of the driving and driven mechanism. 11th. The combination, with a revoluble driving mechanism, a revoluble driven mechanism, and a revoluble intermediate mechanism, of two sets of transmitting devices both connected to the intermediate mechanism, locking devices arranged to lock the first set of transmitting devices to the driving mechanism, and locking devices arranged to lock the second set of transmitting devices to the driven mechanism. 12th. The combination, with a revoluble driving mechanism, a revoluble driven mechanism, and a revoluble intermediate mechanism, of two sets of transmitting devices, both connected to the intermediate mechanism, frictional locking devices between the two sets of transmitting devices and the driving and driven mechanisms respectively, and means for permitting the adjustment of the axis of rotation of the intermediate mechanism. 13th. The combination, with a driving mechanism, and a driven mechanism, of unyielding transmitting means intermediate the

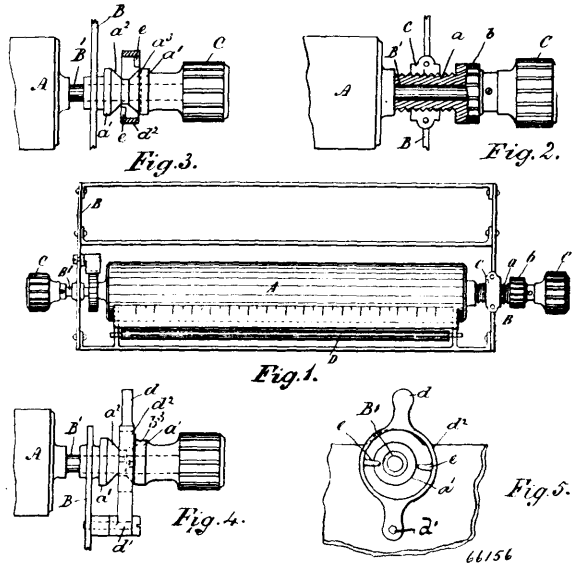
driving and driven mechanism and adjustable by the resistance of the driven mechanism, whereby a constant power is transmitted with varying ratio of speed and force from the driving mechanism to the driven mechanism in an unyielding manner. 14th. The combination, with a revoluble driving mechanism, and a revoluble driven mechanism, of a revoluble intermediate mechanism, transmitting devices connecting the driving mechanism and the intermediate mechanism and tending to shift in one direction the axis of the said intermediate mechanism, and transmitting devices connecting the intermediate mechanism and driven mechanism and tending to shift in an opposite direction the said axis of the intermediate mechanism. 15th. The combination, with a revoluble driving mechanism, a revoluble driven mechanism and revoluble intermediate mechanism, of two sets of toggle-transmitting devices, one set connecting the driving mechanism and the intermediate mechanism, the other set connecting the intermediate mechanism and the driven mechanism. 16th. The combination, with a revoluble driving mechanism, a revoluble driven mechanism and a revoluble intermediate mechanism, of two sets of oppositely-acting toggle-transmitting devices, one set connecting the driving mechanism to the intermediate mechanism and the other set connecting the intermediate mechanism to the driven mechanism. 17th. The combination, with a revoluble driving mechanism, a revoluble driven mechanism, and a revoluble intermediate mechanism, the axis of the intermediate mechanism being relatively movable toward the axes of the driving and driven mechanisms, of two sets of toggle-transmitting devices, one set connecting the driving mechanism to the intermediate mechanism, the other set connecting the intermediate mechanism to the driven mechanism. 18th. The combination, with a revoluble driving mechanism, and a revoluble driven mechanism having their axes in line with each other, of a revoluble intermediate mechanism having its axis of rotation moveable with relation to the axis of the driving and driven mechanism, and two sets of toggle-transmitting devices, one set acting in a direction opposite to the other, one set connecting the driving mechanism to the intermediate mechanism, the other set connecting the intermediate mechanism to the driven mechanism. 19th. The combination, with a revoluble driving mechanism, a revoluble driven mechanism, and a revoluble intermediate mechanism having its axis adjustable with relation to the axes of the driving and driven mechanism, of two sets of toggle-transmitting devices, connected to the intermediate mechanism, means for intermittingly locking the driving mechanism to and unlocking it from the first set of toggle-transmitting devices, and means for intermittingly locking the driven mechanism to and unlocking it from the second set of toggle-transmitting devices. 20th. The combination, with a revoluble driving mechanism, a revoluble driven mechanism, and a revoluble intermediate mechanism, of two sets of transmitting devices connected to the intermediate mechanism, each set comprising a plurality of toggle devices, means for locking the toggle devices of one set *seriatim* to the driving mechanism and unlocking them therefrom, and means for locking the toggle devices of the other set *seriatim* to the driven mechanism and unlocking them therefrom. 21st. The combination, with a revoluble driving mechanism, a revoluble driven mechanism, and a revoluble intermediate mechanism having its axes of rotation adjustable with relation to the axes of the driving and driven mechanism, of two sets of oppositely-acting toggle-transmitting devices connected to the intermediate mechanism, frictionally-actuated locking devices between the driving mechanism and one set of transmitting devices, and frictionally-actuated locking devices between the driven mechanism and the other set of transmitting devices.

No. 66,156. Typewriting Machine. (Clavigraphic.)

William S. Craig and Charles C. Whitacre, London, England, 9th February, 1900; 6 years. (Filed 9th August, 1898.)

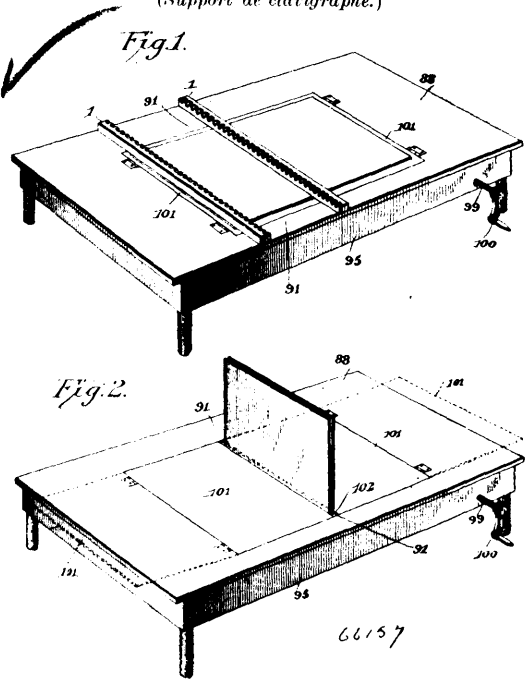
Claim—1st. In a typewriting machine, the combination with the paper roller, the paper roller spindle, the fixed knobs at the extremities of the said spindle, and the paper carriage frame, of a rotary sleeve for longitudinally adjusting the paper roller, said sleeve forming the bearings of the roller spindle at one end, substantially as described for the purpose specified. 2nd. In a typewriting machine, the combination with the paper roller, the paper roller spindle, the fixed knobs at the extremities of said spindle, and the paper carriage frame, of an externally screw-threaded rotary sleeve forming the bearing of the roller spindle at one end, which sleeve fits accurately between one of the said roller and the knob fixed to that end of the said spindle, substantially as described for the purpose specified. 3rd. In a typewriter in combination with the paper roller carriage, the paper roller, the paper roller spindle and the fixed knobs at the extremities of the said spindle, of a longitudinally adjustable bearing for said roller consisting of a screw *a* situated at one end of the spindle between the fixed knob thereon and the end of the paper roller, a head *b* for turning the said sleeve, an internally screw-threaded fixed nut or block *c* on the carriage to support said sleeve, and a projecting piece on the spindle at the opposite end of the roller of sufficient length to be capable of sliding longitudinally in its bearings, substantially as described and for the purpose specified. 4th. In a typewriter, the combination with the paper roller carriage and the paper roller, of a longitudinally adjustable bearing for the said roller consisting of the block *a* fixed to one end of the roller spindle and having oppositely inclined wedging surfaces *a*², *a*³, the

lever *d* pivoted to the roller carriage and having a circular extension or ring *d*² surrounding the block *a*¹, the wedge pins *e* attached to



said ring and bearing respectively upon the wedging surfaces *a*², *a*³, according to the direction in which the lever *d* is moved, and a roller spindle of sufficient length to permit of the longitudinal adjustment of the paper roller, substantially as described and for the purpose specified.

No. 66,157. Typewriting Machine Support. (Support de clavigraphic.)

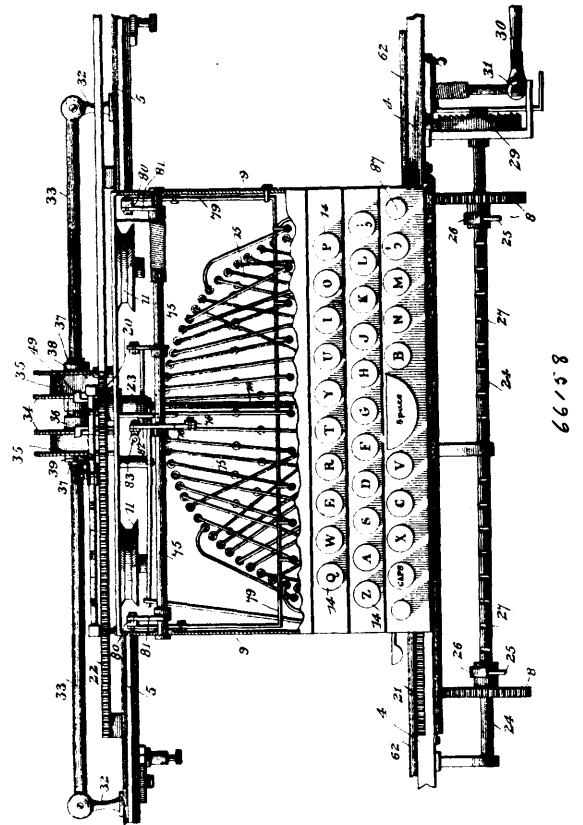


The Fisher Typewriter Company, assignee of Robert J. Fisher, all of Athens, Tennessee, U.S.A., 9th February, 1900; 6 years. (Filed 21st September, 1899.)

Claim—1st. A typewriting machine having a normally stationary platen, a vertically adjustable book support, disposed below the plane of the platen and having a continuous book receiving surface, whereby an open book may be elevated throughout its extent toward the plane of the platen, and means for securing the book support at the desired adjustment, substantially as specified. 2nd. A typewriting machine support having a base, a normally stationary platen having leaves or members separated at their adjacent edges to form a book leaf receiving slot, a vertically adjustable book support having a continuous book receiving surface, whereby an open book may be elevated throughout its extent toward the plane of the platen, to arrange its opposite sides in contact with the under sur-

faces, respectively, of the platen leaves or members, and means for securing the book support at the desired adjustment, substantially as specified. 3rd. A typewriting machine support having a normally stationary platen, a vertically adjustable support, disposed below the plane of the platen and having a continuous book receiving surface, whereby an open book may be elevated throughout its extent toward the plane of the platen, and operating mechanism for the book support, connected with the latter at a plurality of points, substantially as specified. 4th. A typewriting machine support having a base, a platen having separate platen leaves or members hingedly mounted upon the base to normally occupy a common plane with their contiguous edges separated, a vertically adjustable book support arranged below the plane of the platen, and means for securing the book support at the desired adjustment, substantially as specified. 5th. A typewriting machine support having a base, a platen comprising separate platen leaves or members hingedly mounted at their remote edges upon the base, and normally occupying positions in a common plane with their contiguous edges separated, a vertically adjustable book support arranged below the plane of the platen, and means for securing the book support at the desired adjustment, substantially as specified. 6th. A typewriting machine support having a base for supporting a platen, a vertically adjustable book support arranged below the plane of the platen and provided with depending racks, segment gears meshing, respectively, with said racks and having parallel spindles located contiguous to opposite ends of the supporting frame, a countershaft connected by gearing with said segment gear spindles and carrying a worm gear, and an operating worm meshing with said worm gear and having its shaft provided with an operating crank exposed beyond the base for mutual actuation, substantially as specified. 7th. A typewriting machine support having a base, a vertically adjustable book support, and operating devices for the book support, having gearing including intermeshing racks and gears connected for simultaneous movement, and a single operating shaft provided beyond one edge of the base with an operating device, and connected with said gearing for communicating motion in either direction thereto, substantially as specified. 8th. A typewriting machine support having a base, a vertically adjustable book support, and operating devices for the book support, having gearing including intermeshing racks and gears connected for simultaneous movement, and a single operating shaft terminating near one edge of the base and provided with a manually movable operating device, said shaft having a worm gear connection with said gearing, whereby the book support is automatically held in any of its adjusted positions, substantially as specified.

8th. In a typewriting machine, the combination with a carriage mounted for movement parallel with the lines of writing, and carry-



66,158. Typewriting Machine. (Clavigraphic.)

The Fisher Typewriter Company, assignee of R. J. Fisher, all of Athens, Tennessee, U.S.A., 9th February, 1900; 6 years. (Filed 21st September, 1899.)

Claim—1st. In a typewriting machine, the combination with a carriage mounted for movement parallel with the lines of writing and carrying printing mechanism, of inking mechanism, including ribbon spools mounted upon a support which is fixed with relation to the carriage and parallel with the lines of writing, and means for imparting axial movement to the spools from the carriage, substantially as specified. 2nd. In a typewriting machine, the combination with a carriage mounted for movement parallel with the lines of writing and carrying printing mechanism, of inking mechanism, including ribbon spools, a spool spindle equal in length to, and parallel with, the path of the carriage and independent thereof, and means for imparting axial movement to the spools, substantially as specified. 3rd. In a typewriting machine, the combination with a carriage mounted for movement parallel with the lines of writing and carrying printing mechanism, of inking mechanism including ribbon spools mounted upon a fixed support for axial movement parallel with the lines of writing, and means for imparting axial movement to the spools, substantially as specified. 4th. In a typewriting machine, the combination with a carriage mounted for movement parallel with the lines of writing and carrying printing mechanism, of inking mechanism including ribbon spools mounted upon a common fixed spindle arranged parallel with the lines of writing, and means for imparting axial movement to the spools, substantially as specified. 5th. In a typewriting machine, the combination with a supporting frame and a carriage mounted upon said frame for movement parallel with the lines of writing and carrying printing mechanism, of inking mechanism including ribbon spools having a common fixed spindle arranged on the supporting frame parallel with the lines of writing, and means for imparting axial movement to the spools, substantially as specified. 6th. In a typewriting machine, the combination with a frame mounted for line spacing movement, and a carriage mounted for movement parallel with the lines of writing and carrying printing mechanism, of inking mechanism, including ribbon spools mounted upon a fixed spindle on said frame, and means for feeding the spools parallel with the path of the carriage, substantially as specified. 7th. In a typewriting machine, the combination with a carriage mounted for movement parallel with the lines of writing, and carrying printing mechanism, of inking mechanism, including twin co-axial ribbon spools, having a common journal sleeve, a fixed spindle upon which said sleeve is mounted for sliding movement with the carriage parallel with the lines of writing, and means for imparting a step by step rotary motion to one of the spools, substantially as specified.

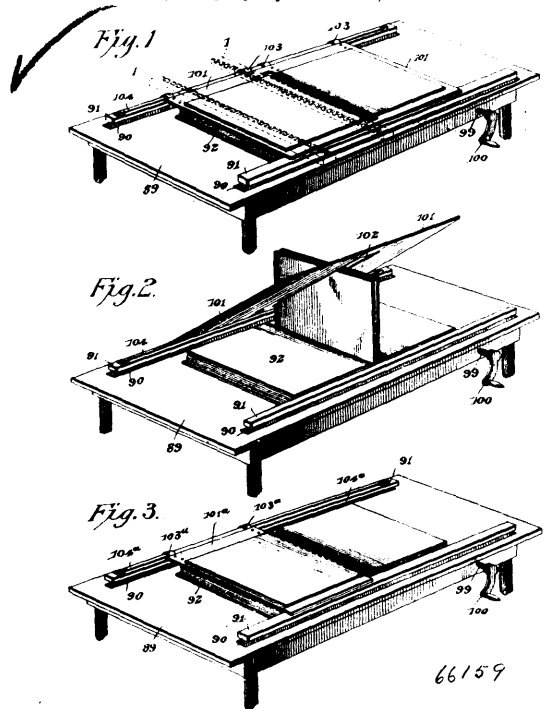
ing printing mechanism, of inking mechanism including co-axial ribbon spools, a journal sleeve upon which said spools are mounted between spaced collars, the collar on one side of each spool being adjustable, a fixed spool spindle upon which said journal sleeve is mounted for movement parallel with the lines of writing, and means for communicating motion to the journal sleeve, substantially as specified. 9th. In a typewriting machine, the combination with a carriage mounted for movement parallel with the lines of writing, and carrying printing mechanism, of inking mechanism, including ribbon spools, a spool spindle arranged parallel with the lines of writing, a journal sleeve mounted upon said spindle and having reduced terminal portions upon which the spools are revolvably mounted, said sleeve having a fixed central collar, and adjustable terminal collars adapted to bear against the outer surfaces of the spools, means for securing said adjustable collars at the desired adjustment, and means for imparting a sliding motion to the sleeve, substantially as specified. 10th. In a typewriting machine, the combination with a carriage mounted for movement parallel with the lines of writing, and carrying printing mechanism, of inking mechanism including ribbon spools having a common support and mounted for movement parallel with the lines of writing, and a feed arm on the carriage having connection with the spools to impart axial movement thereto, substantially as specified. 11th. In a typewriting machine, the combination with a carriage mounted for movement parallel with the lines of writing, and carrying printing mechanism, of inking mechanism including co-axial ribbon spools having a common journal sleeve mounted for movement parallel with the lines of writing, and a feed arm on the carriage having an interlocking engagement with said sleeve to impart axial movement to the spools, substantially as specified. 12th. In a typewriting machine, the combination with a carriage mounted for movement parallel with the lines of writing, and carrying printing mechanism, of inking mechanism including a journal sleeve mounted upon a spindle for movement parallel with the lines of writing and operatively connected with the carriage, interchangeable ribbon spools mounted upon said sleeve, and means for imparting rotary motion to either of said spools, substantially as specified. 13th. In a typewriting machine, the combination with a carriage mounted for movement parallel with the lines of writing, and carrying printing mechanism, of inking mechanism including co-axial ribbon spools mounted for movement parallel with the lines of writing and having ratchets, independent feed pawls arranged respectively in operative relation with the ratchets of the ribbon spools, operating connections between said pawls and the printing mechanism, and trip mechanism including a rocking lever having its arms arranged respectively under said pawls, and means for securing the lever in its adjusted positions,

66158

substantially as specified. 14th. In a typewriting machine, the combination with a carriage mounted for movement parallel with the lines of writing, and carrying printing mechanism, of inking mechanism, including co-axial ribbon spools mounted for movement parallel with the lines of writing and having ratchets, feed pawls arranged respectively in operative relation with the ribbon spool ratchets operating connections between said pawls and the printing mechanism, and trip mechanism including a rocking lever having its arms arranged respectively in operative relation with the feed pawls to remove either of said pawls from operative engagement with its ratchet, and locking devices for the lever, including a cam faced head and a holding spring in operative relation with said head, substantially as specified. 15th. In a typewriting machine, the combination with a carriage mounted for movement parallel with the lines of writing, and carrying printing mechanism, of inking mechanism including ribbon spools mounted for axial movement parallel with the lines of writing, an oscillatory ribbon guide or carrier for supporting an intermediate looped portion of a ribbon reeled upon said spools, and having spaced terminal angularly disposed ribbon guiding loops, between which an intermediate portion of the ribbon is arranged parallel with the lines of writing, said loops being movable to vary transversely the intermediate portion of the ribbon, a locking device for securing said loops in their adjusted positions, and means for actuating said guide or carrier, substantially as specified. 16th. In a typewriting machine the combination with a carriage mounted for movement parallel with the lines of writing, and carrying printing mechanism, of inking mechanism, including ribbon spools mounted for axial movement parallel with the lines of writing, and an oscillatory ribbon guide or carrier operatively connected with the printing mechanism and having spaced angularly disposed ribbon guiding loops adjustable transversely with relation to the lines of writing, and a locking device for securing said ribbon guiding loops at the desired adjustment, substantially as specified. 17th. In a typewriting machine, the combination with a carriage mounted for movement parallel with the lines of writing, and carrying printing mechanism, of inking mechanism, including ribbon spools mounted for axial movement parallel with the lines of writing, a hinged ribbon guide or carrier operatively connected with the printing mechanism for oscillatory movement, and having an adjustable section provided with angularly disposed ribbon guiding loops and adapted for adjustment transversely to the lines of writing, and means for securing said adjustable member at the desired adjustment, substantially as specified. 18th. In a typewriting machine, the combination with a carriage mounted for movement parallel with the lines of writing, and carrying printing mechanism, of inking mechanism, including ribbon spools mounted for axial movement parallel with the lines of writing, an oscillatory ribbon guide or carrier operatively connected with the printing mechanism and having a main member provided with fixed ribbon guiding loops, and an adjustable member provided with movable ribbon guiding loops between which an intermediate portion of an inking ribbon is held in a position parallel with the lines of writing, and means for locking the adjustable member of the ribbon guide or carrier at the desired adjustment with relation to the fixed guiding loops, substantially as specified. 19th. In a typewriting machine, the combination with a carriage mounted for movement parallel with the lines of writing and having a pendent type-bar supporting ring, type-bar bearing clips carried by the supporting ring, securing plates spanning the bearing clips to fasten them to the supporting ring, one of the securing plates having an intermediate central section, of inking mechanism, including ribbon spools, mounted for axial movement parallel with the lines of writing and connected with the carriage for actuation thereby, feed mechanism operatively connected with the printing mechanism for imparting rotary movement to the spools, a bracket carried by said intermediate securing plate section, hangers depending from the carriage and attached at their lower ends to said bracket for supporting said feed mechanism, a ribbon guide or carrier hingedly mounted upon an extension of said securing plate section and having ribbon guiding loops, and connections between said ribbon guide and the printing mechanism, substantially as specified. 20th. In a typewriting machine, the combination with a supporting frame, a carriage mounted upon said frame for movement parallel with the lines of writing, and printing and inking mechanism, the former including a pendent type-bar supporting ring, of a guide bar attached to the supporting frame in rear of the type-bar supporting ring and parallel with the lines of writing, the inking mechanism mounted on the guide bar, and a sliding connection between said supporting ring and the guide bar, substantially as specified. 21st. In a typewriting machine, the combination with a supporting frame, a carriage mounted upon said frame for movement parallel with the lines of writing, and printing and inking mechanisms, the former including a pendent type-bar supporting ring, of front and rear guide bars secured to the supporting frame contiguous to the plane of and respectively in front and in rear of the supporting ring, and parallel with the lines of writing, the rear guide bar receiving and supporting the inking mechanism, and sliding connections between said supporting ring and said front and rear guide bars to prevent vibration of the supporting ring transversely to the lines of writing, substantially as specified. 22nd. In a typewriting machine, the combination with a supporting frame, and a carriage mounted upon the supporting frame for movement parallel with the lines of writing, and carrying printing mechanism including a pendent

type-bar supporting ring, of front and rear guide bars arranged on the supporting frame contiguous to the plane of the type-bar supporting ring, and parallel with the lines of writing, inking mechanism, including ribbon spools, co-axially mounted for linear movement upon the rear guide bar, a feed arm supported by the carriage and operatively connected with said ribbon spools for communicating linear movement thereto, and for bracing the supporting ring against rearward vibration transverse to the lines of writing, and a sliding connection between the support ring and said front guide bar for preventing forward vibration of the supporting ring transverse to the lines of writing, substantially as specified.

No. 66,159. Book Typewriting Machine.
(*Clavigraphique pour livres.*)

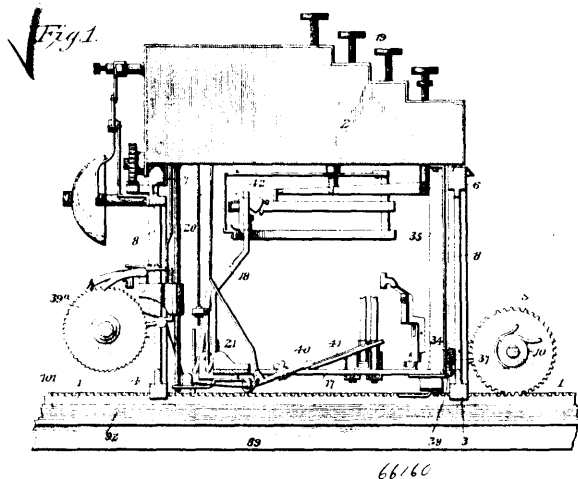


The Fisher Typewriter Company, assignee of Robert J. Fisher, all of Athens, Tennessee, U.S.A., 9th February, 1900; 6 years. (Filed 21st September, 1899.)

Claim.—1st. A platen for book typewriting machines, having leaves or members connected for simultaneous movement and arranged in a common plane to respectively support book leaves, and having an intermediate space or passage through which book leaves may extend to the upper surface of the platen leaves or members, substantially as specified. 2nd. A platen for typewriting machines, having pivotal leaves or members connected for simultaneous swinging movement, and arranged in a common plane to respectively support book leaves, and having an intermediate space through which the book leaves may extend to the upper surface of the platen leaves or members, substantially as specified. 3rd. A platen for book typewriting machines, consisting of a continuous plate provided at an intermediate point with a transverse slot for the reception of a plurality of book leaves for extension in opposite directions, and providing writing supports on both sides of said slot, substantially as specified. 4th. A platen for book typewriting machines, having leaves or members arranged in a common plane and mounted co-axially, the same being separated by an intervening slot through which book leaves may extend to the upper surface of the platen leaves or members, substantially as specified. 5th. A typewriting machine support having a base, and a book leaf supporting platen mounted upon the base for pivotal and axial movement, substantially as specified. 6th. A typewriting machine support having a base, and a book leaf supporting platen hingedly mounted upon the base for swinging movement in a vertical plane, and linear movement parallel with the lines of writing, substantially as specified. 7th. A typewriting machine support having a book supporting base, a machine supporting element arranged above the plane of said base, and a book leaf supporting platen mounted upon said machine supporting element for pivotal and axial movement, substantially as specified. 8th. A typewriting machine support having a book supporting base, a machine supporting strip arranged above the plane of the base, and a book leaf supporting platen hinged at one edge upon said strip for pivotal and axial movement, and extending from said strip to span that portion of the base which is adapted to be occupied by a book, substantially as specified. 9th. A typewriting machine support having a base, a hinge rod parallel with the lines

of writing, and a book leaf supporting platen having hinge eyes mounted upon said hinge rod for sliding movement, substantially as specified. 10th. A typewriting machine support having a base, a hinge rod parallel with the lines of writing, and a book leaf supporting platen having hinge eyes mounted upon the hinge rod, the hinge rod being of a length greater than the interval between the terminal or remote hinge eyes, to allow longitudinal movement of the platen, substantially as specified. 11th. A typewriting machine support having a base, and a plural leaf platen mounted upon the base for swinging movement and linear movement parallel with the lines of writing, substantially as specified. 12th. A typewriting machine support having a base, and a plural leaf platen hingedly mounted upon the base and having its leaves connected for simultaneous linear movement parallel with the lines of writing, substantially as specified.

No. 66,160. Typewriting Machine. (Clavigraphic.)



The Fisher Typewriter Company, assignee of Robert J. Fisher, Charles F. Laganke all of Athens, Tennessee, U.S.A., 9th February, 1900; 6 years. (Filed 21st September, 1899.)

Claim.—1st. A typewriting machine support having a book supporting base and elevated machine supporting strips spaced apart to form an interval sufficient to receive a book, and adjustable toward and from the plane of the base, substantially as specified. 2nd. A typewriting machine support having machine supporting strips mounted upon the base for vertical adjustment and apart to form an interval adapted to receive a book, and means for securing said strips at the desired vertical adjustment, substantially as specified. 3rd. A typewriting machine support having a base, machine supporting strips countersunk into the surface of the base and spaced apart to form an interval adapted to receive a book, and means for adjusting and securing said strips at the desired adjustment, substantially as described. 4th. A typewriting machine support having a base, vertically adjustable machine supporting strips mounted upon the base at an interval sufficient to receive a book, and operating devices for said strips, including operatively connected gears meshing with racks on the strips, substantially as specified. 5th. A typewriting machine support having a base, horizontal machine supporting strips adjustable toward and from the plane of the base, and arranged at an interval adapted to receive a book, and a leaf supporting platen supported by said strips, substantially as specified. 6th. A typewriting machine support having a book supporting base, a horizontal machine supporting strip adjustable toward and from the plane of the base, and a leaf supporting platen resting at one edge upon said machine supporting strip, and extending over that portion of the base which is adapted to be occupied by a book, to bear upon a book positioned upon the base, substantially as specified. 7th. A typewriting machine support having a book supporting base, a horizontal machine supporting strip adjustable toward and from the plane of the base, and a leaf supporting platen hinged at one edge upon said strip, to span that portion of the base which is adapted to be occupied by a book, substantially as specified. 8th. A typewriting machine support having a base, supporting strips arranged above the plane of the base at an interval adapted to receive a book, and a platen spanning the interval between and supported by said strip, to support a superposed book leaf, and mounted for swinging movement upon one of the supporting strips, substantially as specified. 9th. A typewriting machine support having a base, supporting strips arranged above the plane of the base at an interval adapted to receive a book, and a platen spanning the interval between and supported by said strips, to support a superposed book leaf, said platen being hingedly mounted upon one of the supporting strips, and supported at its free edge by the other strips, substantially as specified. 10th. A typewriting machine support having a book supporting base, and a platen supporting member adjustable to vary the interval

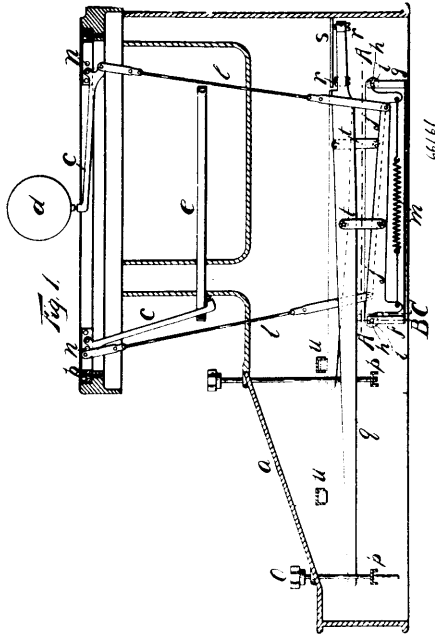
between the plane of the platen and that of the base, the platen being mounted upon said member for swinging movement, substantially as specified. 11th. A typewriting machine support having a frame, a horizontally disposed member mounted upon the frame for adjustment toward and from the plane of the frame, and adapted to be secured at the desired adjustment, and a book leaf supporting platen carried by said adjustable member, substantially as specified. 12th. A typewriting machine support having a frame, adjustable spaced members mounted upon the frame and adapted to be secured at the desired adjustment, and a book leaf supporting platen carried by and hingedly mounted upon one adjustable member for swinging movement, and supported at its free edge by the other member, substantially as specified. 13th. A typewriting machine support having a base and spaced supports, and a book leaf supporting platen spanning the interval between the supports and hingedly mounted at one edge upon one of the supports, substantially as specified. 14th. A typewriting machine support having a base, spaced vertically adjustable machine supporting strips mounted upon the base, connected gears meshing with racks on said strips, and an operating shaft connected with the spindles of said gears by intermeshing worms or worm gears, substantially as specified. 15th. The herein described typewriting machine support having a table top, front and rear parallel machine supporting strips mounted upon the table top for supporting opposite ends of a typewriting machine base frame, front and rear pairs of gears meshing with racks depending from said strips, said pairs of gears having common spindles, and a worm shaft having worms meshing with worm gears on said spindles and provided with a crank arm, substantially as specified. 16th. A typewriting machine support having a base, supporting strips arranged above the plane of the base at an interval adapted to receive a book, and a platen spanning the interval between and supported by said strips, to support a superposed book leaf, and mounted for swinging movement upon one of the supporting strips, substantially as specified. 17th. In a typewriting machine, the combination with a supporting frame having elevated carriage guides, a carriage mounted for movement upon said guides, and a type bar supporting ring depending from the carriage between the guides, of a supplemental guide carried by the frame parallel with the path of the carriage and below the carriage guides, and a sliding connection between the supporting ring and said supplemental guide, substantially as specified. 18th. In a typewriting machine, the combination with a supporting frame, a carriage mounted upon the supporting frame for movement parallel with the lines of writing, and a type bar supporting ring depending from the carriage, of a guide bar mounted upon the supporting frame parallel with the path of the carriage and provided with a longitudinal groove, and a slide consisting of a clip or feather carried by the supporting ring and engaging said groove of the guide bar to prevent vibration of the supporting ring transverse to the lines of writing, substantially as specified. 19th. In a typewriting machine, the combination with a supporting frame, a carriage mounted upon the supporting frame for movement parallel with the lines of writing, and a type bar supporting ring depending from the carriage, of a guide bar secured to the supporting frame parallel with the path of the carriage and contiguous to the plane of said supporting ring, and provided in its underside with a longitudinal groove, and a slide secured to the supporting ring and provided with a blade fitting to slide in the groove of the guide bar to prevent vibration of the supporting ring transverse to the lines of writing, substantially as specified. 20th. In a typewriting machine, the combination with a supporting frame, a carriage mounted upon the supporting frame for movement parallel with the lines of writing, and a type bar supporting ring depending from the carriage, of a guide bar secured to the supporting frame parallel with the path of the carriage and adjacent to the plane of the supporting ring, and a plurality of slides secured to the supporting ring and having an interlocking sliding engagement with said guide bar to prevent torsional vibration of the supporting ring, or movement thereof transverse to the lines of writing, substantially as specified.

No. 66,161. Typewriting Machine. (Clavigraphic.)

The Duplex Typewriter Company, assignee of Robert Turner, all of Des Moines, Iowa, U.S.A., 9th February, 1900; 6 years. (Filed 23rd November, 1899.)

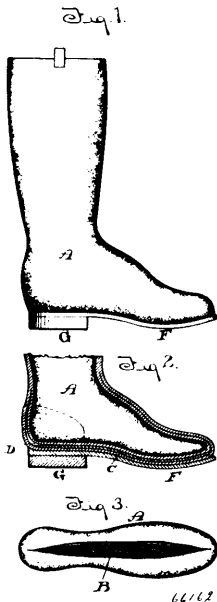
Claim.—1st. In a typewriting machine, the combination with a pair of key levers, of a pair of bell cranks arranged in alternation and links connecting their long arms respectively to said key levers, of a spring connecting the short arms of said cranks and exerting its tension upon both of said cranks and levers, and type-bars suitably connected to said bell cranks. 2nd. In a typewriting machine, the combination with the key levers, of auxiliary bell crank levers connected to them, and springs coupling said bell cranks in pairs, whereby each spring exerts its force upon two key levers and type bars suitably connected to said bell cranks. 3rd. In a typewriting machine, an action comprising key levers, auxiliary bell crank levers connected thereto, type bars connected to said bell cranks, and springs coupling said bell cranks in pairs, whereby each spring does double work in returning the other members of the action to their normal positions. 4th. In a typewriting machine, an action comprising key levers, auxiliary bell crank levers connected thereto, type bars connected to said bell cranks, and springs coupling said bell cranks in pairs, whereby each spring does double work

in returning the other members of the action to their normal positions, and stops against which said type bars are normally



held by said springs. 5th. In a typewriting machine, an action comprising longitudinally sliding and vertically oscillating key levers, auxiliary bell crank levers connected thereto, type bars connected to said bell cranks, and springs coupling said bell cranks in pairs, and exerting their forces to lift and slide each key lever separately and to separately return each type bar to its normal position, and means to adjust the rear bearing of each key lever and to regulate the tension of said springs. 7th. In a typewriting machine, a main frame, parallel longitudinally grooved and transversely notched bars erected thereon, bell cranks pivoted upon said bars in alternation, and springs coupling said bell cranks in pairs, combined with key levers and type bars separately connected to said bell cranks.

No. 66,162. Knit Boot and Shoe. (*Chaussure tricotée.*)

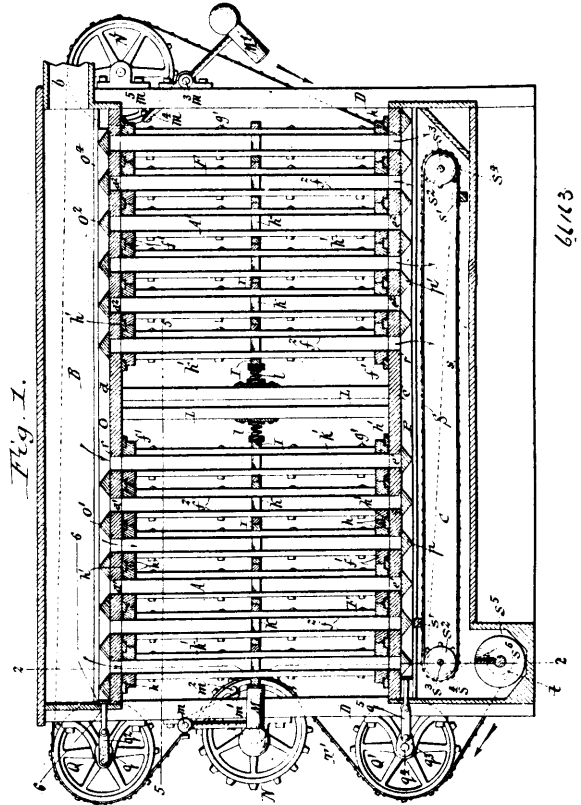


Edward Roos, Mishawaka, Indiana, U.S.A., 10th February, 1900; 6 years. (Filed 26th January, 1900.)

Claim.—1st. A felted or knit boot or shoe having the lower foot portion made double, and the two parts entirely separate from each other, substantially as shown. 2nd. A felted or knit boot or shoe having its sole portion made double, the outer one of which may be slitted or opened without interfering with the inner one, combined

with an inner sole and stiffener which is inserted through the opening, substantially as described. 3rd. A felted or knit boot or shoe having its foot portion made double, combined with an insole which is inserted through the slit made in the outer sole portion, and an outer sole which is secured to the boot or shoe, substantially as set forth.

No. 66,163. Dust Collector. (*Aspirateur de poussière.*)



Paul Eberwein, Jackson, Michigan, U.S.A., 10th February, 1900; 6 years. (Filed 26th January, 1900.)

Claim.—1st. The combination with an upper chamber which receives the dust laden air and a lower chamber which receives the separated dust, of upright filtering chambers arranged between said chambers and communicating therewith, and upper and lower cut-off devices, arranged to open the passages by which said filtering chambers communicate with said upper chambers while closing the passages by which said filtering chambers communicate with the lower chamber, and *vice versa*, substantially as set forth. 2nd. The combination with an upper chamber which receives the dust laden air and a lower chamber which receives the separated dust, of upright filtering chambers arranged between said chambers and communicating therewith, upper and lower cut-off slides which control the passages leading to and from said filtering chambers, and means whereby said slides are reciprocated in opposite directions, substantially as set forth. 3rd. The combination with an upper chamber which receives the dust laden air and a lower chamber which receives the separated dust, of two groups of upright filtering chambers arranged between said upper and lower chambers and communicating therewith, and reversible cut-off devices which direct the dust laden air into one of said groups of filtering chambers and exclude the dust laden air from the other group, substantially as set forth. 4th. The combination with an upper chamber which receives the dust laden air and a lower chamber which receives the separated dust, of two groups of upright filtering chambers arranged between said upper and lower chambers and communicating therewith by upper and lower passages, and upper and lower reversible cut-off devices which simultaneously open one group and close the other group of upper passages and which simultaneously close one group and open the other group of lower passages which lead from the filtering chambers to the lower dust chamber, substantially as set forth. 5th. The combination with an upper chamber which receives the dust laden air and a lower chamber which receives the separated dust, of two groups of upright filtering chambers arranged between said upper and lower chambers and communicating therewith by upper and lower passages, reversible cut-off devices arranged to open one group of passages and close the other group of passages simultaneously, and means whereby said cut-off devices are slowly reversed, thereby opening both groups of passages simultaneously

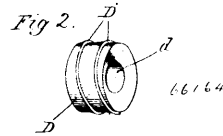
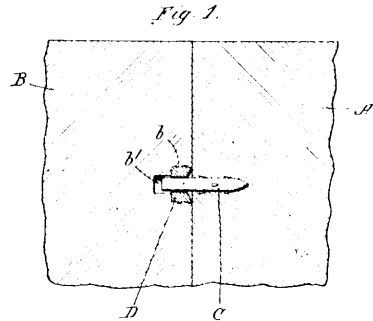
for a time in passing out of one position to the other, substantially as set forth. 6th. The combination with an upper chamber which receives the dust laden air and a lower chamber which receives the separated dust, of two groups of upright filtering chambers arranged between said upper and lower chambers and communicating therewith by upper and lower passages, upper and lower reversible cut-off devices arranged to open one group and close the other group of upper passages and simultaneously close one group and open the other group of lower passages, thereby admitting the dust laden air to one group of filtering chambers and excluding it from the other, and means whereby said cut-off devices are slowly reversed, thereby opening all the passages simultaneously in passing from one position to the other, and admitting the dust laden air to both groups of filtering chambers simultaneously for a time, substantially as set forth. 7th. The combination with an upper chamber which receives the dust laden air and a lower chamber which receives the separated dust, of two groups of upright filtering chambers arranged between said upper and lower passages, upper and lower cut-off slides arranged to open one group and close the other group of upper passages and to simultaneously close one group and open the other group of lower passages, and rotary cranks whereby said slides are reciprocated, substantially as set forth. 8th. The combination with an upper chamber which receives the dust laden air and which is provided in its bottom with a series of parallel transverse openings, and a lower chamber which receives the separated dust and which is provided in its top with corresponding openings, of vertical filtering chambers open at their upper and lower ends and arranged between said upper and lower chambers to register with the openings therein and upper and lower cut-off slides arranged lengthwise in said upper and lower chambers are provided with cross bars by which said openings are alternately covered and uncovered, substantially as set forth. 9th. The combination with an upper chamber which has a horizontal bottom provided with a series of parallel transverse openings, a lower chamber which has a horizontal top provided with a series of corresponding transverse openings, guide rails secured to the underside of said bottom and upperside of said top, between the openings of said bottom and top, and posts whereby said upper and lower chambers are united to a rigid frame, of filtering chambers, open at their upper and lower ends to register with said openings, arranged to fit between said chambers and rabbeted or offset at their upper and lower ends to overlap said guide rails, substantially as set forth. 10th. The combination with a chamber which receives the dust laden air and which is provided with a series of parallel openings, of parallel filtering chambers communicating with said opening and provided with external springs having enlargements by which the springs of adjoining chambers bear against each other, and a knocker by which the spring of the end filtering chamber is struck substantially as set forth. 11th. The combination with a chamber which receives the dust laden air and which is provided with a series of parallel openings, of parallel filtering chambers communicating, with said openings, each chamber provided on opposite sides with external springs having enlargements by which the springs of adjoining chambers bear against each other, internal stay blocks connecting the springs of each chamber, and a knocker by which the spring of the end filtering chamber is struck, substantially as set forth. 12th. In a dust collector, a flat rectangular filtering chamber open at its upper and lower ends and composed of two rectangular cloth frames, each having the filtering cloth arranged on its inner face, interposed side pieces, external springs arranged across the open space of the cloth frames, and internal stay blocks arranged between said springs, substantially as set forth. 13th. In a dust collector, the combination with a series of parallel filtering chambers provided with internal stay pieces and with external springs having enlargements by which the springs of adjoining chambers bear against each other, of a knocker which strikes the spring at one end of the series of filtering chambers, and yielding abutment which supports the spring at the opposite end of the series, substantially as set forth. 14th. The combination with an upper chamber which receives the dust laden air and a lower chamber which receives the separated dust, of two groups of upright filtering chambers arranged between said chambers and communicating therewith, and provided with external springs which bear against each other, knockers arranged to strike the springs at the outer ends of the groups of filtering chambers, yielding abutments arranged between the groups of the filtering chambers and supporting the springs at the inner ends thereof, and reversible cut-off devices whereby the dust laden air is directed to one group of filtering chambers and excluded from the other, substantially as set forth.

No. 66,164. Extension Table. (Table à rallonge.)

Emil Tyden, Haefings, Michigan, U.S.A., 10th February, 1900; 6 years. (Filed 26th January, 1900.)

Claim.—1st. In an extension table, in combination with the top boards, dowels or tenons projecting from one edge of said boards at each junction, and metal sockets let into the adjacent edge at each junction, such sockets being axially apertured and countersunk at the outer end of such aperture, the pin being of substantially uniform diameter throughout its protruding portion. 2nd. In an extension table, in combination with the boards of the table top, dowels or tenons projecting from one edge of said boards, and recesses in the adjacent or facing edge at each junction, the recesses

being at least as deep as the full length of the protruding portion of the tenons and metal sockets, or linings for said recesses, having



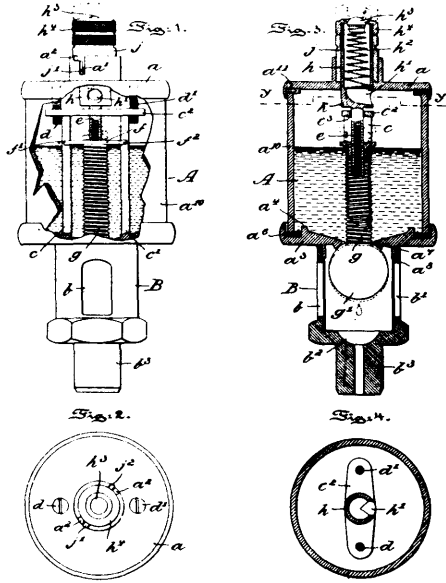
axial apertures countersunk at their outer ends, and at the narrowest point substantially equal in diameter to the diameter of the pins, said narrowest point being at the limit of the countersink, and relatively remote from the bottom of the recess. 3rd. In an extension table, in combination with the boards of the table top, metal dowels set into the edge of one board at each junction, the facing edge of the adjacent board having recesses as deep, at least, as the projecting portion of the metal dowels, metal sockets, or linings, for said recesses, having axial apertures countersunk at their outer ends, and at their narrowest point substantially equal in diameter to the diameter of the pins, said narrowest point being at the limit of the countersink, and relatively remote from the bottom of the recess. 4th. In an extension table, in combination with the boards of the table top, dowel pins or tenons projecting from one edge at each junction, and metal sockets let into the adjacent edge, such sockets being axially apertured and countersunk at the outer end of such aperture, and exteriorly provided with a fine, ratchet-shaped bead or circumferential thread, having its abrupt face forward and a long, sloping face rearward. 5th. In an extension table, in combination substantially as set forth, the adjacent boards of the table top provided at their abutting edges, one with the dowel or tenon, and the other with a metal socket adapted to receive said tenon, the socket being axially apertured from end to end and said aperture being enlarged taperingly at the outer end, the board in which such socket is set having a bore of suitable diameter and depth to permit the socket to be set in flush with the outer edge and having a further bore extended back from the first, of a diameter greater than that of the inner end of the aperture in the socket.

No. 66,165. Lubricator. (Graisseur.)

Albert Allen Freeman and Ogden Armstrong, both of Philadelphia, Pennsylvania, U.S.A., 10th February, 1900; 6 years. (Filed 30th January, 1900.)

Claim.—1st. An automatic sight feed lubricator provided with a lubricant reservoir, a controlled ball valve fitting the exit of said reservoir and having a hollow stem through which the lubricant flows into said reservoir, and means connected with said stem to cut off the flow of the lubricant above said valve, substantially as and for the purposes described. 2nd. An automatic sight feed lubricator provided with a lubricant reservoir, a spring controlled valve fitting the exit of said reservoir and having an adjustable stem through which the lubricant flows into said reservoir, and means connected with said stem to cut off the flow of the lubricant around said valve, substantially as and for the purposes described. 3rd. An automatic sight feed lubricator provided with a lubricant reservoir, a spring controlled adjustable valve fitting the exit of said reservoir and means connected with said valve to cut off the flow of the lubricant above said valve, substantially as and for the purposes described. 4th. An automatic sight feed lubricator provided with an oil reservoir, a spring controlled ball valve fitting the outlet of said reservoir and having a spindle connected with a hollow stem provided with an outlet and an inlet, the inlet being closed by a spring controlled button, ball or stud pin, substantially as and for the purposes described. 5th. An automatic sight feed lubricator provided with a detachable oil reservoir, a sight feed chamber connected with said reservoir having a nipple with a contracted orifice or passage way, a spring controlled valve seated in the bottom of said reservoir, a hollow stem connected with the spring of said valve and provided with an outlet and an inlet, the latter normally closed by a button, ball or stud pin adapted to be depressed to permit of oil being introduced through said stem into said reservoir, substan-

tially as and for the purposes described. 6th. An automatic sight feed lubricator provided with an oil reservoir, consisting of top and

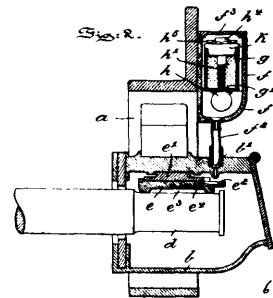
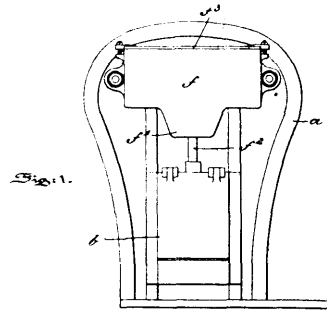


66165

bottom plates and an intermediate wall, said parts being clamped and held together, the bottom plate of said reservoir on the inner side inclined and having standards and a cross strip, means for clamping the top plate to said cross strip, a spring controlled valve fitting the outlet of said reservoir and carrying a spanning device connected with a spindle or shank having a hollow stem with an outlet and an inlet and said inlet closed by a button, ball or stud pin held under spring tension, substantially as and for the purposes described. 7th. An automatic sight feed lubricator provided with a spring controlled ball valve in the outlet thereof and adjustably connected with a spanning plate afforded a range of movement between standards within said reservoir and said valve having a hollow stem provided with an inlet and an outlet, the inlet of said stem being closed by a spring actuated device, substantially as and for the purposes described. 8th. An automatic sight feed lubricator having an outlet in the bottom closed by a ball under spring tension, a shank or spindle connected with said ball and with a hollow stem through which oil is fed into said reservoir, and means for adjusting said spring in its connection with said stem, substantially as and for the purposes described. 9th. An automatic sight feed lubricator provided with a ball fitting the outlet of the lubricant reservoir, a coiled spring connected therewith and with a hollow stem through which the lubricant flows into said reservoir, a spring controlled closing device connected with said stem, and means connected with said stem for cutting off the flow of oil from said reservoir around said ball and for increasing or decreasing the tension of said spring, substantially as and for the purposes described. 10th. An automatic sight feed lubricator provided with a lubricant reservoir, a spring controlled valve for opening and closing the exit of said reservoir, the spring whereof is detachably connected with a threaded spindle carrying a hollow stem into which hollow stem the lubricant is admitted and flows therethrough into said reservoir, and a bayonet connection between said reservoir and stem so arranged as to permit of the raising and lowering of said valve spring, stem and spindle with its hollow stem, substantially as and for the purposes described. 11th. An automatic sight feed lubricator provided with a lubricant reservoir, a spring controlled ball valve for opening and closing the exit of said reservoir, the spring whereof is detachably connected with a threaded spindle carrying an adjustable stem into which the lubricant is admitted and from which it flows into said reservoir, and a bayonet connection for raising and lowering said stem and controlling the spring tension of the ball of said valve, substantially as and for the purposes described. 12th. An automatic sight feed lubricator provided with a lubricant reservoir, a ball valve for opening and closing the exit of said reservoir having a spring stem connected with a nut in which is mounted an adjustable spindle carrying a hollow stem, the latter closed at the upper end by a button held under spring tension and a bayonet connection between said valve stem and lubricator reservoir for raising and lowering said hollow stem with its spindle and therewith increasing or decreasing the tension of the spring stem of said ball valve, substantially as and for the purposes described. 13th. An automatic sight feed lubricator provided with a detachable oil reservoir, a slight feed chamber connected with said reservoir having a nipple with a contracted orifice, a spring controlled valve normally seated in the outlet of said reservoir, a hollow stem connected with the spring of said valve, a spring controlled button, ball or stud pin mounted in said stem and normally

closing the inlet of the same, and a bayonet connection between said lubricator reservoir and stem, substantially as and for the purposes described. 14th. An automatic sight feed lubricator provided with an oil reservoir, consisting of top and bottom plates and an intermediate wall, said parts being clamped and held together, the bottom plate of said reservoir on the inner side inclined and having standards and a cross-strip, means for clamping the top plate to the cross strip of said standards, a spring controlled valve fitting the outlet of said reservoir and carrying a spanning device connected with a spindle and a hollow stem, the latter adapted to permit of oil being admitted thereto and of flowing through the same into said reservoir, and a spring actuated button, ball or stud pin mounted in said hollow stem and normally closing the oil inlet thereof, substantially as and for the purposes described.

No. 66,166. Car Axle Lubricator. (Boîte à graisse.)



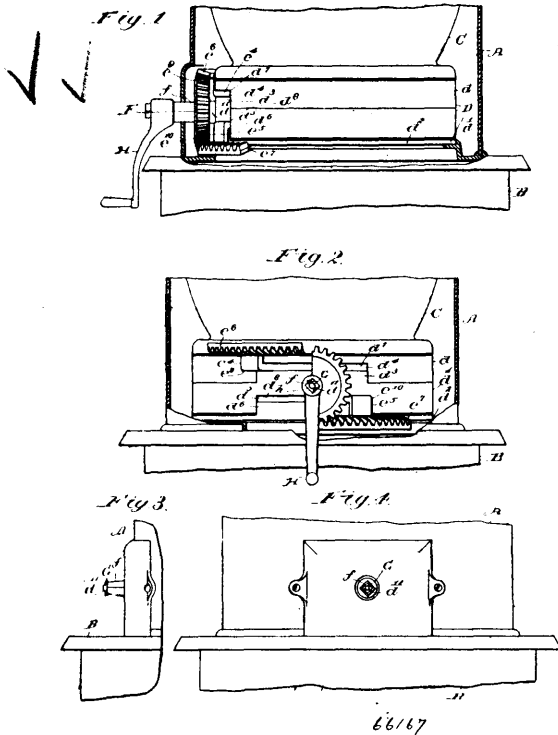
66166

Albert Allen Freeman and Ogden Armstrong, both of Philadelphia, Pennsylvania, U.S.A., 10th February, 1900; 6 years. (Filed 30th January, 1900.)

Claim.—1st. A lubricator for car axles, comprising a casing located directly above the axle box, a tank or reservoir located within said casing, a valve controlled outlet leading from said reservoir to the axle box, and a bearing block for the axle adapted to receive the lubricant from the reservoir and distribute it to the axle, substantially as and for the purpose described. 2nd. In a device of the character described, a tank or reservoir for the lubricant, an outlet formed at the base of said reservoir, a ball valve controlling said outlet, a spiral spring traversing the outlet and extending through the reservoir, said spring carrying the ball valve, a shaft from which said spring is suspended, a bracket supported by the reservoir and traversed by the shaft, and means for advancing and retracting the shaft in said bracket to increase or decrease the tension of said spring, substantially as and for the purposes described. 3rd. In a device of the character described, a tank or reservoir having an outlet in its base, a ball valve normally resting against the under surface of said outlet, a spiral spring from which said ball valve is suspended, a square shaft having a threaded end from which said spring is suspended, a bracket having an opening adapted to be traversed by said square shaft and having a notched upper face, a nut adapted to be advanced or retracted on the threaded end of said shaft, and pins carried by said nut and adapted to engage the notched face of the bracket, substantially as and for the purposes described. 4th. In a device of the character described, a casing, a cover removably secured to said casing, a tank or reservoir adapted to be mounted in or removed from said casing, and a perforated cover secured to said reservoir, substantially as and for the purposes described. 5th. In a device of the character described, a bearing block for an axle provided in its upper face with a dish-shaped recess in communication with a lubricating device, and ducts or channels leading from the upper face of said block to its inner face, substantially as and for the purposes described. 6th. In a device of the character described, a casing located adjacent to an axle box, a cover removably secured to said casing, a tank or reservoir adapted to be mounted in or removed from said casing, a valve controlled outlet leading from said reservoir to said axle box, a bearing block for the axle adapted to receive the lubricant from said tank or reservoir and to distribute the same to the axle, and a perforated cover secured to said reservoir, substan-

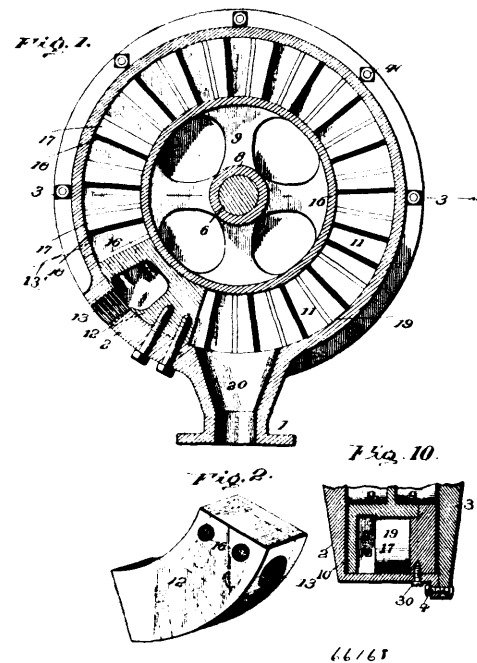
tially as and for the purposes described. 7th. In a device of the character described, a casing located adjacent to an axle box, a cover removably attached to said casing, a reservoir adapted to be mounted in and removed from said casing, a valve controlled outlet leading from said reservoir to said axle box, a bearing block for the axle provided in the upper face with a recess and ducts or channels to uniformly distribute the lubricant over said axle and a perforated cover secured to said reservoir to screen the lubricant prior to its passage through said reservoir, substantially as and for the purposes described.

No. 66,167. Grate for Stoves, etc. (Grille pour poêles, etc.)



larger ends adapted to make a pivotal connection with a tapered pintle carried by the operating ring resting thereupon. 8th. In a grate, a housing consisting of a series of annular rings provided with internal and external flanges constructed and arranged to interlock, their inner walls forming a part of the fire chamber and provided with grate bar receiving openings and their exterior walls with a slot through which the grate bars are operated and their inner bearing surfaces grooved and perforated. 9th. In a stove, the combination with a combustion chamber, of an annular housing having its outer wall provided with a slotted opening for the passage of an operating device and its inner walls divided into ports for the passage of the grate fingers and furnished with perforations in the bottom of the housing for the free passage of air to the interior of the housing and the passage of ashes to the ashpit from the housing. 10th. In a stove, the combination with a combustion chamber, of two annular housings situated one above the other beneath the fire chamber and having a slotted opening through their outer walls for the passage of an operating device, and each inner wall divided into ports for the passage of their respective series of grate bars and having the bottom walls of each chamber or housing perforated for the passage of air and ashes, as set forth. 11th. The combination of a fire pot, two grates, arranged one above the other, below said fire pot, each of said grates consisting of a grate ring and fingers, pivoted thereto, and each grate ring being provided with a rack, curved concentrically with said grate ring, said racks being inverted with respect to each other, a stationary housing, having abutments arranged on opposite sides of each of said fingers, and a segmental gear, supported by said housing, and, when turned, engaging said racks one at a time, to move said racks successively in oppositely directions and to cause the fingers of one grate to be thrown inward and the fingers of the other grate to be immediately thereafter thrown outward. 12th. The combination of the base, the housing, supported thereon, and consisting of superimposed housing rings, each superimposed ring having a recess to receive a projection, with which the housing ring next below is provided, and which fills said recess laterally but not vertically, grate rings arranged in said housing, fingers, pivoted to said grate rings and projecting through the inner face of said housing rings, between abutments, with which said housing rings are provided, said grate rings being provided with arms which project through said recesses above said projections, and means for imparting motion to said grate rings. 13th. The combination of the base, the housing, supported thereon, grate rings, arranged in said housing and having fingers, adapted to project through the inner face of said housing, and the firepot, supported on said housing, said housing forming with said firepot, a combustion chamber said housing consisting of superimposed rings and said housing rings below said grates having downwardly extending perforations to allow the escape of ashes and the ingress of air.

No. 66,168. Impact Engine. (Machine à vapeur.)



John Henry Goodfellow, Lowell, Massachusetts, U.S.A., 10th February, 1900; 6 years. (Filed 29th January, 1900.)

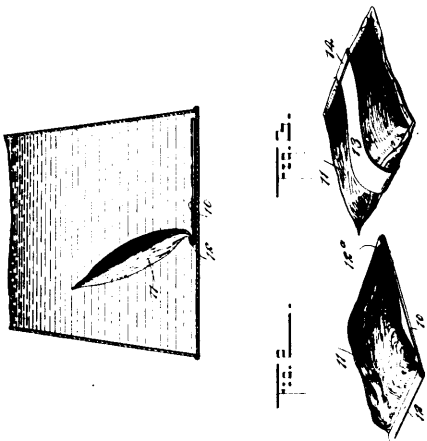
Claim.—1st. In a grate, the combination of two fuel supporting grates situated one above the other and adapted to be moved to their operative positions within the fire chamber and withdrawn therefrom, and means by which the grates may be independently operated or moved successively in opposite directions. 2nd. In a stove, the combination of a combustion chamber, two fuel supporting grates situated one above the other, and means by which one of said grates is moved to its operative position within the combustion chamber and by which, by continuing the movement, the other is withdrawn therefrom. 3rd. In a stove or furnace, the combination with a fire chamber, of two fuel supporting grates situated one above the other, each adapted to be moved in a horizontal plane into and from the fire chamber, and means by which one of said grates is moved to its operative position within the fire chamber and by continuing the movement of the operating means the other is withdrawn therefrom. 4th. In a grate, the combination of a housing provided with openings communicating with the combustion chamber, fuel supporting fingers resting on the bottom of the housing and adapted to be passed through the openings, a ring resting on the outer ends of the fingers and pivotally connected therewith, and means provided with a reduced contact surface for holding the ring and fingers in their operative position. 5th. In a grate, the combination of two fuel supporting grates situated one above the other adapted to be moved to their operative position within the fire chamber and withdrawn therefrom, of two housings encasing the same, the upper housing having a larger internal diameter than the lower, the fuel supporting grates being correspondingly formed. 6th. In a stove or furnace, the combination of a cut-off grate consisting of two annular housings situated one above the other and adapted to form a part of the fire chamber, two series of curved tapering fingers or grate bars adapted to be received therein, two rings, one within each housing, pivotally connected to said series of bars, and means for rotating the rings independently or successively in opposite directions to move the two series of fingers alternately into or out of the fire chamber. 7th. In a grate, the combination with an annular housing forming a part of a grate, a series of independent curved and tapered fingers or bars having their under sides hollowed out and adapted to be received within said housing and furnished with a tapered hole in their

William E. Prall and Edgar F. Prall, both of New York City, New York, U.S.A., 10th February, 1900; 6 years. (Filed 29th January, 1900.)

Claim.—1st. In an engine, the rotary rings or discs provided with bucket faces or deflecting planes to compel the propelling fluid to

pass in a zig-zag manner, said discs being separated by a stationary abutment through which the propelling fluid is admitted and directed against the bucket faces, substantially as shown and described. 2nd. In an engine, the rotary rings or discs provided with bucket faces or deflecting planes to compel the propelling fluid to pass in a zig-zag manner, said discs being rigidly fixed together and separated by a stationary abutment through which the propelling fluid is admitted and directed against the bucket faces, substantially as shown and described. 3rd. In an engine, the cylinder provided with fixed abutment having admission ports for a fluid under pressure, and rotating discs or rings provided with bucket faces or planes, exhaust ports and reversing valves, whereby the fluid may be admitted to either abutment port and exhausted from a corresponding port to drive the engine in reverse directions, substantially as described. 4th. In an engine, the rotary annular rings or discs provided with bucket faces or deflecting planes to compel the propelling fluid to pass in a circuitous zig-zag manner, said discs being separated by a fixed abutment, substantially as shown and described. 5th. In an engine, the discs or rings provided with deflecting planes facing each other, one of said discs being made fast to the shaft to rotate with it, and the other being fixed, the fixed disc having an abutment 15 to prevent the propelling fluid from escaping directly to the exhaust, substantially as shown and described. 6th. In an engine provided with rotary discs or rings having faces or planes for directing the propelling fluid in a zig-zag motion across an open channel or way between them, the deflecting fingers situated in the said way between the discs, substantially as shown and described. 7th. In an engine provided with a plurality of rotary discs having deflecting bucket faces or planes for directing the propelling fluid in a zig-zag direction, comprising several sections, and the connecting channel leading from the exhaust port of one section to the inlet port of the succeeding section through an abutment situated between two discs, and provided with an admission port, substantially as shown and described. 8th. In an engine having two oppositely situated discs provided with deflecting faces or planes to direct the propelling fluid in a zig-zag manner, one of said discs being attached to and revolving with the shaft and the other stationary, the combination with said discs of an abutment situated in an open space between said discs, substantially as shown and described. 9th. In an engine having two discs provided with deflecting faces or planes to direct the propelling fluid in a zig-zag manner across a space between the discs, the abutment fixed between the discs to prevent the backward flow of the fluid, substantially as shown and described. 10th. In an engine, the shaft, the fixed cylindrical casing, a wheel fixed to the shaft, said wheel having a steamway and a series of buckets with impact faces inclined to the said way and from their bottoms toward their mouths or open sides in the direction of rotation, a fixed abutment in the steamway to preclude the backward passage of steam, a plurality of admission ports, a plurality of exhaust ports, and reversing valves whereby the steam may be admitted to either admission port and exhausted from a corresponding port to drive the engine in reverse directions, substantially as described. 11th. In an engine, the shaft, the fixed cylindrical casing, a wheel fixed to the shaft, said wheel having a steamway and a series of buckets with impact faces inclined to the said way and from their bottoms toward their mouths or open sides in the direction of rotation, a fixed abutment in the steamway to preclude the backward passage of steam, a plurality of admission ports, a plurality of exhaust ports, and a reversing valve, each bucket having impact faces similar but oppositely situated to provide for reversal of the engine.

No. 66,169. Percolator Package. (Sac-filtre.)

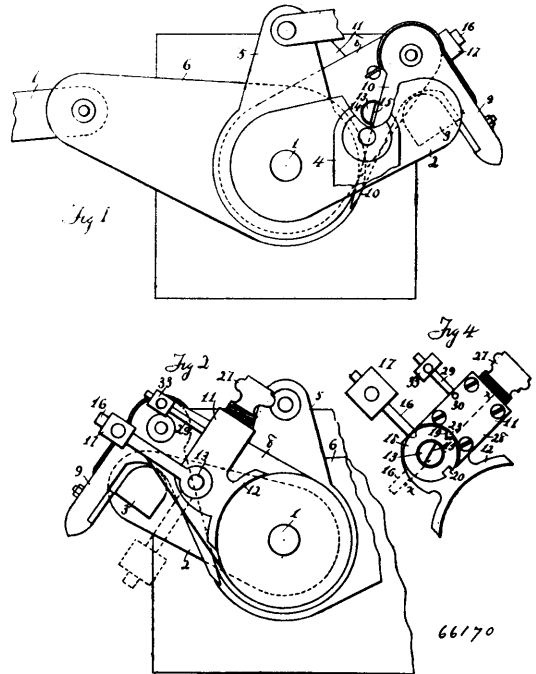


Henry M. Humphrey, Plainfield, New Jersey, U.S.A., 10th February, 1900; 6 years. (Filed 29th January, 1900.)

Claim.—1st. A package for tea, coffee or the like, consisting of a bag of porous or loosely woven material, provided with a weight in

the form of a plate or strip, bent up and over the bag to clamp the same, as set forth. 2nd. A package for tea, coffee and the like, consisting of a bag of porous or loosely woven material provided with a weight in the form of a flat plate, to which one end only of the bag is secured, as specified. 3rd. As an improved article of manufacture, a package adapted to contain any desired amount of tea, coffee or a like material, said package consisting of a slack bag made of loosely woven material, and a plate attached to said bag, which plate serves as a weight, for the purpose specified.

No. 66,170. Cut-Off. (Détente.)



William F. Bradbury and Dixon E. Washington, of Kansas City, Missouri, U.S.A., 10th February, 1900; 6 years. (Filed 30th January, 1900.)

Claim.—1st. A safety device for Corliss engines, consisting of the combination with the valve operating mechanism of a weighted trip mounted on the bell crank, and arranged to be operated by the momentum imparted by the oscillations of the bell crank to trip the crab claw at a certain pre-determined speed limit, and means connected with and arranged to control said trip, until such speed limit is reached, substantially as set forth. 2nd. A safety device for Corliss engines, consisting of the combination with the valve operating mechanism of a weighted trip mounted on the bell crank sleeve and arranged to be operated by the momentum imparted by the oscillations of the bell crank to trip the crab claw at a certain pre-determined speed limit, and a catch connected with and arranged, to control said trip until such speed limit is reached, substantially as set forth. 3rd. A safety device for Corliss engines, consisting of the combination with the valve operating mechanism of a weighted trip mounted on the bell crank sleeve and arranged to be operated by the momentum imparted by the oscillations of the bell crank to trip the crab claw at certain pre-determined speed limit, and a spring controlled catch connected with and arranged to control said trip until such speed limit is reached, substantially as set forth. 4th. A safety device for Corliss engines, consisting of the combination with the valve operating mechanism of the strip mounted upon the bell crank sleeve arranged to act upon the crab claw, a weight connected with and arranged by its oscillating momentum at a certain pre-determined speed limit to operate said strip and means connected with and arranged to control said weight until such speed limit is reached, substantially as set forth. 5th. A safety device for Corliss engines, consisting of the combination with the valve operating mechanism of a strip mounted upon the bell crank sleeve arranged to act upon the crab claw, a weight connected with and arranged by its oscillating momentum at a certain pre-determined speed limit to operate said strip, and a catch connected with and arranged to control said weight until such speed limit is reached, substantially as set forth. 6th. A safety device for Corliss engines, consisting of a trip mounted upon the bell crank sleeve arranged to act upon the crab claw, a weight connected with and arranged by its oscillating momentum at a certain pre-determined speed limit to operate said strip, and a spring controlled catch connected with and arranged to control said weight until such speed limit is reached, substantially as set forth. 7th. A safety device for Corliss engines, consisting of a block mounted on

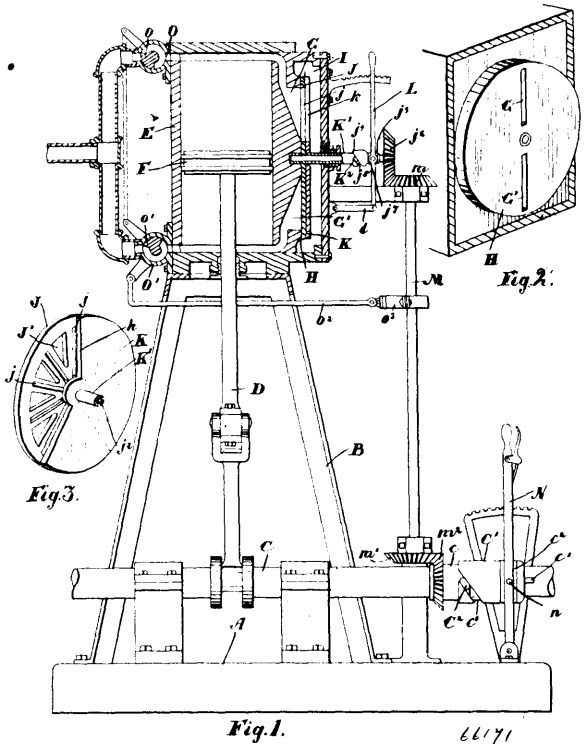
the bell crank sleeve, a shaft journalled in said block arranged to trip the crab claw, a weight mounted on said shaft arranged to operate the trip and a spring catch arranged to control the weight when the parts are so arranged that the oscillating momentum of the weight controls the trip, substantially as set forth. 8th. A safety device for Corliss engines, consisting of a block mounted on a bell crank sleeve, a shaft journalled in said block arranged to trip the crab claw, a weight mounted on said shaft arranged to operate the trip, and a spring catch arranged to control the weight when the parts are so arranged that at a certain speed the oscillating momentum of the weight will overcome the resistance of the catch and operate the trip, substantially as set forth. 9th. A safety device for Corliss engines, consisting of the combination with the valve operating mechanism, of a block mounted on the bell crank sleeve, a shaft journalled in said block arranged to trip the crab claw, a weight mounted on said shaft arranged to operate the trip, and a spring catch arranged to control the weight, when the parts are so arranged that the oscillations of the bell crank beyond a certain speed limit will cause the release of the weight and the operation of the trip, substantially as set forth. 10th. A safety device for Corliss engines, consisting of a block mounted on a bell crank, a shaft journalled in said block arranged to trip the crab claw, a weight mounted on an arm fixed on said shaft, a disc having suitable notches in its periphery mounted on said shaft, and a spring catch arranged to take in said notches, substantially as set forth. 11th. In a safety device for Corliss engines, a block mounted upon the bell crank sleeve, a shaft journalled in said block having at one end a flattened face arranged to trip the crab claw, and means for controlling and operating said shaft, substantially as set forth. 12th. A safety device for Corliss engines, consisting of a block mounted on the bell crank sleeve, a shaft journalled in said block arranged to trip the crab claw, a weight mounted on an arm fixed on said shaft, a disc having suitable notches in its periphery mounted on said shaft, a spring catch arranged to take in said notches and a weighted lever fulcrumed in said block arranged to act on said catch against the tension of its spring, substantially as set forth. 13th. A safety device for Corliss engines, consisting of a block mounted on the bell crank sleeve, a shaft journalled in said block arranged to trip the crab claw, a weight suitably mounted on an arm fixed on said shaft, a disc having suitable notches in its periphery mounted on said shaft, and a spring catch arranged to take in said notches, substantially as set forth. 14th. In a safety device for Corliss engines, a spring catch consisting of a block having suitable adjacent recesses, a catch arranged in one of said recesses, a stud on said catch extending into the other recess, a spring in said recess arranged to bear on said stud, and a screw plug arranged to control the tension of said spring, substantially as set forth. 15th. In a safety device for Corliss engines, a block mounted upon a bell crank sleeve, a shaft journalled in said block arranged to trip the crab claw, a weight mounted on said shaft arranged to operate the same to trip the crab claw at a certain predetermined speed limit, and a catch connected with and arranged to control said weight until such speed limit is reached, substantially as set forth.

No. 66,171. Steam Engine. (Machine à vapeur.)

James H. K. McCollum, Toronto, Ontario, Canada, 10th February, 1900; 6 years. (Filed 27th January, 1900.)

Claim.—1st. In a steam engine, the combination with the cylinder and piston and the admission ports arranged as shown and the circular flat seat through which they extend, of the rotary valve provided with a series of ports corresponding in size to the admission ports and having the side thereof arranged parallel to the radial lines, and means for rotating such valve, as and for the purpose specified. 2nd. In a steam engine, the combination with the cylinder and piston and the admission ports arranged as shown and the circular flat seat through which they extend, of the rotary valve provided with a series of ports corresponding in size to the admission ports and having the side thereof arranged parallel to the radial lines, intermediate ports between the aforesaid ports, and means for rotating the valve, as and for the purpose specified. 3rd. In a steam engine, the combination with the cylinder and piston and the admission ports arranged as shown and the circular flat seat through which they extend, of the rotary valve provided with a series of ports corresponding in size to the admission ports and having the sides thereof arranged parallel to the radial lines, and means connected to the main driving shaft for rotating the spindle, as and for the purpose specified. 4th. In a steam engine, the combination with the cylinder and piston and the admission ports arranged as shown and the circular flat seat through which they extend, of the rotary valve provided with a series of ports corresponding in size to the admission ports and having the sides thereof arranged parallel to the radial lines and secured on a suitable spindle, and means connected to the main driving shaft for rotating the spindle, as and for the purpose specified. 5th. In a steam engine, the combination with the cylinder and piston, and the admission ports arranged as shown and the circular flat seat through which they extend, of the rotary valve provided with a series of ports corresponding in size to the admission ports, and having the sides thereof arranged parallel to the radial lines and secured on a suitable spindle, the bevel pinion on the end of the spindle, the upright shaft and bevel pinion on

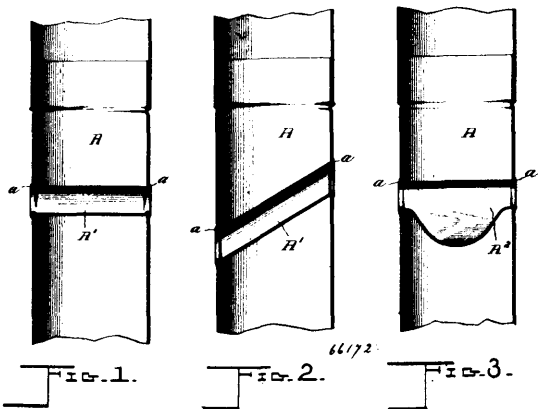
the upper end thereof meshing with the aforesaid pinion, the bevel pinion on the lower end thereof and the bevel pinion on the main



shaft meshing therewith, as and for the purpose specified. 6th. In a steam engine, the combination with the cylinder and piston, and the admission ports arranged as shown and the circular flat seat through which they extend, of the rotary valve provided with a series of ports corresponding in size to the admission ports and having the sides thereof arranged parallel to the radial lines and secured on a suitable spindle, the bevel pinion on the end of the spindle, the upright shaft and bevel pinion on the upper end thereof meshing with the aforesaid pinion, the bevel pinion on the lower end thereof and the bevel pinion on the sleeve on the main shaft provided with a pin, the collar on the main shaft keyed thereto and provided with a spiral groove into which the aforesaid pin fits, the annular groove in the collar, the lever, the collar and pin extending into the groove, all arranged as and for the purpose specified. 7th. In a steam engine, the combination with the cylinder and piston, and the admission ports arranged as shown and the circular flat seat through which they extend, of the rotary valve provided with a series of ports corresponding in size to the admission ports, and having the sides thereof arranged parallel to the radial lines, and secured on a suitable spindle, the bevel pinion on the end of the spindle, the upright shaft and bevel pinion on the upper end thereof meshing with the aforesaid spindle, the bevel pinion the lower end thereof, the bevel pinion on the main shaft meshing therewith, the exhaust ports provided with rocking valves having arms suitably connected, the eccentric on the upright shaft and the rod connecting the same to one of the arms, as and for the purpose specified. 8th. In a steam engine, the combination with the cylinder and piston and the admission ports arranged as shown and the circular flat seat through which they extend, of the rotary valves provided with a series of ports corresponding in size to the admission ports, and having the sides thereof arranged parallel to the radial lines and secured on a suitable spindle, the sleeve also supported on a spindle and provided with the auxiliary valve having the cutaway portion as shown and means for turning the sleeve to adjust the auxiliary valve, as and for the purpose specified. 9th. In a steam engine, the combination with the cylinder and piston and the admission ports arranged as shown and the circular flat seat through which they extend, of the rotary valve provided with a series of ports corresponding in size to the admission ports and having the sides thereof arranged parallel to the radial lines and secured on a suitable spindle, the sleeve also supported on a spindle and provided with the auxiliary valve having the cutaway portion as shown, the collar on the end of the sleeve provided with a spiral groove through which the pin on the sleeve extends and the lever for adjusting the collar, as and for the purpose specified. 10th. In a steam engine, the combination with the cylinder and piston and the admission ports, of the rotary valve provided with a series of ports corresponding in size to the admission ports and means for rotating such valve, as and for the purpose specified. 11th. In a steam engine, the combination

with the cylinder and piston and the admission ports arranged as shown and a circular flat seat through which they extend, of the rotary valve provided with a series of ports corresponding in size to the admission ports and means for rotating the same, as and for the purpose specified. 12th. In a steam engine, the combination with the cylinder and piston and the admission ports, of the rotary valve provided with a series of ports corresponding in size to the admission ports, means for rotating such valve, the auxiliary valve designed to control the size of the opening or openings in the main valve and means for adjusting such auxiliary valve, as and for the purpose specified.

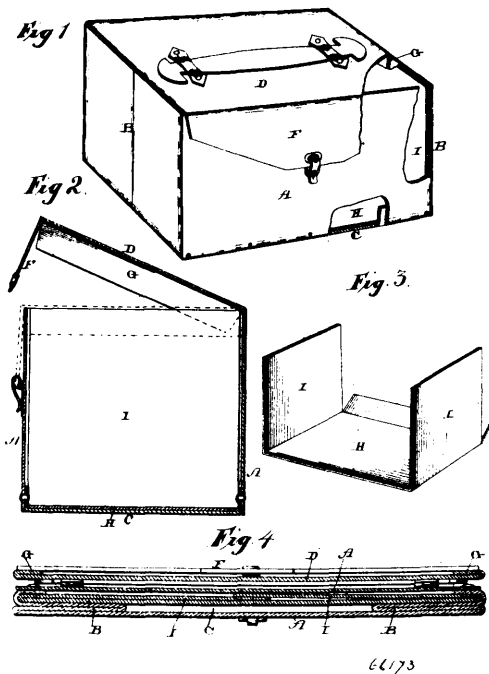
No. 66,172. Stove Pipe. (*Tuyau de poêle.*)



Esdras Rousseau, Montreal, Quebec, Canada, 10th February, 1900; 6 years. (Filed 27th January, 1900.)

Claim.—1st. A stove pipe, having a tube arranged therein and extending through from side to side, said tube permitting the passage of air therethrough for the purposes of heating, substantially as described. 2nd. A stove pipe, having a tube arranged therein and extending through from side to side, said tube permitting the passage of the air therethrough for the purposes of heating, said tube having an enlarged central portion, substantially as described.

No. 66,173. Lunch Box. (*Boîte à lunch.*)



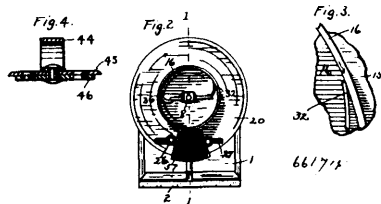
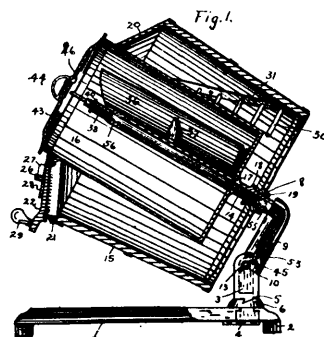
Joseph Smith O'Brien, Springfield, Massachusetts, U.S.A., 10th February, 1900; 6 years. (Filed 29th January, 1900.)

Claim.—1st. In a folding box, the folding bottom piece H, and the end wings or expanders I, whereby the box is prevented from being closed or collapsed, substantially as shown. 2nd. In a folding box, the rigid front and rear sides, the folding end pieces, and the folding bottom piece, combined with a folding bottom piece which is loosely attached at one edge to one of the sides of the box along

its lower edge, and the end flaps or wings which are adapted to be raised vertically between the front and rear sides of the box, and thus prevent it from collapsing, substantially as described. 3rd. In a folding box, a cover provided with a flap F, along one edge, and the two end wings or flaps, combined with a box having a double thickness of material along its ends and in between which double thickness the end flaps upon the cover are made to catch, substantially as set forth. 4th. A box provided with folding ends, and a folding bottom, a second bottom loosely attached to the inner side of the box, and end wings or expanders connected thereto, and which wings or expanders are adapted to be raised vertically between the front and rear sides of the box, combined with a cover having end wings or flaps, and which end wings or flaps are adapted to catch between the top edges of the folding ends of the box, and the end wings or expanders inside of the box, substantially as specified. 5th. A box provided with collapsible ends having as a part thereof a collapsible or folding bottom, a second bottom within the box and provided with end wings or expanders, and which are adapted to be raised vertically and extended between the front and rear sides of the box, combined with a cover having end flaps or wings adapted to be entered between the ends of the box and the expanders next therewithin, substantially as described.

No. 66,174. Ice Cream Freezer.

(*Congélateur de crème à la glace.*)



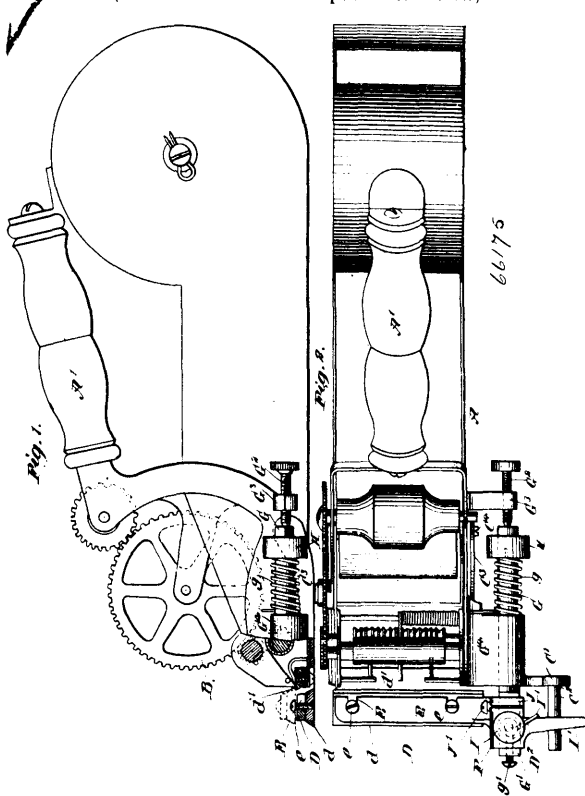
Josiah P. Perkins, Indianapolis, Indiana, U.S.A., 10th February, 1900; 6 years. (Filed 17th January, 1900.)

Claim.—1st. An ice cream freezer including a wooden ice receptacle, a sleeve extending centrally through its bottom with an annular collar bevelled on the side adjacent to the bottom of the ice receptacle, and a nut that is secured on said sleeve adjacent to the other side of the bottom of the receptacle, whereby the bottom of the receptacle is clamped between the nut and the rounded face of the collar. 2nd. An ice cream freezer including a cream can, an ice receptacle, a sleeve extending centrally through said cream can, and ice receptacle to secure them together, the said sleeve being externally threaded at the end which passes through the bottom of the ice receptacle and having an annular collar bevelled or rounded on the side next to the threads and a nut screwed upon the threaded end of said sleeve and having its inner face bevelled or rounded for clamping the bottom of the ice receptacle tightly against the collar on said sleeve. 3rd. An ice cream freezer including a base with a standard thereon curved at its upper end and having peripheral notches therein, a supporting arm for the freezer having on its lower end a radial tooth to engage the notches, and a bolt for drawing and clamping the standard and arm together. 4th. An ice freezer including a base with a suitable standard rounded at its upper end and having radial grooves on one side thereof and notches in its periphery, an arm to support the freezer having a radial rib on one side to engage the grooves in the standard and a tooth to engage the notches in the standard, and a bolt for drawing and clamping the standard and arm together. 5th. An ice cream freezer including a suitable freezing vessel, a standard, means for pivotally securing the freezing vessel to the standard in a series of tilted positions, a base, means for mounting the standard on said base and said standard being laterally adjustable on said base whereby the overturning of the device is prevented when the freezer is tilted in position. 6th. An ice cream freezer including a suitable freezing vessel, a base having in it a slot, a standard extending through said slot, with a head below the base and shoulders above the base, a cam ring around said

standard below its shoulders and above the base whereby the standard can be clamped to said base where desired, and means for pivotally securing the freezing vessel to the standard in a series of tilting positions, whereby the over turning of the device is prevented when the freezer is tilted. 7th. An ice cream freezer including an ice receptacle, a cream can, means for securing them together, and an ice distributor mounted in the freezing chamber consisting of a series of pins or teeth placed in a row at an angle to the axis of the ice receptacle. 8th. An ice cream freezer including a suitable base, a stem therefrom adapted to be held in an inclined position and being enlarged at its lower end to form a bearing, a sleeve to fit on said stem with a contracted inner bearing surface at its upper end, and suitable vessels secured to said sleeves. 9th. An ice cream freezer including a worker secured to a shank having a finger piece or handle at its upper end, a square portion below and a round portion between the square portion of the shank and the worker, and a support for the worker provided with a slotted socket whose length is less than the length of the portion of the shank between the worker and the square part thereof and through which the shank and the worker may be inserted the upper end of such socket being square to furnish a seat for the square portion of the shank. 10th. An ice cream freezer including a worker secured to a shank having a finger piece or handle at its upper end, a square portion below and around portion between the square portion of the shank and worker, and a support for the worker with a slotted socket whose length is less than the length of the portion of the shank between the worker and the square part thereof and through which the shank and worker may be inserted, the upper end of such socket being square to furnish a seat for the square portion of the shank, the slot in the support being constructed near its ends to furnish bearings for said shank.

No. 66,175. Mailer or Addressing Machine.

(Machine à adresser et expédier les lettres.)



James A. Horton and Chauncey Wing, both of Greenfield, Massachusetts, U.S.A., 10th February, 1900; 6 years. (Filed 8th May, 1899.)

Claim.—1st. In a mailer, a swinging cutter blade having main and auxiliary pivots substantially at right angles to each other, a tension spring acting upon the auxiliary pivot and means for adjusting its tension, substantially as described. 2nd. In a mailer, a pivoted cutting arm having an auxiliary pivot substantially at right angles to its main pivot, substantially as described. 3rd. A slip cutting device for a mailer, comprising a fixed cutter blade, a main pivot located near one end of said blade, an auxiliary pivot substantially at right angles to the main pivot and supported to swing thereon, and a cutter arm or blade pivoted upon the auxiliary pivot and adapted to engage the fixed blade, substantially as described. 4th. A slip cutting device for a mailer, comprising a fixed cutter blade, a main pivot located near one end of said blade, an auxiliary

pivot substantially at right angles to the main pivot and supported to swing thereon, a cutter arm or blade pivoted upon the auxiliary pivot and adapted to engage the fixed blade, and a spring acting to swing the blade upon the auxiliary pivot, to hold it against the cutting edge of the fixed blade, substantially as described. 5th. A slip cutting device for a mailer, comprising a fixed cutter blade, a main pivot located near one end of said blade, an auxiliary pivot substantially at right angles to the main pivot and supported to swing thereon, a cutter arm or blade pivoted upon the auxiliary pivot and adapted to engage the fixed blade, and a stop for limiting the swing of the blade upon the auxiliary pivot, substantially as described. 6th. A slip cutting device for a mailer, comprising a fixed cutter blade, a main pivot located near one end of said blade, an auxiliary pivot substantially at right angles to the main pivot and supported to swing thereon, a cutter arm or blade pivoted upon the auxiliary pivot and adapted to engage the fixed blade, and a spring acting to swing the blade upon the auxiliary pivot to hold it against the cutting edge of the fixed blade, and a stop limiting its swing in this direction, substantially as described. 7th. A slip cutting device for a mailer, comprising a fixed cutter blade, a main pivot located near one end of said blade, an auxiliary pivot substantially at right angles to the main pivot and supported to swing thereon, a cutter arm or blade pivoted upon the auxiliary pivot and adapted to engage the fixed blade, a spring acting to swing the blade upon the auxiliary pivot to hold it against the cutting edge of the fixed blade, and means for adjusting the tension of said spring, substantially as described. 8th. A slip cutting mechanism for a mailer, comprising a fixed cutting blade, a rock shaft having a flattened section, a cutting arm or blade having a slot in one end embracing the flattened section of the rock shaft, a pivot passing through the arm and rock shaft, a spring acting to hold said arm against the edge of the fixed cutting blade, and means for turning said rock shaft to engage the cutting edges of both sides, substantially as described. 9th. A slip cutting mechanism for a mailer, comprising a fixed cutting blade, a rock shaft having a flattened section, a cutting arm or blade having a slot in one end embracing the flattened section of the rock shaft, a pivot passing through the arm and rock shaft, a spiral spring surrounding said pivot and connected at one end to the pivot and at the other end to the arm, to hold it against the edge of the fixed cutting blade, and means for turning said rock shaft to engage the cutting edges of both blades, substantially as described. 10th. A slip cutting mechanism for a mailer, comprising a fixed cutting blade, a rock shaft having a flattened section, a cutting arm or blade having a slot in one end embracing the flattened section of the rock shaft, a pivot passing loosely through the arm and rock shaft, a spring connected to the pivot and to the cutter arm, to hold said arm against the edge of the fixed cutting blade, a set screw entering the rock shaft and engaging said pivot, and means for turning said rock shaft to engage the cutting edges of both blades, substantially as described. 11th. A slip cutting mechanism for a mailer, comprising a fixed cutting blade, a rock shaft having a flattened section, a cutting arm or blade having a slot in one end embracing the flattened section of the rock shaft, a pivot passing loosely through the arm and rock shaft, a spiral spring surrounding said pivot and connected at one end to the pivot and at the other to the arm, a set screw entering the rock shaft and engaging said pivot, an adjusting screw passing through the arm end and engaging the rock shaft, and means for turning said rock shaft to engage the cutting edges of both blades, substantially as described. 12th. A slip cutting mechanism for a mailer, comprising a fixed cutting blade, a rock shaft having a flattened section, a cutting arm or blade having a slot in one end embracing the flattened section of the rock shaft, a pivot passing through the arm and rock shaft, an adjusting screw passing through said arm and engaging the rock shaft, a spring acting to hold said arm against the edge of the fixed cutting blade, and means for turning said rock shaft to engage the cutting edge of both blades, substantially as described. 13th. A slip cutting mechanism for a mailer, comprising a fixed cutting blade, a rock shaft having a flattened section, a cutting arm or blade having a slot in one end embracing the flattened section of the rock shaft, a pivot passing loosely through the arm and rock shaft, a spiral spring surrounding said pivot and connected at one end to the pivot and at the other to the arm, a set screw entering the rock shaft and engaging said pivot, an adjusting screw passing through the arm end and engaging the rock shaft, and means for turning said rock shaft to engage the cutting edges of both blades, substantially as described. 14th. A slip cutting device for a mailer, comprising a fixed cutting blade, a main pivot located near one end of said blade, an auxiliary pivot substantially at right angles to the main pivot and supported to swing thereon, an arm pivoted upon the auxiliary pivot and having slots engaging to one edge thereof, and a cutting blade having binding screws entering the slots in the arm, substantially as described. 15th. A slip cutting device for a mailer, comprising a fixed cutting blade, a rock shaft having a complementary cutting blade mounted thereon, a spirally coiled spring surrounding said rock shaft and at one end having a fixed support, a collar loose upon the shaft and connected to the other end of the spring, and a pin upon the shaft engageable with one side of the collar, to prevent its rotation, substantially as described. 16th. A slip cutting device for a mailer, comprising a fixed cutting blade, a rock shaft having a complementary cutting blade mounted thereon, a spirally coiled spring surrounding said rock shaft, and at one end having a fixed support, a collar loose upon the shaft and connected to the other end of the spring, said collar being toothed upon one end face, and a pin upon the shaft

end engageable with the teeth of said collar, substantially as described. 17th. A mailer having a swinging cutter blade provided with an offset curved arm on one side of its pivot end with the convexed side toward the pivot, a rocking actuating member having a part engaging the convexed side of said arm whereby the arm acts as both a cam and a lever in different phases of its movement, substantially as described. 18th. A mailer, having a fixed and a swinging cutter blade, the latter provided with an offset curved arm on one side of its pivot and with the convexed side toward the pivot, a rocking actuating member having a part swinging in a plate parallel with and at one side of the cutter blade pivot, and engaging the convexed side of said arm whereby the arm acts as both a cam and a lever in different phases of its movement, substantially as described. 19th. In a mailer, fixed and swinging cutter blades, the swinging blade having a rearward extension upon the end opposite the cutter and offset from the pivot and the general direction of the bar, the convexed side being toward the pivot, a rocking member having a part slidably engaging the convexed side of said extension to swing the blade whereby said extension acts as both a cam and a lever in different phases of its movement, and a spring acting upon the swinging blade to hold its extension against said arm of the rocking member, substantially as described. 20th. In a mailer, fixed and swinging cutter blades, the swinging blade having a rearward and offset curved extension beyond its pivot and having its convexed side towards the pivot and a rocking member having an arm or bar swinging in a plane parallel with and at one side of the blade pivot, and engaging the convexed side of the extension to swing the blade whereby said extension acts both as a cam and a lever in different phases of its movement, substantially as described. 21st. In a mailer, a swinging cutter blade having main and auxiliary pivots substantially at right angles to each other and an adjustable stop limiting the action of the auxiliary pivot, substantially as described.

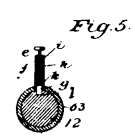
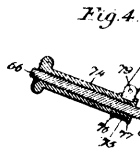
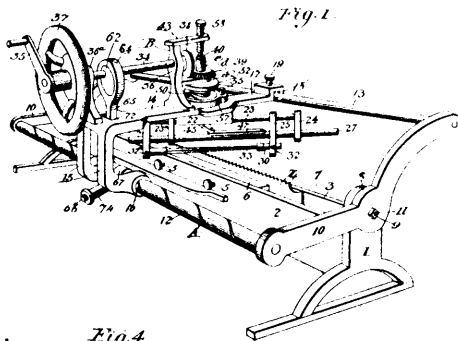
No. 66,176. Gas Manufacture. (*Fabrication de gaz.*)

Samuel Philip Sadtler, Philadelphia, Pennsylvania, U.S.A., 10th February, 1900; 6 years. (Filed 18th May, 1899.)

Claim.—1st. A new compound for the production of carbureted air gas, consisting of a mixture of gasolene or petroleum naphtha, with a hydro-carbon of more condensed or higher series than the gasolene, substantially in the proportions described. 2nd. A new compound for the manufacture of carbureted air gas of petroleum naphtha or gasolene as a base, with a small quantity of a condensed hydro-carbon, such as rosin spirit, benzol or naphthalene, substantially as described. 3rd. As a new compound for the manufacture of illuminating gas, of gasolene or petroleum naphtha as a base, with a proportionately small quantity of rosin spirit, substantially as described. 4th. As a new compound for manufacturing illuminating gas of gasolene or petroleum naphtha as a base, with a proportionately small quantity of benzol, substantially as described. 5th. As a new compound for the manufacture of illuminating gas, of gasolene or petroleum naphtha as a base, with a proportionately small quantity of naphthalene, substantially as described.

No. 66,177. Saw Sharpening Machine.

(*Machine à affûter les scies.*)



66177

Joel F. Cornish, West Union, Iowa, U.S.A., 10th February, 1900; 6 years. (Filed 27th July, 1899.)

Claim.—1st. The combination in a saw filing machine of clamps for holding a saw, ways on each side thereof and parallel therewith, a pivoted connection connecting said clamps and said ways for the adjustment of the same to the plane of the saw, a carriage upon said

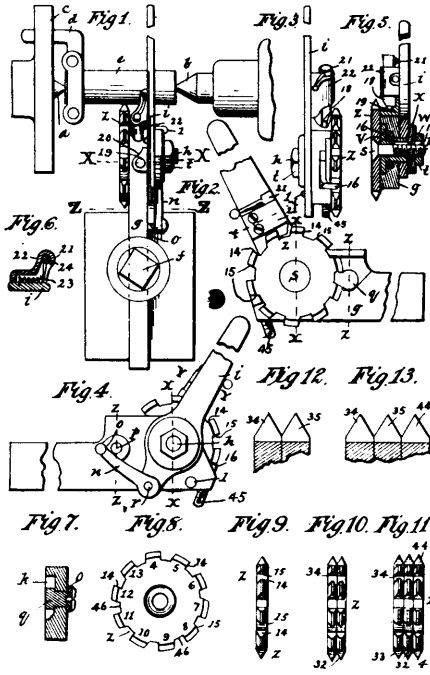
ways provided with a shaft in radial alignment with the axis of the pivot joints connecting said clamps and said ways, a frame holding a file, pivotally connected with said radial shaft, the shaft forming the axis of the connection, and means whereby said radial shaft is automatically reciprocated radially to the axis of said pivotal connection connecting said clamps and said ways, substantially as shown and described. 2nd. In a saw filing machine the combination of clamps for holding a saw, ways on each side and parallel therewith, a pivotal connection connecting said clamps and said ways, a carriage upon said ways provided with a crank shaft to which power is applied, gear wheels connecting said crank to a shaft secured in radial alignment with the axis of the pivotal connection connecting said clamps and ways, a sleeve loosely secured to said radial shaft at the part where same passes through the bed plate of carriage, a frame holding a file, secured to said sleeve, a disc rigidly secured, face downward, to said radial shaft provided with a projection on its face thereof, having a square shoulder on one side of same and chamfered on the other side, a disc rigidly secured, face upward, to bed plate of carriage through the centre of which passes said radial shaft, a projection on the face of said disc, of same size and shape, or disc secured to radial shaft, an adjustable spring pressing upon the upper end of said radial shaft for holding the faces of the discs in close engagement and regulating the file pressure on the saw, a collar encircling the disc aforesaid attached to the bed plate of carriage, adjusting screw for securing and adjusting said collar to said disc, a recess in said collar to receive a pin rigidly secured to file frame for the adjustment of same, and connections between said radial shaft and said file for the operation of same for the filing of saws, substantially as described and for the purpose specified. 3rd. The combination in a saw filing machine of clamps for holding a saw, ways parallel therewith, one of which is a rod provided with a spiral groove extending longitudinally the greater length of same, a carriage upon said ways carrying file, and mechanism connecting said carriage and said ways provided with spiral groove, by means of which carriage is automatically moved intermittently upon said ways, substantially as described and for the purpose specified. 4th. In a saw filing machine, the combination of clamps for holding a saw, a carriage carrying a frame provided with a file, ways for supporting said carriage, one of which is so constructed that by reasons of its connections with the carriage, the said carriage is caused to automatically move longitudinally upon said ways and provide means for regulating the travel of the carriage during the backward stroke of the file, substantially as described and for the purpose specified. 5th. The combination in a saw filing machine, of clamps for holding a saw, ways on each side thereof and parallel therewith, a pivoted connection connecting said clamps and said ways at the ends thereof, a carriage upon said ways provided with a shaft radially situated as to the axis of said pivotal connection, means for rotating of said radial shaft, a connection between said radial shaft and a frame holding a file, and means for the adjustment of said file at any required angle to the horizontal or perpendicular plane of the axis of the said pivotal connection, substantially as described and for the purpose specified. 6th. The combination in a saw filing machine of clamps for holding a saw, ways on each side thereof and parallel therewith, a pivotal connection connecting said clamps and said ways at the ends thereof, the axis of said pivotal connection being in alignment with the base of the teeth of the saw to be filed, a carriage moving automatically upon said ways and provided with a frame, holding a file, pivotally connected thereto, the axis of the connection being in radial alignment with the axis of the pivotal connection connecting said clamps and said ways, and means whereby said file is adjusted and automatically reciprocated transversely and radially at any required angle to the axis of the said last-named pivotal connection, substantially as described.

No. 66,178. Screw Threading Tool. (*Outil à fileter les vis.*)

Herman Dock, Philadelphia, Pennsylvania, U.S.A., 10th February, 1900; 6 years. (Filed 5th September, 1899.)

Claim.—1st. As a new article of manufacture, a tool for grooving and threading metal consisting of a disc, having a series of integral cutters, each cutter having a heel, and interspaces between the cutters, the several cutters being of progressively increasing radial length from the axis of the tool, the peripheral portion of each cutter being from its cutting edge to its heel substantially uniform both in thickness and radial length, and susceptible of sharpening by grinding of the acting face without change of profile, the peripheral portions of the series of cutters however varying in thickness and constructed to operate, substantially as described. 2nd. In an apparatus for cutting screw-threads, the following instrumentalities, viz:—a tool composed of a disc having at its periphery the profile of the thread to be produced and notched to form a series of integral cutters, said cutters varying in lengths as described, each cutter having a heel, a tool stock, a movable bearing mounted therein, a pivot to receive the said tool rotatably, means to move the said bearing with its pivot and tool toward and from the work, a rest co-operating with the heel of each cutter to support it while in operation and means to retain the bearing forward with the cutter in operative position, substantially as described. 3rd. In an apparatus for cutting screw-threads, a stock, a bearing or slide mounted therein and containing a pivot, a tool mounted rotatably on said pivot, said tool having a series of cutters of varying lengths integral therewith, a rest mounted on said stock, a lever free to turn on said

pivot, and fulcra for said lever, and means controlled by said lever to intermittently engage and turn said tool on said pivot the



66178

movement of said lever in one direction withdrawing the cutter from the work, and in the opposite direction putting the cutter into operative positions with its heel against said rest, substantially as and for the purpose described. 4th. In an apparatus for cutting screw-threads, a stock, a movable bearing mounted therein, and a pivot fitted therein, a tool mounted rotatably on said pivot, said tool having a series of cutters of progressively varying length thereon, a rest mounted on said stock, a lever free to turn on said pivot, and fulcra for said lever, and means controlled by said lever to intermittently engage and turn said tool on said pivot, the movement of said lever in one direction withdrawing the cutter from the work, and in the opposite direction putting the cutter into operative position, with its heel against the rest and means to adjust the said rest, substantially as and for the purpose described. 5th. In an apparatus for cutting screw-threads, a stock adapted to be attached to a tool post of an engine lathe, a bearing having a bolt or pivot, a tool having a series of cutters of progressively greater radial length, said tool being mounted rotatably on said pivot, a rest mounted on said stock, and adapted to successively receive against it, and support the heels of the said cutters, means for locking said bearing or slide in said stock with the tool in operative position with relation to the work, and by reverse motion to disengage said locking device to release said bearing or slide, and means to intermittently turn said tool about said pivot to bring successively the several cutters of the series into operative position, substantially as and for the purpose set forth. 6th. In an apparatus for cutting screw-threads, a tool having a series of cutters thereon, said cutters increasing progressively in radial lengths from the axis of said tool, said tool presenting at its periphery notches between the cutters, and a pivot to sustain said tool rotatably combined with a lever having a pawl, said pawl in the movement of said lever in one direction operatively engaging said tool and rotating it one step about its pivot, substantially as described. 7th. In an apparatus for cutting screw threads, the following instrumentalities, viz:— a tool post, a stock carried by said tool post, said stock having applied to it a movable bearing, a pivot mounted in said bearing and extending through the said stock, a tool mounted rotatably on said pivot, said tool having a series of cutters varying progressively in radial length, the peripheral portion of each tooth being of substantially uniform thickness from its cutting edge to its heel, the peripheral portions of succeeding cutters of the series being of gradually less thickness, a lever to receive the pivot extended through said stock, and suitable fulcra for said lever and a pawl carried by said lever, the said lever in the first part of its stroke in either direction turning on said bolt or pivot, and thereafter by contact with said fulcra moving the bolt or pivot with the lever, and effecting the sliding movement of the tool from or toward the work as may be, the said lever in one of its strokes causes said pawl to engage said tool and partially rotate it about said pivot sufficiently to place another cutter into operative position, substantially as described. 8th. In an apparatus for cutting screw

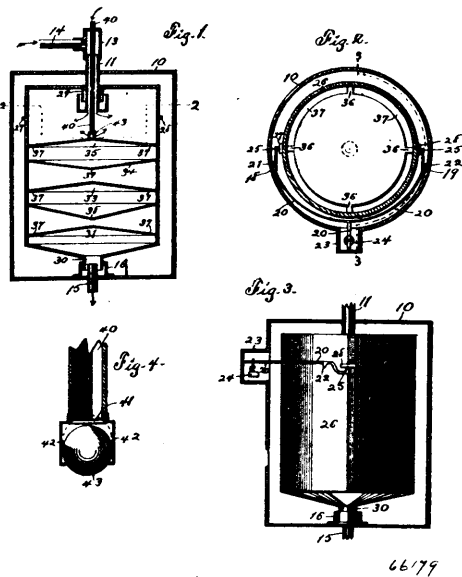
threads, the following instrumentalities, viz:— a tool adapted to be carried by the tool carriage of an engine lathe, said stock having applied to it a movable bearing pivoted in said bearing and extended through the said stock, a tool mounted rotatably on said pivot, said tool having a series of cutters varying progressively in radial lengths, the peripheral portion of each cutter being of substantially uniform thickness from its cutting edge to its heel, the peripheral portion of succeeding cutters of the series being of gradually less thickness, a lever to receive the pivot extended through said stock, and suitable fulcra for said lever and a pawl carried by said lever, the said lever in the first part of its stroke in either direction turning on said pivot, and thereafter by contact with said fulcra moving the pivot with the lever and effecting the sliding movement of the tool from or toward the work as may be, the said lever in one of its strokes causing said pawl to engage said tool and partially rotate it about said pivot sufficiently to place another cutter into operative position, and a rest carried by said stock, said rest receiving upon it the heel of a cutter preparatory to the arrival of the tool in position to place and support a cutter in operative position with relation to the work, substantially as described. 9th. In an apparatus for cutting screw threads, the following instrumentalities, viz:— a stock adapted to be carried by the tool carriage of an engine lathe, said stock having applied to it a bearing and a pivot extending through the said stock, a tool mounted rotatably on said pivot, said tool having a series of cutters varying progressively in radial length, the peripheral portion of each tooth being of substantially uniform thickness from its cutting edge to its heels, the peripheral portions of succeeding cutters of the series being of gradually less thickness, a lever to receive the pivot extending through said stock, and suitable fulcra for said lever, and a pawl carried by said lever, the said lever in the first part of its stroke in either direction turning on said pivot, and thereafter by contact with said fulcra moving the pivot with the lever and effecting the sliding movement of the tool from or toward the work as may be, the said lever on one of its strokes causing said pawl to engage said tool and partially rotate it about said pivot sufficiently to place another cutter into operative position and a rest carried by said stock, said rest receiving upon it the heel of a cutter preparatory to the arrival of the tool in position to place a cutter in operative position with relation to the work, and a suitable locking device co-operating with said bearing to lock the same fixedly in its forward position to prevent any retreat of the cutter while operating to groove the work, substantially as described. 10th. In an apparatus for cutting screw threads, a tool having a series of separate cutters increasing progressively in radial length, a pivoted support on which said tool is rotatably mounted, means to bodily move said support and the tool thereon, and to automatically effect a step by step rotation of the tool on its support, and a fixed rest against which the heel of each cutter is brought successively by movement of the tool into operative position, substantially as described. 11th. In an apparatus for cutting screw threads, a tool having a series of separate cutters increasing progressively in radial length, a reciprocable support on which the tool is rotably mounted, means to rotate said tool on its support, a common actuating lever, connections between it and said support and the means for rotating the tool, whereby swinging movement of said lever reciprocates the support and tool bodily and also effects a step by step rotation of the tool on said support, and a fixed rest against which the heel of each cutter is brought successively by the movement of the tool into operative positions and supported during the cutting operation, substantially as described. 12th. In a tool for cutting screw threads, two or more discs each having a series of cutters of progressively increasing radial length from the axis of the tool, the peripheral portion of each cutter being from its cutting edge to its heel substantially uniform both in thickness and radial length, the said discs being secured to each other with the cutters of each to act simultaneously and the radial length of each series of cutters being such that the cutters of each disc shall be longer than the adjacent preceding cutters as and for the purpose set forth.

No. 66,179. Air and Gas Mixer. (Mélangeur d'air et gaz.)

Garrett S. Chambers, Des Moines, Iowa, U.S.A., 10th February, 1900; 6 years. (Filed 29th November, 1899.)

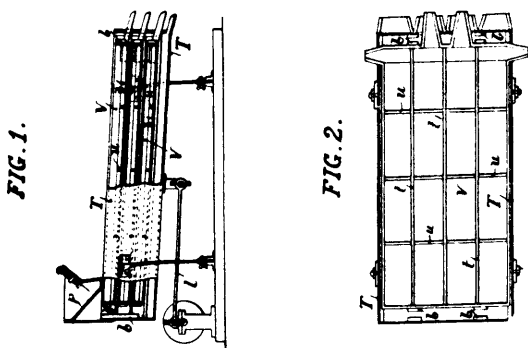
Claim.—1st. A air and gas mixing machine, comprising a mixing chamber, suspended in atmospheric air under normal pressure and provided with ingress and egress ports for gaseous vapors and valve controlled ingress port for atmospheric air under pressure as great as or greater than the pressure of the gaseous vapors, the valve of the air ingress port being controlled by the gravity of the gas in the chamber relative to the density of the atmospheric air in which the chamber is suspended. 2nd. An air and gas mixing machine, comprising a mixing chamber, a lever carrying said chamber, gas supply and discharge ports at opposite ends of said chamber and normally open thereto, an air supply pipe entering said chamber adjacent to the gas supply pipe and a valve in said air supply pipe, which valve is controlled by the rise and fall of the chamber caused by variations of the specific gravity of the gas in the chamber. 3rd. The combination of a casing, a forked lever fulcrumed in said casing, a poise on the stem of said lever, a mixing chamber balanced on the extremities of said lever, a gas supply pipe entering the upper end

of said chamber, a gas discharge pipe leading from the lower end of said chamber, an air supply pipe entering the upper end of



said chamber, a valve in the lower end of the air supply pipe, and a partition in the chamber arranged for impingement with the valve to close the same. 4th. In a machine of the class described, a gas mixing chamber provided with inlet and outlet ports for gas and an inlet port for air, concavo convex partitions horizontally positioned in said chamber and alternately inverted relative to each other, gas passages at the circumferential margins of some of the partitions and alternating with the circumferential passages, and means for controlling the air into the chamber. 5th. In a machine of the class described, a gas mixing chamber, a gas supply pipe entering the top of said chamber, a liquid cup on said pipe, a collar on the chamber entering the liquid cup, a gas discharge pipe leading from the bottom of the chamber, a liquid cup surrounding the discharge pipe, a collar on the chamber entering the latter said cup, an air supply pipe entering the top of the chamber and means for controlling the flow of air through said pipe. 6th. In a machine of the class described, the combination of the chamber, the gas supply pipe entering said chamber, the T on said pipe and adapted to be connected with a carbureter, and an air supply pipe rigidly mounted in the T and extending longitudinally through the gas supply pipe and provided with a valve at its inner end, together with a seat for said valve on the air supply pipe.

No. 66,180. Bolting Sieve for Flour Mills.
(Bluteau pour moulins à farine.)



Joseph Schweitzer, Paris, France, 10th February, 1900; 6 years. (Filed 22nd December, 1899.)

Claim.—1st. An arrangement of bolting sieve composed of several superposed sieves, sliding freely in a frame of greater length than the said sieves, each sieve being further divided by a series of projecting transverse bars with the object of causing the grist to remain in a suitable manner to contact with the bolting silk, substantially

as described. 2nd. In a bolting sieve constructed in the manner hereinbefore described, the combination of bars or longitudinal partitions separating the sieves into so many longitudinal compartments which may each be fed from a separate hopper, substantially as hereinbefore set forth.

No. 66,181. Furnace. (Fournaise.)

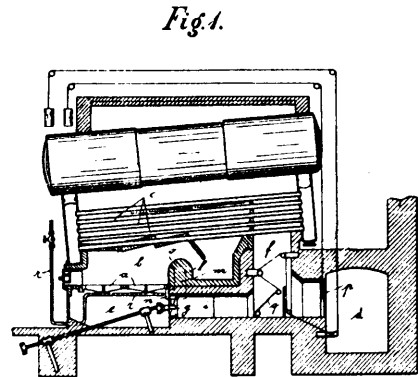
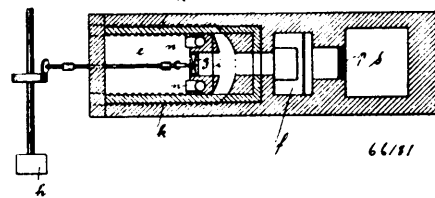


Fig. 2.



Emil Ott, Berlin, (Germany, 10th February, 1900; 6 years. (Filed 25th January, 1900.)

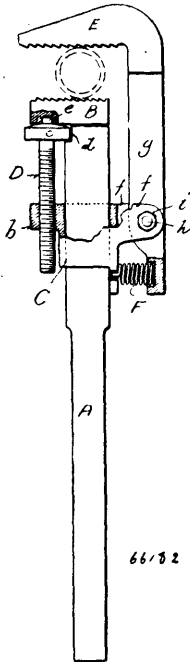
Claim.—1st. In a furnace the processes of utilizing a mixture of fire gases and fresh air as a vehicle for the introduction of steam through the fire grates, substantially as described. 2nd. In a furnace, the combination of a chamber connecting the ash pit *c* and the channel *f* which leads the fire gases to the chimney, air conduits *k* opening into that chamber, means adapted to draw fire gases and fresh air through that chamber and to force same through the fire grates and means to mix water in a finely divided state with air and fire gases before passing through the grate, substantially as and for the purpose described. 3rd. The construction and use of an improved furnace embodying the combination of a chamber connecting the ash pit and the channel which leads the fire gases to the chimney, air pipes *k* opening into that chamber, a fan *g* in that chamber adapted to draw fire gases and fresh air into that chamber and to force the mixture of same into the ash pit *c*, a water pipe *r* located in the ash pit provided with fine holes adapted to distribute water in a finely divided state, substantially as and for the purpose described. 4th. The construction and use of an improved furnace embodying, the combination of a hollow fire bridge *l* forming a free passage from the ash pit *c* to the fire place or chamber *b*, means for producing a mixture of fire gases, fresh air and water in a finely divided state in the ash pit, and means to force part of same through the fire grates, substantially as and for the purpose described. 5th. In a new and improved furnace for flame tube boilers, the combination with fire places in the flame tubes of a casing *s* connecting the ash pit *c* with the channel *f* leading the fire gases to the smoke flue, means to force a mixture of fire gases and air through said casing into the ash pit and means to mix or combine said gases and air with water in a finely divided state before entering the slits of the grate *a*, substantially as and for the purpose described.

No. 66,182. Pipe Wrench. (Clé à écrou.)

Otto Otterson, and Martin Otterson, both of Menominee Falls, Wisconsin, U.S.A., 10th February, 1900; 6 years. (Filed 15th January, 1900.)

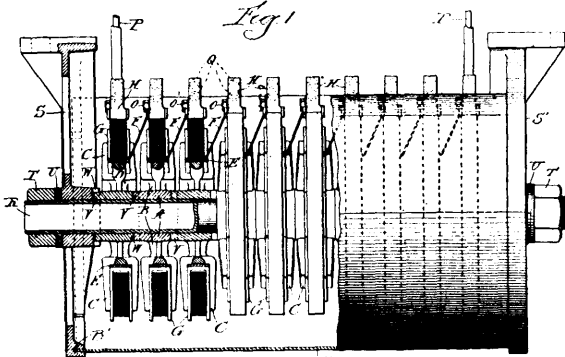
Claim.—The combination of a stock having a forward underside notch and partly depending rigid jaw adjacent to the notch provided with a rear recess, a slide on the stock provided with a pair of upper ears and a lower lug having a tapped aperture, a screw engaging the lug aperture, a head on the screw engaging the stock notch, a centre

stud on the screw head engaging the jaw or recess, another jaw having a shank in pivotal connection with the slide ears, the rear end of



this shank being narrowed back of said ears, and a spiral spring under tension between said slide and narrow end of said shank.

No. 66,183. Rheostat. (Rheostate.)



Sidney Howe Short, Cleveland, Ohio, U.S.A., 12th February, 1900; 6 years. (Filed 9th August, 1897.)

Claim.—1st. In a rheostat for street railway motors, a spider having radial arms adapted to receive the resistance material in spiral convolute layers therebetween, and means for attaching the motor circuit terminals to such resistance material, as and for the purpose set forth. 2nd. In a rheostat for electric motors, a spider having radial arms adapted to receive the resistance material in spiral convolute layers therebetween, means for insulating such resistance material from such spider, and means for connecting the motor circuit terminals to such resistance material, as and for the purpose set forth. 3rd. In a rheostat for street railway motors, a spider comprising a hub, forked arms carried thereby, the resistance material adapted to be carried by said forked arms, and means for connecting the terminals of the motor circuit to said resistance material, as and for the purpose set forth. 4th. In a rheostat for street car motors, a spider comprising a hub, forked arms radiating therefrom, the resistance material adapted to be received in said forked arms in a spiral convolutions, a strap for securing the end of the resistance material, and means for attaching the motor circuit terminal to such strap, as and for the purpose set forth. 5th. In a rheostat for street railway motors, a strip of resistance material formed in spiral coils, a strap having a slot through which the end of the material is passed, and means for securing such end to such strap at the opposite side thereof, and means for securing the motor circuit terminal to such strap, as and for the purpose set forth. 6th.

A rheostat for street railway motors consisting of a plurality of sections, each section comprising a hub having radial arms adapted to receive therebetween a spirally wound strip of resistance material, the resistance material of one section being in electrical connection with the next adjacent section, having means for attaching the ends of the motor circuit thereto, as and for the purpose set forth. 7th. A rheostat for street railway motors comprising a series of sections electrically connected together, each section consisting of a hub having radially arranged forked arms adapted to receive therebetween a spirally wound strip of resistance material, and a strap for securing the end of the strip of each section, said strap adapted to receive the terminal of the motor circuit, as and for the purpose set forth. 8th. In a rheostat for street railway motors, a supporting bar, a series of spider hubs having radially arranged forked arms mounted on said bar, a spirally wound coil of resistance material arranged between the forked arms of each spider hub, the resistance material of one hub being electrically connected to that of the adjacent hub, and means for preventing the rotation of said hub on said bar, each section having means adapted to receive the terminal of the motor circuit, as and for the purpose set forth. 9th. In a rheostat for street railway motors, a supporting bar, a series of spider hubs having radially arranged forked arms mounted on said bar, a spirally wound coil of resistance material arranged between the forked arms of each spider hub, the resistance material of one hub being electrically connected to that of the adjacent hub, and casings mounted on the ends of said bar, and means for clamping said hubs between said end casings, as and for the purpose set forth. 10th. In a rheostat for street railway motors, a supporting bar, spider hubs having radially arranged forked arms mounted on said bar, a spirally wound coil of resistance material arranged between the forked arms of each spider hub, the resistance material of one hub being electrically connected to that of the adjacent hub, each section provided with a socket in which the motor circuit terminals are inserted, means for clamping said sections upon said bar and a casing adapted to inclose said sections, as and for the purpose set forth. 11th. In a rheostat for street railway motors, a supporting bar, a series of spiders mounted on said bar, the resistance material of one spider in electrical connection with the resistance material carried by the next adjacent spider, means for attaching the motor circuit terminal to the resistance material carried by the next adjacent spider, means for attaching the motor circuit terminal to the resistance material of each spider, the hubs of said spiders provided with interlocking grooves or depression, as and for the purpose set forth. 12th. In a rheostat for street railway motors, a support, sections of resistance material electrically connected together and mounted on said support, and casings also mounted on said support and adapted to clamp said sections together, said end casings being grooved on the opposed faces thereof, and an enclosing shield for said sections having the ends thereof arranged to be received in the grooves in said end casings, as and for the purpose set forth. 13th. In a rheostat for street railway motors a spider comprising a hub, spokes radiating therefrom, and a rim supported by said spokes, a strip of resistance material adapted to be wound on said rim but insulated therefrom, and means for attaching the motor terminal to said resistance material, as and for the purpose set forth. 14th. A rheostat section, comprising a spirally wound strip of resistance material, a strap having a slot at one end and flanges at the other end, the end of the strip of resistance material adapted to be passed through said slot and reversely bent upon itself and secured by said flanges to the opposite end of the strap, said strap adapted to receive the terminal of the motor circuit, as and for the purpose set forth. 15th. A rheostat section, comprising a strip of resistance material spirally wound upon itself a strap for securing the end of said spiral, said strip having a slot at one end and a hooked portion at the other end, the end of the strip of resistance material adapted to be passed through said slot and then bent upon itself, a securing plate around which the end of the said strip is passed, and means for securing said plate to the hooked end of said strap, and means for attaching the motor terminal to said strap, as and for the purpose set forth. 16th. In a rheostat section, the strap having sockets, the end of the motor circuit adapted to be received in one of said sockets, and the end of the resistance material of the next adjacent section adapted to be received in the other of said sockets, and means for securing the end of the resistance material to said strap, as and for the purpose set forth. 17th. In a rheostat section, a spider comprising a hub, spokes radiating therefrom, a rim supported by said spokes and forked arms, a strip of insulating material arranged on said rim, and insulating pockets arranged in said forked arms, a strip of resistance material adapted to be wound spirally around said spider, and in said insulating pockets, means for securing the end of said spirally wound strip, and means for attaching the end of the motor circuit thereto, as and for the purpose set forth.

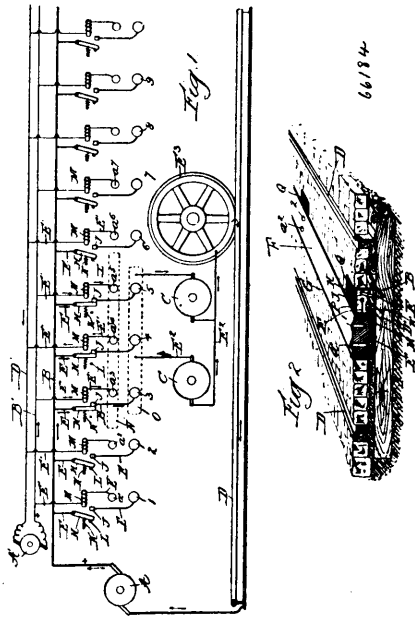
No. 66,184. Electric Railway System.

(Système de chemin de fer électrique.)

Sidney Howe Short, Cleveland, Ohio, U.S.A., 12th February, 1900; 6 years. (Filed 9th August, 1897.)

Claim.—1st. In an electric railway system, an auxiliary circuit adapted to carry a current of low potential, a series of insulated surface contacts alternately connected to the positive and negative wires of said auxiliary circuit, said connections including an electro-

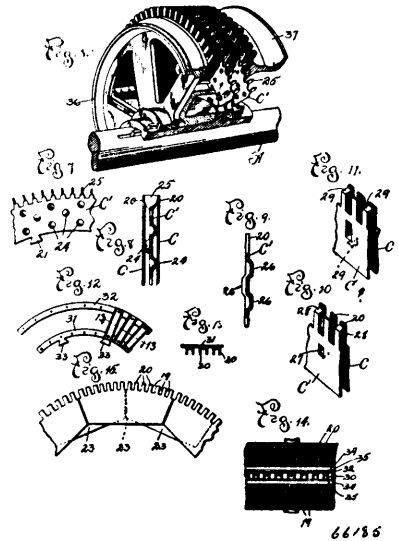
magnet, a shoe carried by the car and adapted to make successive contact with a plurality of said contacts whereby circuit is simul-



taneously completed through a plurality of said magnets, a main circuit, a second series of insulated surface contacts connected thereto through switches forming armatures for said magnets, means for normally maintaining said armature switches open, a second shoe carried by the car and adapted to make electrical connection with said surface contacts of said last mentioned series, for completing the main circuit through the translating devices on the car, as and for the purpose set forth. 2nd. In an electric railway system, a road bed, a through arranged therein and containing a bed of cement or other suitable material, two rows of contacts arranged in said bed, all of said contacts being insulated from each other, a main circuit and an auxiliary circuit both arranged to extend throughout the length of the road, branches connecting said circuits respectively to the individual contacts of said rows of contacts at suitable distance apart, a switch arranged in each of said main circuit branches, an electro-magnet arranged in each of said auxiliary circuit branches, said switch levers forming the armatures of said magnets, said switch levers normally open, manholes arranged to contain said switches and magnets, and shoes carried by the car respectively adapted to contact successively with the members of said rows of contacts, one of said shoes in electrical connection with the translating devices on the car and the other of said shoes adapted to bridge the space and to complete the circuit between adjacent contacts in the row of the auxiliary circuit, as and for the purpose set forth. 3rd. In an electric railway system, a main supply conductor extending throughout the length of the road bed, an auxiliary circuit also extending throughout the length of the road, two rows of surface contacts, branch connections extending from the alternate contacts of one of said rows to the opposite sides of said auxiliary circuit, an electro-magnet arranged in each of said auxiliary branch connections, main branch connections extending from said supply conductor to each contact in the other of said rows, a switch lever arranged in each of said main branch connections, said levers forming the armatures of said magnets and normally held in position to open said main branches, contact shoes carried by the car, one of said shoes adapted to contact successively with the surface contacts in one of said rows to complete the circuit therefrom through the translating devices on the car, the other of said shoes adapted to make simultaneous contact with two or more adjacent contacts in the other of said rows of contacts to bridge the space therebetween and to complete the auxiliary circuit therethrough, as and for the purpose set forth. 4th. In an electric railway system, a normally open main supply circuit extending throughout the length of the road, a normally open auxiliary circuit also extending throughout the length of the road, a series of contacts arranged in the road bed, adjacent contacts of said series being respectively connected to the positive and negative wires of the auxiliary circuit, and means arranged solely in said auxiliary circuit connections and actuated by the closing of the circuit between adjacent contacts of said series for closing said main circuit, as and for the purpose set forth. 5th. In an electric railway system, a normally open main supply circuit extending throughout the length of the road, a normally open auxiliary circuit also extending throughout the length of the road, a series of contacts arranged in the road bed, adjacent contacts of said series being respectively connected to the positive and negative wires of said

auxiliary circuit, and electro magnet arranged in each of said auxiliary circuit, connections, means carried by the car for bridging the space between adjacent contacts of said series, and means actuated by the energization of said electro-magnets for closing the main supply circuit through the motor on the car, as and for the purpose set forth. 6th. In an electric railway system, a main supply circuit, an auxiliary circuit, a series of contacts arranged in the road bed, adjacent contacts of said series being respectively connected to the positive and negative wires of said auxiliary circuit, a second series of contacts arranged in the road bed, a normally open connection extending from each of said second series of contacts to the main supply circuit, electrically actuated means arranged in each of said auxiliary circuit connections for closing the corresponding main circuit connection to its road bed contact, means carried by the car for bridging the space between adjacent auxiliary circuit contacts, and means also carried by the car for completing circuit from said main circuit contacts through the translating devices on the car, as and for the purpose set forth.

No. 65,185. Armature Core and Hub.
(Moyeu d'armature.)

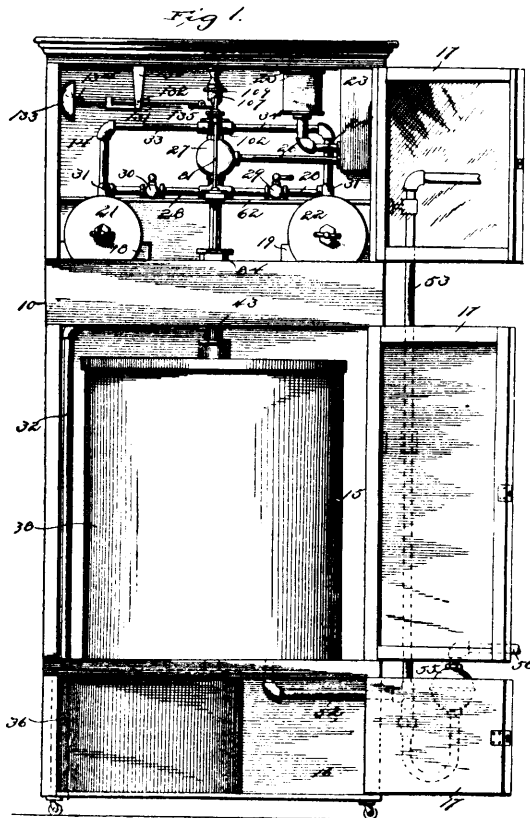


Sidney Howe Short, Cleveland, Ohio, U.S.A., 12th February, 1900; 6 years. (Filed 7th January, 1899.) Division of application No. 78,317. (Filed 9th August, 1897.)

Claim.—1st. A separating lamina for a dynamo electric armature, having peripheral teeth the ends of which are bent at right angles, substantially as specified. 2nd. A separating lamina for a dynamo electric armature formed of sheet metal having integral teeth which are bent transversely to the body of the sheet, substantially as specified. 3rd. An armature lamination of sheet metal having dents poked into it from opposite directions, whereby integral projections are formed on each side of it without cutting, said lamination being adapted to be introduced into an armature core between ordinary laminæ and form an air space on each side of itself, substantially as described. 4th. In an armature core, a lamination occupying the centre of an air duct in the armature core, and having integral spacing projections on both sides, substantially as specified. 5th. In an armature core, a spacing lamination occupying the centre of an air duct of an armature core, and secured to the armature hub at one or more places, substantially as specified. 6th. In an armature core, a spacing lamination occupying the centre of an air duct of said core, and having peripheral teeth which are twisted and thereby project to each side of spacing lamination, substantially as specified. 7th. An armature for a dynamo electric machine having its core made up of a plurality of ordinary laminæ and one or more separating laminæ occasionally introduced between the ordinary laminæ, said separating lamina consisting of a sheet of metal having integral lateral projections on both sides, and peripheral teeth which are twisted at substantially right angles to the sheet, substantially as specified. 8th. An armature for a dynamo electric machine having its core made up of a plurality of segmental laminæ dovetailed to the armature hub and occasionally separated by a segmental lamina provided with integral projections extending from it to the adjacent lamina, the separating lamina being attached to the armature hub, in the same manner as the other laminæ, substantially as specified. 9th. In an armature for a dynamo electric machine, the combination of a plurality of laminæ and of a segmental lamina, with integral projections on both sides, not attached to the adjacent laminæ, but held in place by being attached to the armature hub, substantially as specified. 10th. An armature core built up of laminæ and having spacers interposed between laminæ and separated therefrom, as and for the purpose set forth. 11th. An armature core built up of laminæ and having spacers interposed between the laminæ and

insulation interposed between the spacers and the laminae, as and for the purpose set forth. 12th. In an armature, a hub or spider, an armature core mounted thereon, and ventilating spacers mounted on said hub or spider and arranged to extend through the body of the core, and means for supporting the core adjacent to such spacers, as and for the purpose set forth. 13th. In an armature, a hub or spider, an armature core mounted thereon, ventilating spacers mounted on said hub or spider and arranged to extend through the body of the core, and insulation interposed between the spacers and the core, as and for the purpose set forth. 14th. In an armature, a hub or spider, an armature core mounted thereon, ventilating spacers mounted on said hub or spider, and arranged to extend radially through the body of the core, and strips of insulation interposed between said spacers and core, as and for the purpose set forth. 15th. In an armature, a hub or spider, a core comprising laminae mounted thereon, said core having interposed ventilating ducts formed by mounting spacers on said hub or spider, intermediate certain adjacent laminae, as and for the purpose set forth. 16th. An armature core built up of laminae and having spacers U-shaped in cross-section interposed between adjacent laminae, as and for the purpose set forth. 17th. An armature core built up of laminae and having spacers U-shaped in cross section arranged to extend radially through the body of such core, as and for the purpose set forth. 18th. An armature core built up of thin laminae and having sections of channel iron interposed between adjacent laminae, and means for supporting the laminae next adjacent to such channel irons, as and for the purpose set forth. 19th. In an armature, a hub or spider comprising radial arms, a core supported by said arms, strips mounted on said arms and between adjacent core laminae, and spacers secured to said strips, as and for the purpose set forth. 20th. In an armature, a hub or spider having radial arms, said arms provided with dovetail grooves on the outer periphery thereof, a core mounted on said arms, strips provided with dovetail projections adapted to be received in the grooves in said arms, said strips interposed in the body of said core, and spacers attached to said strips, as and for the purpose set forth. 21st. An armature built up of successive thin rings or laminae, rings of spacers, and supporting rings interposed between said spacers and said laminae, as and for the purpose set forth.

No. 66,186. Gas Generator. (Générateur à gaz.)



66186

John Ruthven, Chicago, Illinois, U.S.A., 12th February, 1900; 6 years. (Filed 16th February, 1899.)

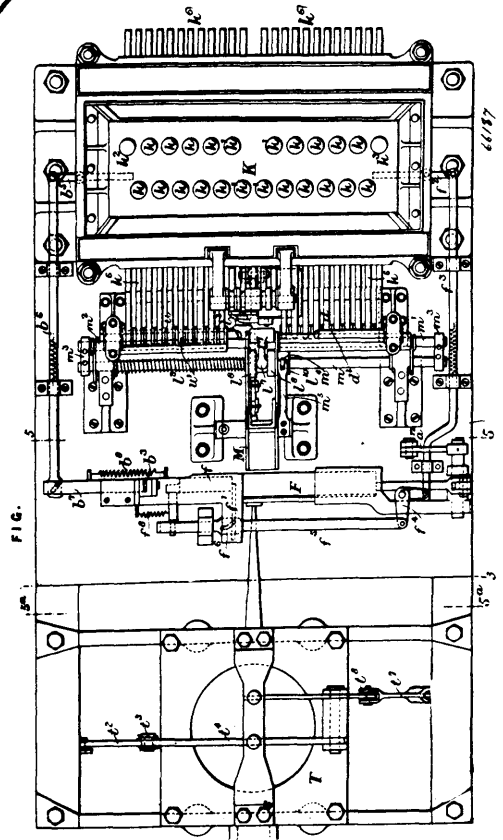
Claim.—1st. In an acetylene gas apparatus, a generator comprising a closed casing or shell, a horizontal carbide receptacle revolvably supported within said casing and withdrawable therefrom by an

endwise adjustment through one end of the casing, and an absorbent filtering jacket surrounding the carbide receptacle and removable therewith from the casing or shell, in combination with means for rotating the carbide receptacle within the generator casing and means for supplying water to the generator casing for saturating the absorbent jacket of the carbide receptacle, substantially as described. 2nd. In an acetylene gas apparatus, a generator comprising a closed shell or casing, a perforated carbide receptacle revolvably supported within said casing and removable therefrom by an endwise adjustment, and an absorbent filtering jacket attached to and surrounding said perforated receptacle and removable therewith from the generator casing, in combination with means for supplying water to the upper part of the generator casing for saturating the absorbent filtering jacket of the carbide receptacle, a gas outlet pipe connected to the closed casing and disconnected from the revolvable carbide therein, and means mounted on the closed casing and connected detachably to the carbide receptacle for rotating the latter, substantially as described. 3rd. In an acetylene gas apparatus, a generator comprising a closed shell or casing, a perforated carbide cylinder supported revolvably within said casing and removable therefrom by an endwise adjustment, an absorbent filtering jacket surrounding the carbide cylinder, and removable therewith from the shell or casing, and a perforated gas tube supported centrally within the carbide receptacle and removable therewith from a casing, in combination with a gas pipe connected with the casing substantially in alignment with the gas tube of the carbide receptacle and arranged to receive the gas therefrom, a filtering medium between the gas pipe and perforated tube of the carbide receptacle, and means for supplying water to the casing, substantially as described. 4th. In an acetylene gas apparatus, a generator comprising a shell or casing, a perforated carbide receptacle supported revolvably therein, an absorbent filtering jacket surrounding said perforated receptacle, a water pipe connected to the generator at a point intermediate the length of said absorbent jacket and adapted to drop the water directly thereon for saturating the same, an actuating device connected to the receptacle to rotate the latter, and a gas outlet pipe connected to the generator at one end of the carbide receptacle, said water and gas pipes being disconnected from the carbide receptacle, substantially as described. 5th. In an acetylene gas apparatus, a generator comprising a horizontal shell or casing, a gas pipe coupled to one end thereof, a carbide receptacle provided with a spacing flange and fitted in said casing for its flange to abut against the head to which the gas pipe is coupled, and means for supplying water to said casing substantially as described. 6th. In an acetylene gas apparatus, a generator provided with a perforated carbide vessel having a spacing flange at one end, an absorbent filtering jacket surrounding said vessel, and a perforated gas tube arranged longitudinally within said vessel and extending to the spacing flange thereof, in combination with a gas pipe coupled to the vessel opposite to the spacing flange, a filtering medium between the gas tube of the carbide vessel and said gas pipe, and a water supply, substantially as described. 7th. In an acetylene gas apparatus, a generator having a perforated carbide receptacle, an absorbent jacket surrounding the same, a perforated gas tube within said receptacle, a follower mounted loosely on the tube and within said receptacle, and a spring acting against said follower, substantially as described. 8th. In an acetylene gas apparatus, a generator comprising a shell or casing, a perforated carbide receptacle having a permanent head at one end, a packed gas port in said permanent head of the carbide vessel, a central perforated tube within said receptacle, a yieldable follower on said tube, and an absorbent jacket surrounding the perforated receptacle, substantially as described. 9th. In an acetylene gas apparatus, a generator comprising a shell or casing having a gas outlet port at one end thereof, and a carbide receptacle fitted removably within said casing and provided with an off-standing flange arranged to limit the adjustment of said receptacle in the casing toward the outlet in one end thereof, substantially as described. 10th. In an acetylene gas apparatus, a generator consisting of a shell, a carbide cylinder provided with a perforated spacing flange at one end and with a central gas tube extending into said flange, said cylinder being revolvably supported within the shell, and a filtering jacket attached to the carbide cylinder, in combination with an actuator device mounted on the shell and coupled with the cylinder, a gas pipe connected to the casing to receive the gas from the chamber thereof and from the perforated flange of the carbide vessel, and a water inlet pipe, substantially as described. 11th. In an acetylene gas apparatus, a generator consisting of a shell or casing, a carbide cylinder provided at its ends with the annular spacing flanges which support said cylinder revolvably within said shell, an absorbent jacket united intimately with the cylinder between the flanges thereof and revolvable therewith within the casing, and an operating spindle mounted in the casing and provided with means for connecting the same to the revolvable cylinder, substantially as described. 12th. In an acetylene gas apparatus, the combination of a floatable bell provided with an extended tube having a cap, a generator, a water inlet valve to said generator, an actuating lever having an eye to receive the capped tube of said bell, a spring to lift the lever, and a trip actuated by the lever and controlling the water inlet valve, substantially as described. 13th. In an acetylene gas apparatus, the combination with a water inlet valve, of a trip rod carrying a trip plate, a yieldable trip on the inlet valve, and means for adjusting the trip rod laterally with respect to yield-

able valve trip, whereby the trip on said rod may be retracted from the path of said yieldable trip, substantially as described. 14th. The combination with a water inlet valve having a yieldable trip, of a reciprocating trip rod carrying a fast trip, an adjuster movable with the trip rod, and a guide within which the adjuster is free to travel, substantially as described. 15th. In an acetylene gas apparatus, the combination with a water inlet valve having a yieldable trip, of a trip rod carrying a trip which is fast therewith, an adjusting cone carried by said trip rod, and a guide within which the adjusting cone is free to play with the trip rod, substantially as described. 16th. In an acetylene gas apparatus, the combination with a generator water valve having a yieldable trip of a bell controlled lever, a trip rod connected with said lever and carrying a trip adapted to impinge against the yieldable trip, and a guide device which permits lateral movement of the rod and its trip with respect to the yieldable valve trip, substantially as described. 17th. The combination with a generator water valve, of a bell controlled lever, a trip rod connected with said lever and having a trip fast therewith to actuate said valve, an adjusting cone fast with the trip rod, and an adjustable guide plate in which the adjusting cone is fitted to travel, substantially as described. 18th. An acetylene gas apparatus consisting of a cabinet divided into a number of compartments, generators situated within the upper compartment, a purifier in the lower compartment, a gas pipe between the generators and said purifier, a gasometer situated within the middle compartment and having a capped tube which is extended into the upper compartment, an actuating lever arranged within the upper compartment and having an eye through which plays the capped tube of the gasometer bell, a trip controlled valve having pipe connections with said generators, and a trip actuated by the lever and connected operatively with the valve that supplies the generators, substantially as described. 19th. In an acetylene gas apparatus, a gasometer comprising a closed tank containing a liquid seal, a floatable inverted bell housed within said tank, and a weight receiving tube attached to the floatable bell and guided within the tank, substantially as described. 20th. In an acetylene gas apparatus, a gasometer comprising a tank, a floatable inverted bell having a guide, and an adjustable collar clamped to said guide and adapted to rest upon the tank to suspend the floatable bell therein, substantially as described. 21st. In an acetylene gas apparatus, the combination with a generator, of a floatable gas bell having its tube or stem provided with a head, an actuating lever having an eye through which the bell tube or stem is adapted to play a water valve, a trip rod connected to the actuating lever and carrying a trip arranged to actuate the water valve, a spring connected to the lever to raise the latter, and the trip rod, and a source of water supply connected with said valve, substantially as described. 22nd. In an acetylene gas apparatus, the combination with a generator, valved water inlet devices thereto, and a trip mechanism, of an audible signal mechanism embracing a trip which is disposed out of the path of the valved water inlet device and lies below the trip devices which control the same, whereby the alarm trip is operated by the valve trip when the latter assumes an abnormal position, substantially as described. 23rd. In an acetylene gas apparatus, the combination with a generator, a valved water inlet thereto, and a trip rod which controls the valved water inlet, of an alarm mechanism having a trip disposed out of the path and below the normal working positions of the valve trip and lying in the path of the trip rod to be actuated thereby when it assumes an abnormal position relatively to the valve trip, substantially as described. 24th. In an acetylene gas apparatus, the combination with a generator, means for admitting water thereto, a trip for the water inlet device, and a rod which controls said trip, of an alarm mechanism embracing an operating lever, and a trip on said operating lever below the plane of the valve trip and in the path of the trip rod to be actuated thereby when it descends below the normal working position thereof, substantially as described. 25th. In an acetylene gas apparatus, a generator having a circulating jacket which surrounds its shell at one end thereof and provided with a removable head at the exposed end of said generator combined with circulating pipes connected with the jacket, and means for supplying a cooling medium to the pipes and jacket, substantially as described. 26th. In an acetylene gas apparatus, a generator comprising a casing, a removable carbide cylinder, a sediment jacket provided with a longitudinal slot and interposed between the carbide receptacle and the generator casing, and a water pipe passing through the generation casing, and the slot of the sediment jacket, substantially as described. 27th. In an acetylene gas apparatus, a generator provided with a carbide cylinder and a sediment receiving jacket which surrounds the carbide cylinder and is removable therewith from the generator, substantially as described. 28th. In an acetylene gas apparatus, a generator provided with a removable carbide cylinder, a sediment receptacle surrounding the carbide cylinder and engaging therewith to support said cylinder revolvably within the sediment cylinder and generator, substantially as described. 29th. In an acetylene gas apparatus, a generator provided with a water inlet pipe, a sediment cylinder within the generator and engaging with the water inlet pipe to be restrained thereby against rotation within the generator, and a revolvable carbide cylinder supported within the sediment cylinder, substantially as described. 30th. In an acetylene gas apparatus, a generator, a slotted imperforate sediment cylinder fitted removably within said generator, means engaging the sediment

cylinder to restrain the latter against rotation within the generator, means for admitting water through the slot in the sediment cylinder, and a carbide cylinder supported revolvably within the sediment cylinder in position to receive water from the feed device, substantially as described. 31st. In an acetylene gas apparatus, the combination with a generator and a water pipe connected thereto, of a valved sediment cylinder fitted within the generator and engaging with the water inlet pipe, and a perforated carbide cylinder provided with annular flanges which are engaged by the flanges of the sediment cylinder, substantially as described.

No. 66,187 Type Casting and Composing Apparatus.
(Appareil à couler le caractère et composer.)

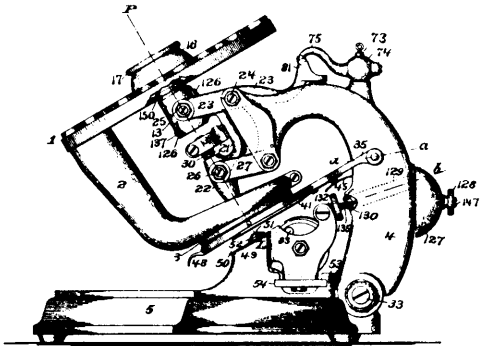


Henry James S. G. Stringer, Brighton, Sussex, England, 12th February, 1900; 6 years. (Filed 1st May, 1899.)

Claim.—1st. The combination of a type casting mould, a pivotally supported sector-shaped matrix carrier having rows of matrices in its periphery, means for rocking said carrier to place any row of matrices level with the mould, and means for shifting the carrier longitudinally with relation to it to present any one of the matrices in a row to the mould, substantially as described. 2nd. The combination of a type casting mould, a rocking and longitudinally movable sector-shaped matrix carrier having rows of matrices in its periphery, sets of finger keys, devices operated by one set of fingers for turning the matrix carrier on its axis to place any row of matrices level with the mould, and devices operated by another set of finger keys for shifting the matrix carrier longitudinally to present any one of the matrices in a row to the mould, substantially as described. 3rd. The combination with a rocking matrix carrier movable longitudinally relative to its axis, of depressible finger keys, means for locking the keys depressed, sliding rods having heads provided with stepped inclines, rods connected with the matrix carrier and acted on by the stepped inclines when advanced with the sliding rods, spring plungers mounted on said rods and depressed by the depression of the keys, a carriage having pushers arranged to engage said plungers when depressed, and means for reciprocating said carriage, substantially as described. 4th. The combination with a rocking matrix carrier, movable longitudinally relative to its axis, of depressible finger keys, means for locking the keys depressed, sliding rods having heads provided with stepped inclines, rods connected with the matrix carrier and carrying rollers acted upon by the stepped inclines when advanced with the sliding rods, spring plungers carried by said rods and depressed by the depression of the keys, a reciprocating carriage having hinged pushers to engage the depressed plungers, a rotary driving shaft having an eccentric, and connections between the eccentric and the carriage for reciprocating the latter,

substantially as described. 5th. The combination with the matrix and mould frame having a mould cavity, a pair of horizontal slides the one engaging on the upper edge of the matrix, the other sliding over the mould cavity and a pair of vertical slides, the one meeting the lower edge of the matrix and forming the bottom of the mould cavity, the other pushing up the cast type to form a column, operating these slides, substantially as described. 6th. The combination with a mould frame having a mould cavity, of a horizontal slide to form the top of the mould cavity, a primary vertical slide, the upper end of which forms the bottom of said cavity, a second vertical slide onto which the cast type is pushed by the horizontal slide when said type is raised from the mould cavity by the primary vertical slide, a space column having a channel leading to said second vertical slide, means for actuating said slides, a spring pressed space pushing slide for pushing a space from the space column on to the second vertical slide, a space key whereby the space pushing slide may move to push the space, substantially as described.

No. 66,188. Typewriter. (Clavigraphie.)



66/88

Frank Lambert, Brooklyn, New York, U.S.A., 12th February, 1900; 6 years. (Filed 12th May, 1898.)

Claim.—1st. In a typewriter, a type block having a spherical exterior with one or more series of type thereon, each series being formed of two or more rows of circles of type, and a stepped interior provided with as many steps as there are series of type. 2nd. In a type writer, a type block having on its exterior a series of two or more rows of type, and on its interior a series of radial recesses of varying depths, the total number of recesses being equal to the aggregate number of type in the said series. 3rd. In a typewriter, a type block having on its outer surface two circles of type, the type of one circle being disposed opposite the intervals between the type of the other circle, and on its inner surface a circle of corresponding recesses, the recesses corresponding to the type in one circle being deeper, measured in a radial direction of the ring, than the recesses corresponding to the type of the other circle, the said shallow and deep recesses alternating, substantially as described. 4th. In a typewriter, a multiple key having two rows of designated pressure points, a type block having two rows of type on its exterior surface, the inner row of pressure points being marked to correspond to the outer row of type and *vice versa*, substantially as described. 5th. In a typewriter, a nutating key, a support therefor, said key being adapted to be rotated on said support to various predetermined positions. 6th. In a type writer, a key, a type actuated thereby, a spacing feed, and means to rotate said type so that on two consecutive printings the outline of said type in the second printing will stand at a different angle than the outline of the same said type in the first printing. 7th. In a typewriter, a key, a type actuated thereby, a carriage feed and means by which said type can be brought to print with its outline in various predetermined angular positions relatively to the line of motion of said carriage feed. 8th. In a typewriter, a nutating multiple key, type controlled thereby, a support for said key and means to rotate said key and said type on said support in various predetermined positions, substantially as described. 9th. In a type writer, a nutating key adapted to be rotated, a support for said key, and an indexing clutch connecting said support and said key, whereby the angle of rotation may be determined. 10th. A nutating key and a brake or damper operating to control the vibration of said key, substantially as described. 11th. In a typewriter, a nutating key, a type actuated thereby, and a brake or damper operating to control the vibration of said key and said type, substantially as described. 12th. In a typewriter, a multiple key, a type block actuated thereby, a brake or damper acting upon said type block after pressure on said key has been relieved, substantially as described. 13th. In a type-writer, multiple key, a re-setting spring for said key, and a brake or damper controlling the vibration of said key due to said spring after pressure upon said key has been removed substantially as described. 14th. In a typewriter, a multiple key, a friction brake or damper for said key and means for adjusting the friction of said brake. 15th. In a typewriter, a multiple key, a

printing mechanism, a re-setting spring for said key and means for controlling the vibrations of said key due to its own inertia and to the resiliency of said spring, substantially as described. 16th. In a typewriter, a type block having a spherical exterior with type thereon and an inking pad having a corresponding concave spherical inking surface, the pad being supported so that said concave surface is self adjusting upon said spherical exterior of the type block, substantially as described. 17th. In a typewriter, the combination of a type ring, an inking pad support, inking pad holder free to tilt in said support, a pad in said holder, said pad extending and coming in contact with the said type ring across both sides of the tilting line of said pad holder, substantially as described. 18th. An inking pad frame, inking pad holder having an aperture, inking pad in said holder, said inking pad holder being pivoted in said frame in a line across said aperture, substantially as described. 19th. In a typewriter, the combination of a type block, pivoted inking pad support, self adjustable inking pad holder pivoted in said support and having a central aperture, inking pad in said holder, and a type shield having an opening, the pivoted line of said pad holder bisecting said pad holder central aperture and shield opening, substantially as described. 20th. In a typewriter, the combination of a type block and standard, with the double forked support 34, pad holder 37 diametrically pivoted thereon, pad plate 38 and pad 40, substantially as described. 21st. In a typewriter, a base, a swinging standard pivoted to said base, a multiple key and an equalizing pressure device for said key directly pivoted to said standard, substantially as described. 22nd. In a typewriter, the combination with the type block and standard, of the double forked support 34, pivoted to the standard, pad holder 37 pivoted to said support, index 43 and pad 40, substantially as described. 23rd. In a typewriter, a base having thereon a relatively fixed printing platen, a swinging standard pivoted to said base and carrying a printing mechanism, and means for regulating the axial position of said printing mechanism in relation to said printing platen. 24th. In a typewriter, a type block having two or more series, each series being formed of two or more rows of type, an adjustable stop in the path of said type block, said stop being adjustable in as many positions as there are series of rows of type on said type block, substantially as described. 25th. In a typewriter, a pivotally supported multiple key, pressure points raised above the face of said key, the face of said key being below its pivot centre, substantially as described. 26th. In a typewriter, a multiple key and resetting spring therefor, a spring actuated brake and means for adjusting the relative tension of the said key resetting spring and the said brake spring. 27th. In a typewriter, a multiple key, a spring actuated resetting cap for said key and means to prevent said cap from rotating in its own plane, substantially as described. 28th. In a typewriter, a centrally pivoted multiple key, and pivoted pressure blocks for actuating said key, substantially as described. 29th. In a typewriter, a centrally pivoted multiple key and pressure blocks pivoted in said key, the axes of said blocks being radial to the centre of said key, substantially as described. 30th. In a typewriter, a nutating multiple key, a type block controlled thereby having on its exterior two circles of type, a circle of recesses within said type block, every alternate recess being deeper, measured radially of said type block than the recess intervening, and a fixed stop adapted to enter any one of said recesses when said block is tilted to bring the type corresponding to said recess into printing position, substantially as described. 31st. In a typewriter, a multiple key, a type block actuated thereby, having on its exterior two or more series each of two or more rows or circles of type and on its interior as many steps as there are series of type, substantially as described. 32nd. In a typewriter, a nutating key and means for preventing rocking of the key about a line drawn through the key centre and the point of pressure when said key is tilted, substantially as described. 33rd. A nutating key, a resetting spring therefor and means to control the tilting action of said key in a meridional line passing through the centre of depression when said key is tilted. 34th. A nutating key, pressure points therefor, a support for said key and means to control the tilting action of said key in meridional lines passing through the centre of said pressure points when said key is tilted. 35th. In a typewriter, a nutating key, a central support therefor, a spring actuated resetting cap concentric with the said key and bearing upon the surface thereof, the plane of contact between the cap and the key being below the centre of nutation of said key, substantially as described. 36th. In a typewriter, a nutating key, a central support therefor, a spring actuated resetting cap concentric with said key and bearing upon the same, the meeting surface of said key and said cap being relatively so formed that when said key is tilted by pressure on one side of the centre of nutation there will be two points of contact between said key and said cap on either side of said centre, said points being located on opposite sides of a line drawn through the centre of nutation and the centre of the pressure point, substantially as described. 37th. In a typewriter, a multiple key, a resetting spring therefor, a cap actuated by said spring and resting on said key, and an undulating or corrugated surface between said cap and said key, substantially as described. 38th. In a typewriter, a multiple nutating key having on its surface a concentric circle of elevations and depressions, and exterior to said circle a series of designated pressure points, the said pressure points and said elevations and depressions being so disposed that a central line drawn through the centre of any pressure point on one side of the centre of

rotation will pass between two of said elevations on the other side of said centre and a spring actuated resetting cap concentric with said key and bearing downward upon said circle of elevations and depressions, substantially as described. 39th. In a typewriter, a base, a spring actuated escapement wheel, a pallet for said escapement wheel, a movable standard carrying said pallet, said standard being pivoted to said base in the plane of said escapement wheel, the parts being constructed and arranged to control said escapement wheel in various positions of the standard, substantially as described. 40th. In a typewriter, a base, an escapement wheel supported on said base, a swinging controlling device for said escapement wheel, a printing mechanism actuating said controlling device, and means of timing said controlling device and said printing mechanism, substantially as described. 41st. In a typewriter, a spring actuated carriage, an escapement wheel regulating the movement of said carriage, a movable standard and a controlling device for said escapement wheel carried by said standard, said controlling device, hence said escapement wheel and said carriage being operative in various relative angular positions of said escapement wheel and said standard, substantially as described. 42nd. In a typewriter, a base, a standard pivoted to said base and supporting a printing mechanism, a spring actuated carriage, and an escapement regulating the movement of said carriage, and a controlling device for said escapement carried by said standard and actuated by said printing mechanism, said controlling device being operative in various angular positions of said standard, substantially as described. 43rd. In a typewriter, in combination with a base, a spring actuated paper carriage, and the escapement wheel 71 regulating the movement of said carriage, the hinged standard 4 and rod 73 thereon, having fingers 79 and 80 engaging with said escapement wheel 71, substantially as described. 44th. In a typewriter, in combination with a base, a spring actuated paper carriage, and the escapement wheel 71 regulating the movement of said carriage, the hinged standard 4, rod 73 thereon, having fingers 79 and 80 engaging with said escapement wheel, and the spring 76 acting upon said rod, substantially as described. 45th. In a typewriter, a base having a standard pivoted thereon carrying a printing mechanism and a spring actuated paper carriage, in combination with a spring barrel 61 having attached thereon pinion centre 68, escape wheel centre pin 70 and adjusting screw 140, substantially as described. 46th. In combination with a base, a spring actuated paper carriage, escape wheel 71, pivoted standard 4, rod 73 having fingers 79 and 80, and releasing arm 75, substantially as described. 47th. In a typewriter, a carriage, a spring actuated escape wheel for said carriage, a pallet to control said escape wheel and means to disengage said pallet from said escape wheel, the said controlling and disengaging action remaining the same in various relative angular positions of said escape wheel and said pallet, substantially as described. 48th. In a typewriter machine, a paper carriage, feeding mechanism for feeding the carriage, a regular series of steps, and mechanism for varying the relation of said steps as a whole to the printing point whereby the printed characters can be ghosted, as described. 49th. In a typewriter, a spring actuated paper carriage, an escape wheel controlling the movement of said carriage, the said escape wheel being mounted on an eccentric axis adapted to change the position of the escape wheel, as and for the purpose set forth. 50th. In a typewriter, the combination of a coiled spring, gear actuated by said spring, a rack engaging said gear, the disengagement of the rack from said gear, causing the gear to be locked, thereby preventing the unwinding of said spring, substantially as described. 51st. In a typewriter, the combination of a coiled spring, gear actuated by said spring and a rack engaging said gear, and a device adapted to automatically lock said gear when the rack is disengaged therefrom, and to automatically unlock said gear by the engagement of said rack and said gear. 52nd. In a typewriter, the combination of a spring actuated removable carriage, rack and gear connection between said spring and said carriage, with means automatically operated by the removal of said carriage to lock said gear and prevent unwinding of said spring, substantially as described. 53rd. In a typewriter, the combination with a base and the paper carriage having the rack bar 54, the coiled spring 62, gear wheel 65, pinion 67, escape wheel 71, pinion engaging with said rack bar 54, standard 4, and rod 73 having pallet 78 with fingers 79 and 80, substantially as described. 54th. In a typewriter, a nutating key, series of type actuated thereby, series of recesses for said type, a stop adapted to engage said recesses and means to adjust in proper alignment said stop and said recesses so as to prevent said stop from entering into the wrong recess or from striking between two recesses when said key is tilted and said type carried into printing position. 55th. A nutating key, printing mechanism actuated thereby, a brake or damper to control the vibrations of said key and said printing mechanism. 56th. In a typewriter, a nutating key, printing mechanism actuated by said key, a brake or damper to control the vibration of said printing mechanism. 57th. In a typewriter, a nutating key, a printing mechanism actuated thereby, a spring opposing the motion of said

printing mechanism, and a brake or damper preventing the vibration of said key and said printing mechanism. 58th. In a typewriter, a nutating key, two or more rows of type actuated thereby, a relatively fixed stop for said key and means to carry a type of either row into printing position without shifting the position of said key. 59th. In a typewriter, a tilting key, a stop to limit the extent of tilting of said key over several predetermined angles, and means whereby this extent of tilting is varied at different predetermined angles without moving the said stop. 60th. In a typewriter, a nutating key having pressure points thereon, two or more rows of type actuated by said key, and means to equalize the extent of tilting on said pressure points to bring a type of either of said rows into printing position. 61st. The combination of a standard having a tubular aperture, a ball in said aperture, a bell supported at one end of said aperture and means of projecting said ball against gravity through said aperture against said bell, substantially as described. 62nd. The combination of a standard having an inclined tubular aperture constricted at its lower end, and a ball in said aperture seated by gravity in said constricted end, a bell supported at the other end of said aperture, and means for projecting said ball through said aperture against said bell. 63rd. In a typewriter having a transversely moving paper carriage, a standard having a tubular aperture, a plunger in said aperture, a bell supported at one end of said aperture, and a spring on said carriage constructed to meet said plunger when carried past said aperture by said carriage and to project said plunger through said aperture against said bell, substantially as described. 64th. In a typewriter, a type, multiple depressible key, carriage actuated thereby and means to vary and reduce the pressure necessary to depress said key before said type is brought to print, substantially as described. 65th. A multiple depressible key, a force opposing the depression of said key, and means to prevent said opposing forces from increasing while said key is depressed. 66th. In a typewriter, a multiple depressible key, a spring opposing the depression of said key and means to relieve the resistance caused by said opposing spring while said key is depressed, substantially as described. 67th. A multiple depressible key, a force opposing the depression of said key and means of reducing said opposing resistance while said key is depressed. 68th. In a typewriter, the combination of a removable spring actuated carriage, rack and gear connection between said spring and said carriage, and positive means operated by the removal of said carriage to lock said gear and prevent the unwinding of said spring, substantially as described. 69th. In a typewriter, a multiple tilting key having two or more rows of characters thereon, two or more rows of type actuated by said key, a relatively fixed stop in the path of motion of said type, and means whereby depression of equal extent on all of said characters on the key will cause the corresponding type to move variable distances before being located by said stop. 70th. A multiple tilting key, a support therefor, two type actuated by said key, a relatively fixed stop in the path of motion of said type, one of the said type being at a greater distance than the other from said stop when said key is in normal position and means to carry either and both of said type into printing position without shifting said stop. 71st. A nutating key, type and printing mechanism actuated thereby, and means to accelerate the speed and increase the momentum of said printing mechanism to force said type to print. 72nd. In a typewriter, a nutating key, type and printing mechanism actuated thereby, a resistance opposing the action of said printing mechanism, and means to suddenly reduce said resistance, thereby increasing the force of the blow to force said type to print. 73rd. A nutating key, series of type and a printing mechanism actuated thereby, means to accelerate the speed and adjust said acceleration, hence the momentum of said printing mechanism, to carry and force said type to print. 74th. A multiple key, a printing mechanism, a force opposing the motion of said printing mechanism, and means of reducing said opposing resistance while said printing mechanism is in motion. 75th. A multiple key, type actuated thereby, a force opposing the action of said type and means to prevent said force from increasing while said type is carried into printing position.

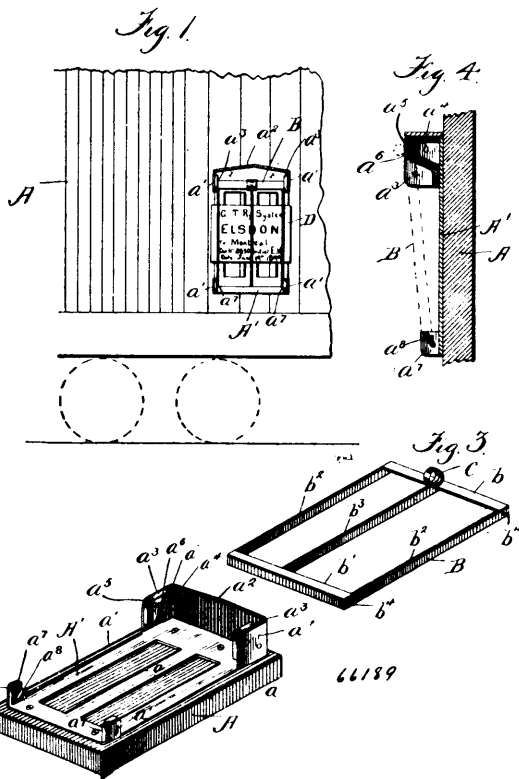
No. 66,189. Card Holder for Freight Cars.

(*Porte-cartes pour chars à marchandises.*)

David Pitkin Cory, Consecon, Ontario, Canada, 12th February, 1900; 1116 years. (Filed 16th September, 1899.)

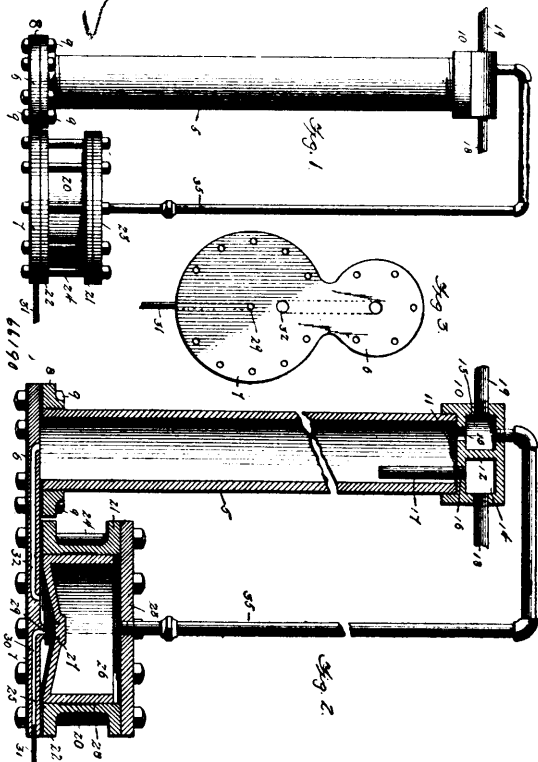
Claim.—1st. A card holder for freight cars, comprising a rectangular base plate, lugs mounted on each corner of said base plate, guideways formed on said lugs, a clamp plate having suitable pins adapted to engage said guideways, whereby said clamp plate is slidably secured to said base plate, substantially as described. 2nd. A card holder for freight cars, comprising a rectangular base plate, lugs mounted on each corner of said base plate, inclined guideways formed on said lugs, a clamp plate having pins adapted to

engage said inclined guideways, a suitable stop for limiting the movement of the clamp plate formed on the upper of said lugs,



whereby the clamp plate may be raised up off the base plate or lowered down upon the same, substantially as described.

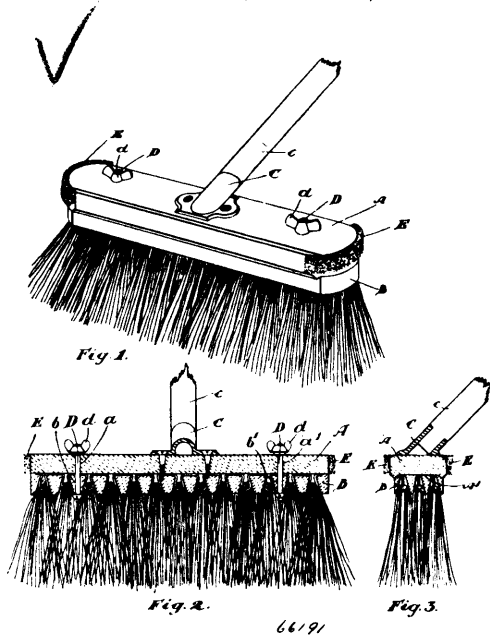
No. 66,190. Separator. (*Séparateur.*)



Alonzo J. Simmons, Indianapolis, Indiana, U.S.A., 12th February, 1900; 6 years. (Filed 20th October, 1899.)

Claim.—1st. A separator, comprising a receiver, a gas inlet for the receiver, a gas outlet for the receiver, a water outlet, a valve casing, a piston valve within the casing, a water drain passage adapted to be opened and closed by said valve, said water outlet communicating with the casing at one side of the piston, and a pipe communicating with the receiver and with the valve casing at the opposite side thereof. 2nd. In a separator, the combination with a receiver adapted to receive gas and water, of a gas inlet, a gas outlet, a water outlet and a valve for the water outlet adapted for operation by the column of water in the stand pipe. 3rd. In a separator, the combination with a receiver adapted to receive gas and water, of a receiving chamber in the stand pipe communicating with the stand pipe, a gas inlet connected with said chamber, an outlet chamber, a gas outlet pipe connected with the outlet chamber, a drain passage, a valve adapted to close said passage, and a pipe communicating with the valve at the opposite side from the drain passage and with the outlet chamber. 4th. An automatic relief valve for separators, comprising a valve casing, a base secured to the casing, inlet and outlet ports through the base, an elastic sheet covering the inner surface of the base and having its edges secured between the base and the casing, and a piston in the casing secured to said sheet, whereby pressure below the piston will operate the piston without direct engagement of the medium under pressure with the piston. 5th. An automatic relief valve for separators, comprising a valve casing, a valve within the casing, and an elastic sheet covering the valve and adapted to receive direct engagement of the medium to be controlled, whereby access of said medium to the working parts of the valve will be prevented. 6th. The combination with a stand pipe having inlet and outlet openings, of a drain passage, a valve casing having communication with the drain passage, a valve within the casing and adapted for operation under pressure through said passage, and an equalizing pipe connected with the casing at the opposite side of the valve from said passage and with the stand pipe.

No. 6C,191. Brush Back. (*Dos de brosse.*)

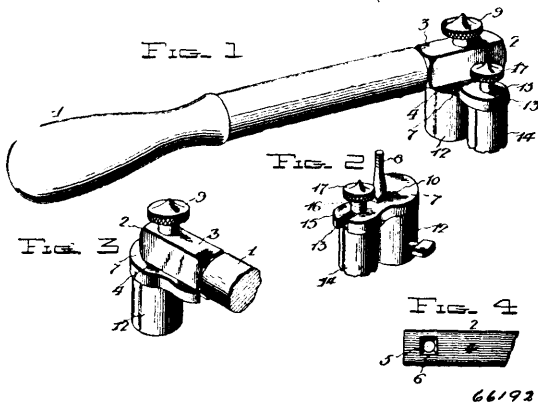


Henry Christopher Baker, Toronto, Ontario, Canada, 12th February, 1900; 6 years. (Filed 30th January, 1900.)

Claim.—1st. In a brush, the combination with the ordinary back having its top side transversely curved, of a cover or upper portion grooved on its under side to fit on the back and a detachable means for holding the two parts of the brush together, as and for the purpose specified. 2nd. In a brush, the combination with the ordinary back having its top side transversely curved, of a cover or upper portion grooved on its under side to fit on the back, correspondingly located holes extending through both the cover and the ordinary back and designed to register with each other, and means extending through such holes for connecting the back to the brush proper, as and for the purpose specified. 3rd. In a brush, the combination with the ordinary back having its top side transversely curved, of a cover or upper portion grooved on its under side to fit on the back, correspondingly located holes extending through both the cover and the ordinary back and designed to register with each other, and a bolt extending through the holes, and suitable butterfly nuts on the upper side of the bolts, as and for the purpose specified.

No. 66,192. Stamp Cancelling Apparatus.

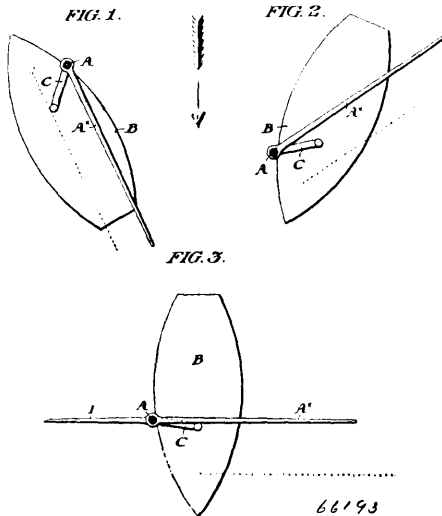
(Appareil à canceler les timbres.)



Winfield Scott Reed, Orono, Maine, U.S.A., 12th February, 1900; 6 years. (Filed 6th November, 1899.)

Claim.—A combined postmarking and cancelling stamp, comprising the rigid handle 1, formed with the rectangular head 2, having an orifice 5, terminating at one end in the concentric rectangular recess 6, the cross head 7, formed with the studbolt 8, having a rectangular collar 10, an integral dater socket 12, and a longitudinal open ended slot 13, the cancelling socket 14, formed with the integral rectangular shank 15, and threaded stud 16, and the nut 17, adapted to removably secure said socket 14, in said cross head, substantially as shown and described.

No. 66,193. Sailing Vessel. (Vaisseau à voile.)



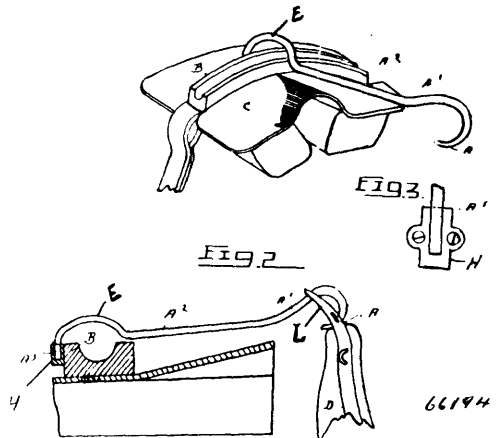
George Holmes Perkins, Philadelphia, Pennsylvania, U.S.A., 12th February, 1900; 6 years. (Filed 19th February, 1900.)

Claim.—1st. A boat, a structure mounted in said boat and adapted for horizontal movement with respect thereto, a mast connected to said structure, means for occasioning the movement of said structure to carry the mast to different positions in the boat, and means for trimming or extending in any desired direction a sail attached to said mast independently of the movement of said mast, substantially as set forth. 2nd. A boat, a mast, a movable structure in said boat in which said mast is stepped, means for occasioning the movement of said structure to carry the mast to different positions in the boat, and means for trimming or extending in any desired direction, a sail attached to said mast regardless of the position or movement of the mast, substantially as set forth. 3rd. A boat, a mast, a revolvable structure in said boat to which said mast is connected, means for occasioning the revolution of said structure to carry the mast to different positions in the boat, and means for trimming or extending in any desired direction a sail attached to said mast, without moving said mast, substantially as set forth. 4th. A boat, a mast, a movable structure on said boat to which said mast is connected, and adapted to carry the mast to different positions in the boat, and means for trimming or extending in any desired direction a sail attached to said mast, regardless of the position of said mast, substantially as described. 5th. In combination with a boat, a mast, an approximately horizontal movable arm to the outer portion

of which said mast is connected and by which it is carried, a stationary device engaged with the inner end of said arm, and means for trimming or extending in any desired direction a sail attached to said mast, without moving said mast, substantially as set forth. 6th. A boat, a mast, a boom arranged to be set in any desired direction with reference to said mast without moving said mast, and a device supporting said mast and capable of movement to shift said mast from place to place, substantially as set forth. 7th. A boat, a mast capable of bodily movement from place to place therein, means to occasion such movement, and a boom carried by said mast and adapted to be set in any desired position, regardless of the position of the masts substantially as set forth. 8th. A boat, a mast capable of movement from place to place therein, means to occasion such movement, and means for extending in any desired direction a sail attached to said mast, substantially as set forth. 9th. In combination, a boat, a mast, a substantially horizontal arm at the lower end of said mast, a swivel connection between said arm and the structure of the boat, means for occasioning the movement of said arm, to carry the mast to different positions in the boat, and means for extending in any desired direction a boom attached to said mast, substantially as set forth. 10th. In combination, a boat, a movable device mounted in said boat, a mast upheld by said movable device, a boom or equivalent sail trimming or extending device or devices, and means for securing said mast and boom in various positions in the boat without altering the angular relation of the vertical plane of the boom to that of the boat keel, substantially as set forth. 11th. In combination, a boat, a movable device mounted in said boat, a mast upheld by said movable device, a boom or equivalent sail trimming or extending device, a bowsprit or equivalent device carried by said mast, and means for securing said mast, boom and bow-sprit in various successive positions in the boat without altering the angular relation of the vertical plane of the boom and bowsprit to that of the boat keel, substantially as set forth. 12th. A boat, a structure mounted in said boat and adapted for horizontal movement with respect thereto, a mast connected to said structure, means for occasioning the movement of said structure to carry the mast bodily at the will of the sailor, to windward or to leeward, or forward or aft, substantially as set forth.

No. 66,194. Collar Supporter for Harness.

(Support de collier pour harnais.)



William N. Houghtaling, Ansonia, Connecticut, U.S.A., 12th February, 1900; 6 years. (Filed 31st January, 1900.)

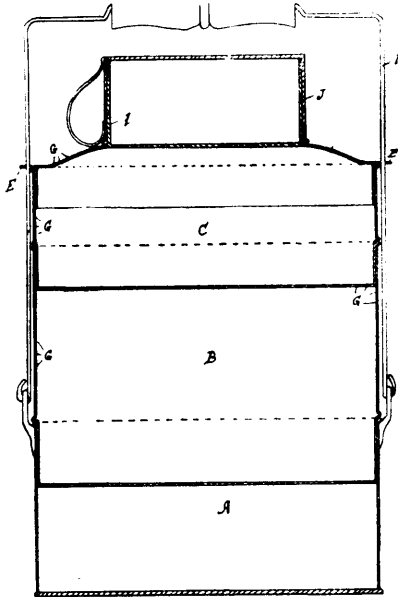
Claim.—The combination with the saddle provided with a chain low located upon its top, of a hame collar, and a yielding supporter secured at its rear end to said bow and extended forward therefrom beyond the forward edge of said saddle and constructed at its forward end to extend over the said collar which is suspended from it, the said supporter exerting a constant upward draft on the collar which is yieldingly supported.

No. 66,195. Lunch Bucket. (Boîte à lunch.)

Minnie Gilmore, Garden Valley, California, U.S.A., 12th February, 1900; 6 years. (Filed 31st January, 1900.)

Claim.—1st. A lunch bucket, consisting of superposed compartments of substantially uniform diameter and provided, at points above their bottoms, with flanges or fillets whereby the compartments are supported one above the other to present continuous and substantially unbroken sides throughout the height of the bucket, said compartments having the portions above the flanges or fillets perforated and the portions below the flanges or fillets imperforate and fitting with the open end of a lower compartment, a cover having lugs and a bail secured to the lower compartment and having its side members extending along the other compartments and adapted to spring into engagement with and be held by said lugs. 2nd. A

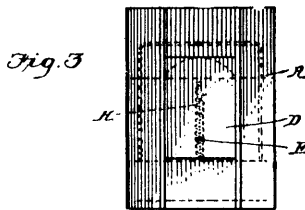
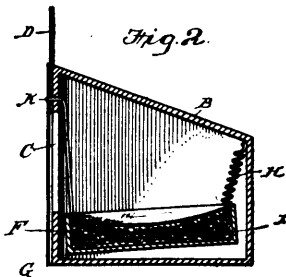
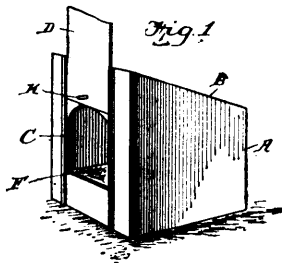
lunch basket, consisting of superposed compartments of substantially uniform diameter and provided with flanges or fillets at points



66195

above their bottoms whereby the compartments are superposed and substantially continuous and unbroken sides are formed for the full height of the bucket, said compartments having a perforate portion above the flange of the fillet and an imperforate portion below said flange and adapted to fit closely within the open top of a lower compartment, a cover for the uppermost compartment, having a central projection and having the portion outside of the circumference thereof perforated, said cover having lugs on its outer edge adapted to be engaged by the bail to secure the series of compartments.

No. 66,196. Hen Nest. (Nid de poule.)

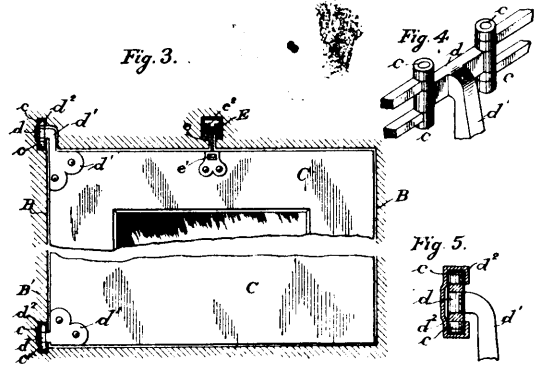
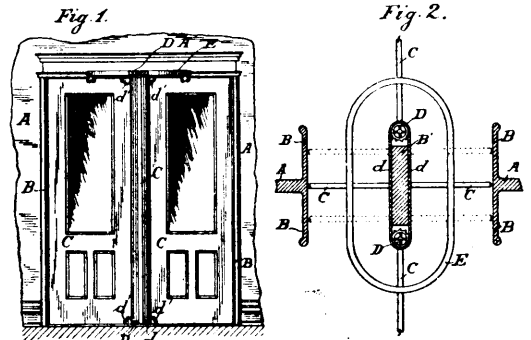


66196

Rupert E. Zearfoss, Keota, Iowa, U.S.A., 12th February, 1900; 6 years. (Filed 31st January, 1900.)

Claim.—1st. The combination in a nest for hens or other fowls, of an outer box provided with a self-closing door, an inner hinged box yieldingly supported and a latch secured to the inner box and holding the door open when the inner box is raised, and releasing it when lowered, substantially as described. 2nd. The combination in a nest for hens or other fowls, of an outer box having a sliding door, an inner box hinged at one end and yieldingly supported at the other, and a latch secured to the inner door in position to engage and hold the door raised, when the box is elevated, and release it when depressed, substantially as described. 3rd. The herein described nest comprising an outer box, the vertically slidable door in the front thereof having an opening near its lower end, the inner box hinged at one end to the front of the outer box below the door, the spring suspended, the inner end of the inner box, and the bail shaped latch rigidly secured at its ends to the sides of the inner box near its hinges and having a projection in the door from its upper cross bar adapted to engage in the opening in the door when the door and inner box are raised, substantially as described.

No. 66,197. Storm Door. (Contre porte.)



66197

Oscar Cobb, Chicago, Illinois, U.S.A., 12th February, 1900; 6 years. (Filed 31st January, 1900.)

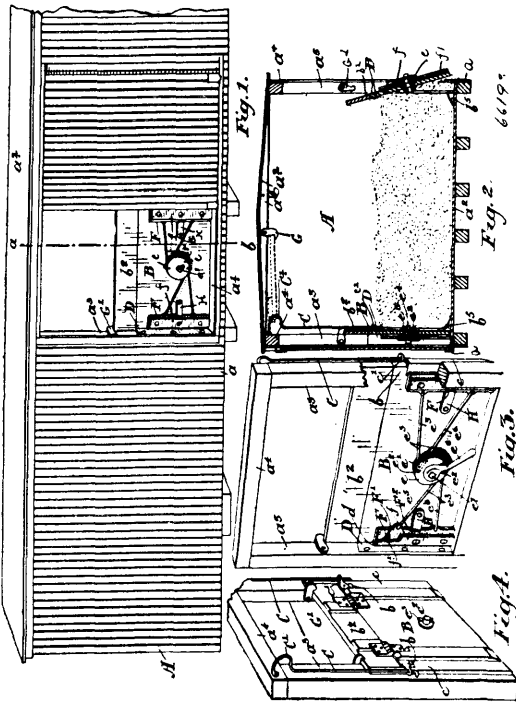
Claim.—1st. The combination with the passageway casing having parallel sides of a series of doors mounted on chain belts and trolley-way and having the relation with one another and the casing, substantially as specified. 2nd. The combination with the passageway of the sprocket wheels and chain belts, the trolley-way and the doors, all arranged and connected, substantially as specified.

No. 66,198. Grain Door for Cars. (Porte à grain pour chars.)

John Flesher, Parry Sound, Ontario, Canada, 12th February, 1900; 6 years. (Filed 30th January, 1900.)

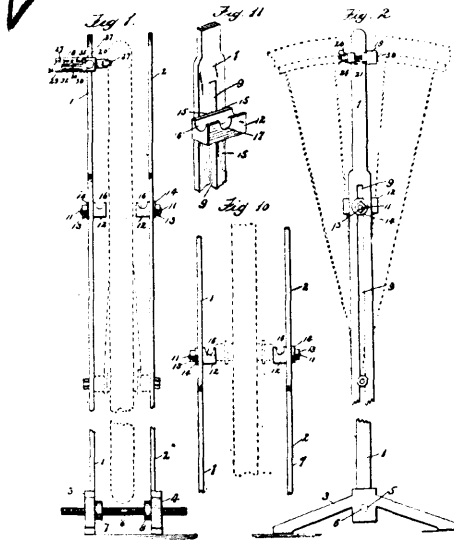
Claim.—1st. In a car of the class described, the combination with the frame thereof, of a pivotally swung door hung between two of the vertical timbers of the said frame and designed to swing outwardly against the pressure of the grain within the car and means for locking the same in a vertical position as and for the purposes specified. 2nd. In a car of the class described, the combination with the frame thereof, of a pivotally swung door hung between two of the vertical timbers of the said frame, vertical guide rods secured to the vertical timbers, said door being loosely secured to said rods and capable of a vertical and swinging movement thereon and means for temporarily securing said door to the roof of the car and mechanism for locking the door in a vertical and closed position as and for the purpose specified. 3rd. In a car of the class described, the combination with the frame thereof, of a door pivotally swung between two of the vertical timbers, of the car, keeper plates secured to each side of said door in the vertical timbers, bolt plates slidably secured to

said door and means for simultaneously sliding said bolts back and forth, as and for the purpose specified. 4th. In a car of the class



described, the combination with the frame thereof, of a door pivotally swung between two of the vertical timbers of the car, keeper plates secured to each side of said door on the vertical timbers, a trunion pivotally secured to the centre of the door and means for turning the same, links connecting the vertically opposite sides of the said trunion with each of said bolts and means for locking said bolts in position when shot, as and for the purpose specified.

No. 66,199. Wheel Truing Gauge.
(Gauge pour ajuster le roues)



66199

Nevin B. LeFevre, Littletown, and Ellwood L. Hallman, Norristown, both in Pennsylvania, U.S.A., 13th February, 1900; 6 years. (Filed 5th June, 1899.)

Claim.—1st. A wheel truing device comprising a stationary section, a movable section connected to be moved upon said stationary section by a wheel rim, a device to show the extent of movement of said movable section upon said stationary section, and a device to

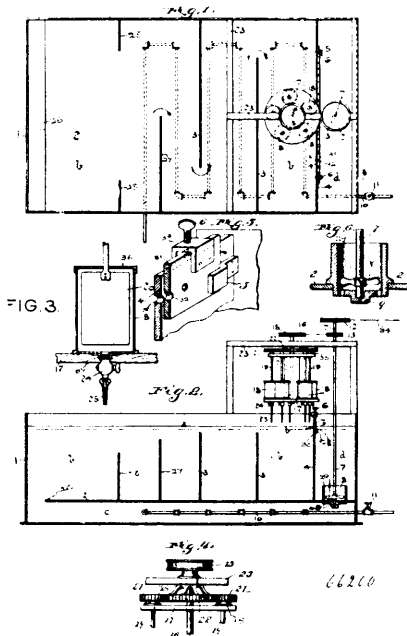
positively record such extent of movement, substantially as described. 2nd. In a wheel truing device a stationary section having fixed indices to show the extent of movement of a movable section carried by said stationary section, and means independent of said indices to record the extent of movement of said movable section, in combination with said movable section connected to be moved upon said stationary section, and an indicator carried by said movable section to show in conjunction with the indices of the stationary section the extent of movement imparted to said movable section by a wheel rim and to actuate means which record such extent of movement, substantially as described. 3rd. A wheel truing gauge comprising a stationary section, a clamp thereon to secure said section to a support, indices upon said section, and spring pressed gauge slides movably connected with said section to co-act with said indices, and means to move said spring pressed gauge slides by a wheel rim, substantially as described. 4th. A wheel truing gauge comprising a stationary section, a clamp thereon to secure said section to a support, indices upon said section, and spring pressed gauge slides movably connected to said section to co-act with the indices in combination with a section to be moved upon said stationary section by a wheel, and a pointer connected to said movable section to move the spring pressed gauges on the stationary section, substantially as described. 5th. In a wheel turning gauge, a stationary section, a clamp thereon to secure said section to a support, and indices upon said stationary section, in combination with spring pressed gauge slides comprising headed bolts having shanks that extend through a slot formed in said stationary section, springs upon said shanks to bear against said section upon the side opposite that contracted by the heads of said bolts, cup shaped washers upon said shanks to hold the springs thereon, and means independent of said spring pressed gauge slides to move the same upon stationary sections, substantially as described. 6th. In a wheel truing device, a support to carry a wheel to be trued, a gauge section stationary upon said support, and movement indicating indices and a movement recording device upon said stationary section, in combination with a movable gauge section connected to be moved upon said stationary section, and an indicator carried by said movable section to show in conjunction with the indices of the stationary section the extent of movement of said movable section upon said stationary section and to actuate the recording device upon the stationary section to record the movement of said movable section, substantially as described. 7th. In a wheel truing device, a stationary gauge section, fixed indices upon said section, and bars connected to said section to be moved about said indices, in combination with a gauge section movably connected to said stationary section, and an indicator to be moved by said movable section and to move the bars above the indices upon said stationary section, substantially as described. 8th. In a wheel truing device, a stationary gauge section, a clamp thereon to connect said section with a support, indices upon said section, and bars upon said section to move above said indices, in combination with a movable gauge section upon said stationary section, a spring to move said movable section in one direction, an indicator carried by said movable section to move the bars on the stationary section, and means to clamp said stationary and said movable sections together, substantially as described. 9th. In a wheel truing device, a stationary section, an adjustable clamp connected thereto to hold said section rigid with a wheel supporting stand, a gauge section movably connected with said stationary section, a spring between said stationary and movable sections to hold the latter in continuous contact with a wheel to be trued, and means substantially as described to determine and to accurately record the extent of movement in opposite directions of the movable section upon the stationary section, as and for the purpose specified. 10th. In a wheel truing device, a tubular gauge section, a clamp thereon to connect said section with a suitable support, a slot formed through the side of said section, and indices upon said section, in combination with a movable plunger within said tubular section, a friction roller upon said plunger, an indicator to move with said plunger above said indices, and means independent of said indices to record the extent of movement of said plunger, substantially as described. 11th. In a wheel truing device and in combination, wheel supporting standards, means to adjust said standards toward each other, and adjustable wheel supports carried by said standards, a stationary gauge upon said standards having a connected movable plunger to bear upon a wheel rim, means substantially as described to show the lateral movement of said wheel rim, and means to positively record the lateral movement of the said wheel rim, as and for the purpose set forth.

No. 66,206. Painting Machine. (Machine à peindre.)

John H. Davis, Lorenzo L. Merriman, Albert E. Jessurun, and William R. Rummel, all of Chicago, Illinois, U.S.A., 13th February, 1900; 6 years. (Filed 30th June, 1899.)

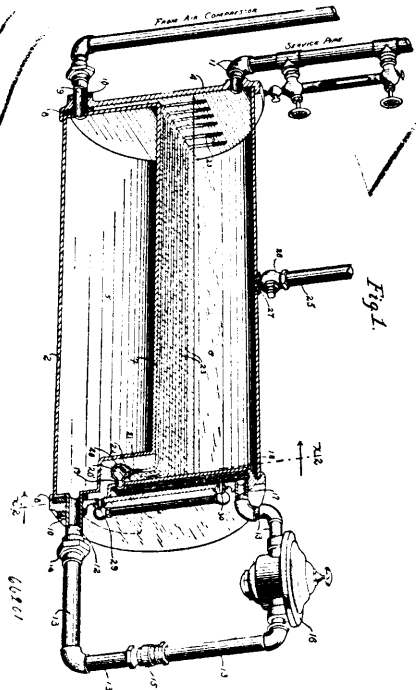
Claim.—1st. An apparatus for applying paint and similar coatings, comprising a tank for containing the supporting liquid, a travelling feeder at one end of the tank adapted to contain and distribute the paint upon the supporting liquid, and means adapted to induce a current in said liquid toward the other end of the tank. 2nd. An apparatus for applying paint and similar coatings, comprising a tank for containing the supporting liquid, a travelling feeder at one end of the tank carrying a plurality of receptacles adapted to contain different paints, and distribute same upon the supporting liquid.

and means adapted to induce a current in said liquid toward the other end of the tank. 3rd. An apparatus for applying, paint and



similar coatings, comprising a tank for containing the supporting liquid, a revolving feeder at one end of the tank adapted to contain and distribute the paint upon the supporting liquid, and means adapted to induce a current in said liquid toward the other end of said tank. 4th. An apparatus for applying paints and similar coatings, comprising a tank for containing the supporting liquid, a travelling feeder at one end of the tank adapted to contain and distribute the paint upon the supporting liquid, and means adapted to induce a current in said liquid toward the other end of the tank. 5th. An apparatus for applying paints and similar coatings, comprising a tank for containing the supporting liquid, and of suitable form for guiding the supporting liquid in a winding current, a travelling feeder at one end of the tank adapted to contain and distribute the paint upon the supporting liquid, and means adapted to induce a current in said liquid toward the other end of the tank. 6th. An apparatus for applying paint and similar coatings, comprising a tank for containing the supplying liquid, and of suitable form for guiding the supporting liquid in a winding current, a travelling feeder at one end of the tank carrying a plurality of receptacles adapted to contain different paints, and distribute same upon the supporting liquid, and means adapted to induce a current in said liquid toward the other end of the tank. 7th. An apparatus for applying paint and similar coatings, comprising a tank for containing the supporting liquid, and of suitable form for guiding the supporting liquid in a winding current, a revolving feeder at one end of the tank adapted to contain and distribute the paint upon the supporting liquid, and means adapted to induce a current in said liquid toward the other end of the tank. 8th. An apparatus for applying paint and similar coatings, comprising a tank for containing the supporting liquid, and of suitable form for guiding the supporting liquid in a winding current, a revolving feeder at one end of the tank carrying a plurality of receptacles adapted to contain different paints, and distribute same upon the supporting liquid, and means adapted to induce a current in said liquid toward the other end of the tank. 9th. An apparatus for applying paint and similar coatings, comprising a tank for containing the supporting liquid, having a main compartment, an auxiliary compartment communicating with opposite ends of the main compartment, means at one end of the main compartment adapted to feed the paint upon the supporting liquid, and a pump adapted to induce a flow of the supporting liquid through said auxiliary compartment, so as to produce a surface current in the main compartment, in a direction away from said place of feeding. 10th. An apparatus for applying paint and similar coatings, comprising a tank for containing the supporting liquid, having a main compartment, an auxiliary compartment communicating with opposite ends of the main compartment, means at one end of the main compartment adapted to feed the paint upon the supporting liquid, and a fan pump adapted to induce a flow of the supporting liquid through said auxiliary compartment, so as to produce a surface current in the main compartment, in a direction away from said place of feeding, and whereby said current may be reversed.

No. 66,201. Carburettor. (Carburateur.)



Mendon F. Schutt and Harry B. Cornish, both of Minneapolis, Minnesota, U.S.A., 13th February, 1900; 6 years. (Filed 3rd July, 1899.)

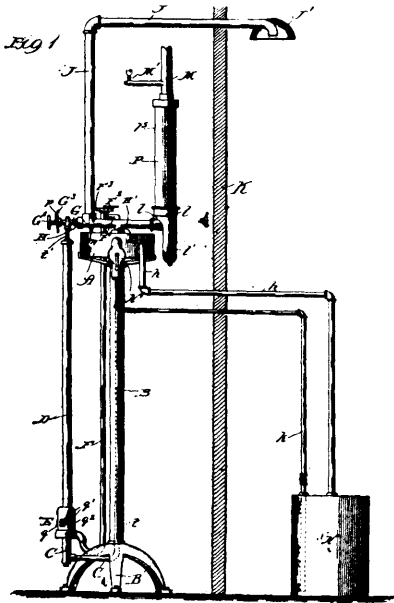
Claim.—1st. In a gas apparatus the combination with means for holding or supplying air under pressure, of means for holding a supply of gasoline or volatile fluid, a carburettor having a chamber 20¹, air ducts connected therewith, ducts connected with said gasoline supply and with said air ducts and adapted to substantially surround the stream or current of air in each of said air ducts with gasoline at the point of juncture between said air ducts and gasoline ducts, and means whereby said air is thoroughly carburetted and carried to a supply chamber or pipe, substantially as described. 2nd. The combination, in a gas apparatus, of means for holding or supplying air under pressure, means for holding a supply of gasoline or volatile fluid, a carburettor having a chamber 20¹, and provided with ducts 21 and 22, pipes 25 connected with said ducts 21, and extending above the supply of gasoline in said gasoline supply, and a supply pipe connected therewith, substantially as described. 3rd. The combination, with a means for holding or supplying air under pressure, of a tank divided into two compartments 5 and 6, and having heads 3 and 4, said air supply connected with said compartment or chamber 5, a second pipe 12 leading from said chamber 5, and connected with a carburettor 20, having ducts 21 and 22, said ducts 22 connected with said gasoline supply and opening into said ducts 21, pipes 23 connected with said ducts 21, and extending above the level of the gasoline in said chamber 6, a supply pipe 25, and a service pipe 11, substantially as described. 4th. A gas apparatus comprising in combination, means for holding a supply of gasoline or volatile fluid, means for supplying air under pressure, means whereby a stream or current of air is confined and separated from the main body of volatile fluid and carried or conducted along, its force being utilized to draw into said means and mingle with said air current a quantity of said volatile fluid, substantially surrounding said air current or stream with said volatile fluid at the point of introduction of said volatile fluid into said air current or stream, and means whereby said air and fluid are thoroughly intermingled and said air carburetted and the resultant gas delivered to a supply pipe or chamber, substantially as described.

No. 66,202. Gas Generator. (Générateur à gaz.)

Bernhardt Carl Anderson and Louis F. Nonnast, both of Chicago, Illinois, U.S.A., 13th February, 1900; 6 years. (Filed 31st October, 1899.)

Claim.—1st. In a gas generator, the combination of an oil pressure chamber, a generator pipe communicating with the lower portion thereof, pressure means of predetermined maximum capable of forcing oil to a given height in said pipe, an extension to said generator pipe provided with a service burner above the level to which the oil is capable of being raised by said pressure, and a heater for the generator pipe at a sufficient distance below the highest possible oil level in said pipe to afford the desired pressure, said generator pipe being without communication with the external atmosphere

below the level to which the oil is capable of rising therein, substantially as and for the purpose specified 2nd. In a gas generator,

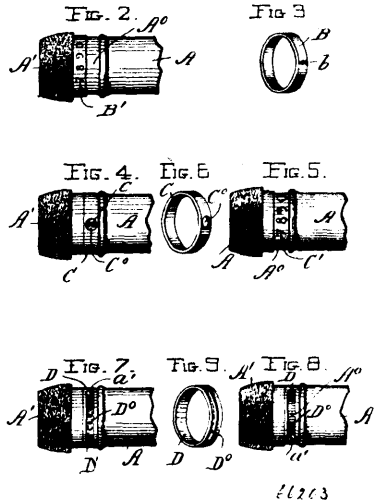
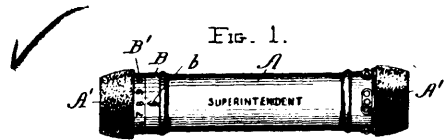


66202

the combination of an oil pressure chamber, a generator pipe communicating with the lower portion thereof, pressure means capable of forcing oil to a given height in the generator pipe, a generator pipe heater below the highest oil level in said generator pipe, a service pipe, and a valve above said highest attainable oil level regulating the passage of gas to the service pipe, said generator pipe being without orifice below said valve, substantially as and for the purpose set forth. 3rd. In a generator, the combination of an oil chamber, a generator pipe communicating with the lower portion thereof, a burner for said generator pipe, a gas supply pipe for said burner communicating with the upper portion of said oil chamber, a service pipe, and a pipe section connecting service pipe and generator pipe and in communication with said oil chamber, and means for regulating the flow of gas, substantially as and for the purpose set forth. 4th. In a gas generator, the combination of an oil chamber, a generator pipe communicating with the lower portion thereof, a heater for the generator pipe below the highest attainable oil level therein, a service pipe, a pipe section connecting service pipe and generator pipe, a valve between said generator pipe and said pipe section above the oil level, and an air inlet pipe communicating with said pipe section adjacent to said valve, said generator being without external orifice below the highest attainable oil level, substantially as and for the purpose set forth. 5th. In a gas generator, the combination of an oil chamber, a generator pipe communicating with the lower portion thereof, a burner for the generator pipe below the highest oil level therein, a gas supply pipe for said burner communicating with said oil chamber above the oil level, a valve for the gas supply pipe, a pipe section extending above and across said oil chamber in communication with the upper portion of said chamber, and a valve between said pipe section and the generator pipe, substantially as and for the purpose set forth. 6th. In a gas generator, the combination of an oil chamber, a generator pipe communicating with the lower portion thereof, a burner for the generator pipe below the highest attainable oil level therein, a gas supply pipe for said burner communicating with said oil chamber above the oil level, a valve for the gas supply pipe, a pipe section extending above and across said oil chamber in communication with the upper portion of said chamber, a valve between said pipe section and the generator pipe, an annular ring on the interior of said pipe section, an induction pipe of relatively small cross section adjacent to said valve and having gas tight connection with said ring, an air inlet pipe communicating with said pipe section adjacent to said valve, and a drain pipe for said pipe section between said ring and said valve, said drain pipe extending beneath the oil level in said chamber, substantially as and for the purpose set forth. 7th. In a gas generator, an oil chamber, a generator pipe communicating with the lower portion thereof, a burner for said pipe below the highest attainable oil level, a service pipe, a pipe section connecting generator pipe to service pipe, and in communication with the upper portion of said oil chamber, a valve between generator pipe and said pipe section above the oil level, and a device for collecting condensed oil and impurities and separating the former from the latter, said device for collecting condensed oil and impurities being con-

nected with said service pipe and the oil supply in a manner to cause the return of the oil to its source, substantially as and for the purpose set forth. 8th. In a gas generator, the combination of an oil chamber, a generator pipe extending above the oil level of said oil chamber, a heater for said generator pipe, a pipe H¹ in communication with said oil chamber, a service pipe, and an interposed collecting device connected with the pipe H¹, comprising elbow l supplied with diaphragm l¹ and a trap l², passage l² communicating with said trap through a perforation l³, enlarged pipe or chamber l⁴, inner pipe l⁵ and drain pipe l⁶, substantially as and for the purpose set forth. 9th. In a gas generator, the combination of an oil chamber, a generator pipe, a burner for the generator pipe, a gas supply pipe connecting said burner to said chamber above the oil level, an oil reservoir, means for transferring oil to said chamber and for agitating the oil in said chamber, and an extension to said generator pipe supplied with a service burner and in communication with the upper portion of said chamber, substantially as and for the purpose set forth. 10th. In a gas generator, the combination of elevated oil chamber A, a support therefor, U-shaped pipe C connected with the lower portion of said chamber, generator burner E provided with chimney D inclosing the rising portion of said U-shaped tube, horizontally disposed pipe H¹ supported by and in communication with the upper portion of chamber A, valve G¹, gas supply pipe F provided with valve F¹, and collecting device P, substantially as and for the purpose set forth.

No. 66,203. Pneumatic Carrier. (*Transmetteur pneumatique.*)



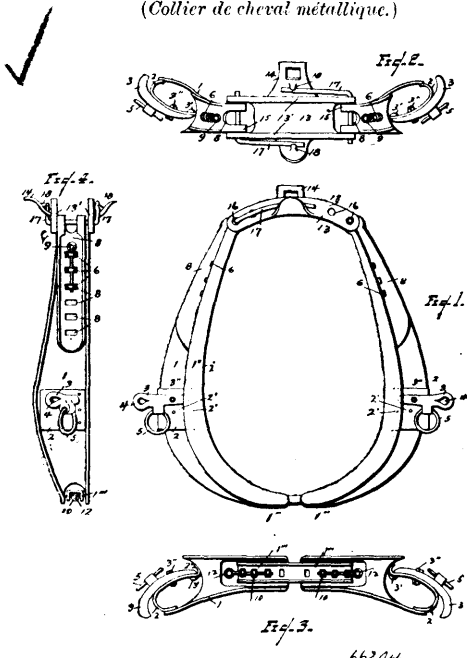
66203

The Lamson Consolidated Store Service Company, Newark, New Jersey, assignee of John Alexis Mud, the United States Navy Yard, Brooklyn, New York, U.S.A., 13th February, 1900; 6 years. (Filed 30th January, 1900.)

Claim.—1st. A carrier for pneumatic despatch systems, having a series of characters or marks thereon corresponding to stations in the system, in combination with an adjustable band surrounding the carrier and provided with means for indicating any single one of said characters or marks, substantially as described. 2nd. The combination with a carrier for pneumatic despatch systems, said carrier having an annular surrounding groove thereon, and devices displayed thereon corresponding to a series of stations in the system, of a ring fitting closely within said groove and adjustable about the carrier body, said ring being provided with means for indicating a single one of said devices, substantially as set forth. 3rd. A carrier for pneumatic despatch systems, comprising a cylindrical body, and a ring surrounding and fitting closely upon the said body adjustable thereon about the said body, the said carrier and the said ring being provided with an indicator co-operating with a series of characters corresponding with stations in the system whereby the adjustment of the ring effects an indication of a particular station as the designation for the carrier. 4th. The combination with a cylindrical carrier for despatch tube systems, of an adjustable ring permanently mounted upon said carrier, and devices indicating a particular station by the adjustment of the ring, substantially as described.

No. 66,204. Metal Horse Collar.

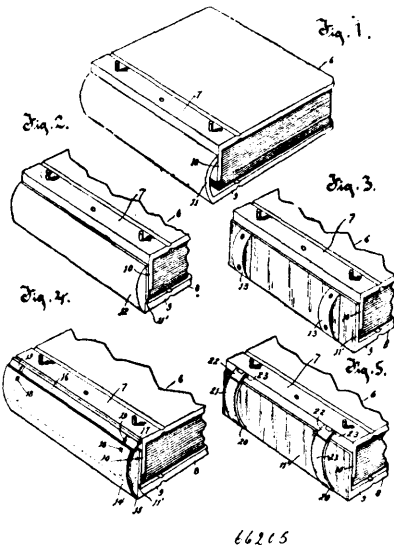
(*Collier de cheval métallique.*)



John B. Howell and Eugene O. Spalding, both of Cairo, U.S.A., 13th February, 1900; 6 years. (Filed 31st January, 1900.)

Claim.—1st. In a metal horse collar, the bow 2 provided with two or more pairs of holes for receiving a tug attachment, and a tug attachment provided with a bent inner end arranged to enter one of a pair of holes, and with a hole for the single bolt, whereby the tug attachment may be adjusted by removing and replacing a single bolt, substantially as described. 2nd. In a metal horse collar, the adjusting bars 8 8, a metal pad 13, provided with lug 18, and the pins 17 having bent portions adapted to spring within the lugs 18, substantially as described.

No. 66,205. Temporary Binder. (*Relieure temporaire.*)



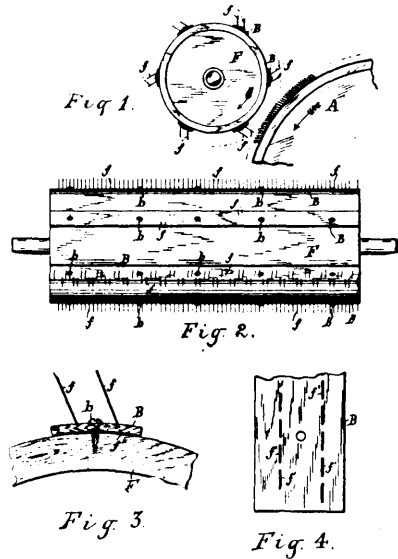
Henry C. Miller, Milwaukee, Wisconsin, U.S.A., 13th February, 1900; 6 years. (Filed 8th January, 1900.)

Claim.—1st. In a back for a binder, or other book, the combination with movable cover sections, of curved overlapping back sections, the convexity of the curves being outermost, and said back sections hinged, respectively, to the cover sections and sliding fitted together, whereby as the cover sections are moved closer together or farther apart, a continuous rounded contour of the back is preserved. 2nd. In a back for a binder, or other book, the combination, of movable cover sections, curved overlapping back sections, the convexity of the curves being outermost, and said back sections hinged,

respectively, to the cover sections and slidingly fitted together, whereby, as the cover sections are moved closer together or farther apart, a continuous rounded contour to the back is preserved, and means for preventing the separation of the back sections. 3rd. In a back for a binder, or other book, the combination, with movable cover sections, of curved overlapping back sections, the convexity of the curves being outermost, and said back sections hinged, respectively, to the cover sections, and slidingly fitted together, whereby as the cover sections are moved closer together or farther apart a continuous rounded contour to the back is preserved, one of said back sections provided with a projecting pin or pins, and the other back section with a slot or slots to receive the pin or pins.

No. 66,206. Card Clothing for Fancy Rolls.

(*Carte pour carduses.*)



John Henry Crowther, Auburn, New York, U.S.A., 13th February, 1900; 6 years. (Filed 26th October, 1899.)

Claim.—1st. The combination of the fancy roller, strips of wood extending longitudinally of the roller and secured to its periphery, and straight flexible wire teeth extending through the strips, as set forth. 2nd. The combination of the fancy roller, strips of wood extending longitudinally of the roller and secured to its periphery, and flexible wire staples extending through the strips and in an inclined direction, and having their connections between the legs lying between the strips and the roller, as set forth. 3rd. The combination of the fancy roller, strips of wood extending longitudinally of the roller and secured to its periphery, said strips being curved in cross section, and flexible wire staples extending through the strips in parallel rows and having their connections between the legs lying between the strips and the roller, substantially as described and shown. 4th. The combination of the fancy roller, strips of wood extending longitudinally of the roller, separated from each other, equal distances apart, said strips being curved in cross section, and straight flexible wire staples extending through the strips in an inclined direction, and screws securing the strips to the periphery of the roller, the connections between the legs of the staples lying between the strips and the roller, substantially as described and shown. 5th. In card clothing for fancy rollers, a strip of wood curved in cross section, a series of holes extending longitudinally of the strip and passing through the same in an inclined direction, and flexible wire staples with straight legs extending through the strip, substantially as described and shown. 6th. In card clothing for fancy rollers, a strip of wood curved in cross section, a series of holes extending longitudinally of the strip and passing through the same in an inclined direction, and flexible wire staples with straight legs extending through the holes, said holes being larger than the wire, as set forth.

No. 66,207. Scale Fulcrum and Bearings.

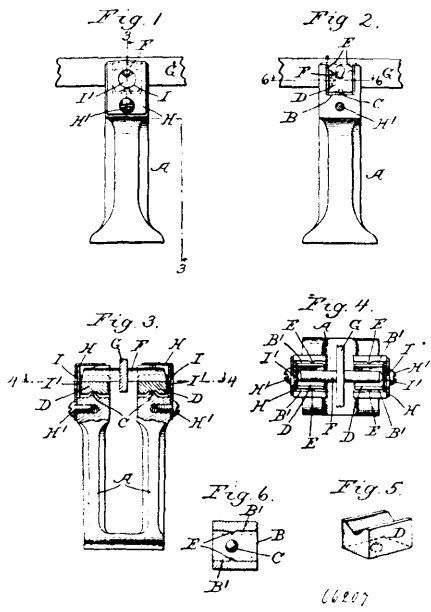
(*Support et coussinet de balance.*)

Edwin Finn, Elkhart, Indiana, U.S.A., 13th February, 1900; 6 years. (Filed 13th June, 1899.)

Claim.—1st. In a scale, a bearing including a bearing block and a support on which it is adapted to oscillate, one of said parts having a projecting pivot point and the other a tapering recess adapted to seat the pivot point, the surface of the block being grooved opposite the pivot point to receive a knife edge trunnion of a scale beam, the block being free to oscillate vertically in the direction of such groove, and means for holding the block against oscillation in a transverse

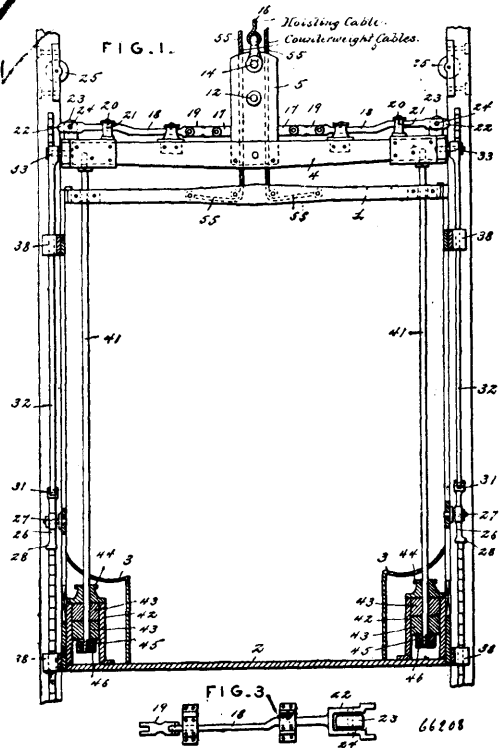
direction. 2nd. In a scale, a bearing, including a bearing block and a pivotal support upon which it is adapted to oscillate, one of

No. 66,208. Elevator. (Elevateur.)



66207

said parts having a pivotal point projecting from its surface and the other having a recess in its surface to receive the projecting point, the top surface of the block being grooved centrally in direction of its length to receive a scale beam trunnion, the block being free to oscillate vertically in direction of its length, and means for holding the block against oscillation in direction of its width. 3rd. An improved scale bearing, including a bearing block having a raised central pivotal support upon which it is adapted to oscillate horizontally, the top surface of the block being grooved centrally in direction of its length to receive a scale trunnion, the block being free to oscillate vertically in the direction of its length, and means for holding the block against oscillation in the direction of its width, substantially as shown and described. 4th. An improved scale bearing, including a bearing block, and aligned bottom and side bearings over and between which, respectively, the block is mounted, whereby the same is adapted to oscillate vertically and horizontally, substantially as shown and described. 5th. In a scale, a bearing block having a swivel joint bottom bearing, and knife edged side bearings aligned transversely with such swivel point bearing, whereby such bearing block is adapted to oscillate on said swivel point bearing both horizontally and in longitudinal plane vertically. 6th. An improved scale bearing, including a support formed with a socket, a bearing block pivoted centrally above the socket bottom and of less width than the socket so as to oscillate horizontally therein, the block being capable of free vertical oscillation in the direction of its length, and means for holding the block against vertical oscillation in the direction of its width, substantially as shown and described. 7th. An improved scale bearing, including a bearing block formed with a central bottom depression, a cone bearing upon which the depressed bottom is centred and oppositely facing upright knife edge bearings adapted to engage opposite sides of the bearing block, whereby the latter is sustained in upright position and capable of frictionless vertical and horizontal oscillation, substantially as set forth. 8th. An improved scale bearing, including a support formed with a socket, a nib raised centrally from the socket bottom, a bearing block centred on the nib and of less width than the socket so as to oscillate horizontally therein, the block being grooved centrally on its top from end to end and capable of vertical oscillation in the direction of the length of the groove, and bearings on opposite sides of the block for maintaining the same in upright position and against oscillation in the direction of its width, substantially as shown and described. 9th. An improved scale bearing comprising a bifurcated fulcrum post having vertically inwardly extending vertical projections, on opposite sides of the bifurcation, and a bearing block within and of less width than the bifurcation, and centred at a point in line with the said inwardly extending vertical projections, substantially as shown and described. 10th. An improved scale bearing comprising a bifurcated fulcrum post having vertical inwardly extending projections on opposite sides of the bifurcation, and a bearing block between said projections, and centred above the bifurcation bottom, whereby said block is held in upright position and free to oscillate vertically and horizontally, substantially as shown and described.

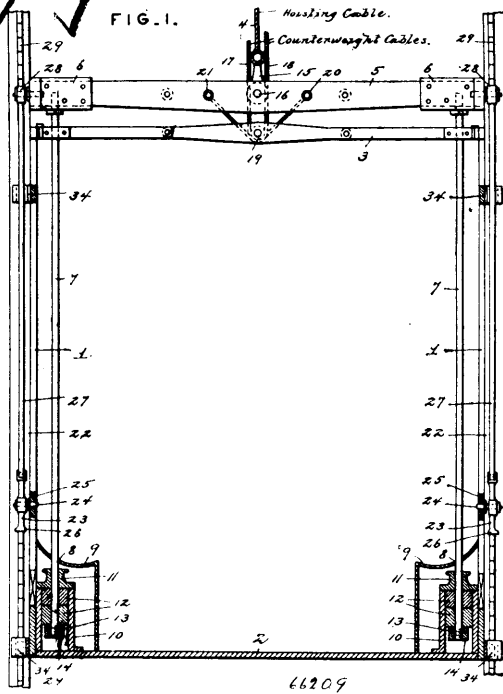


66208

John Fletcher, Philadelphia, Pennsylvania, U.S.A., 13th February, 1900; 6 years. (Filed 1st February, 1900.)

Claim.—1st. The combination with an elevator car, of a shackle comprising pivoted jaws, jaw actuating rods connected thereto and carried by the car, and means within the elevator shaft for actuating said rods and releasing the jaws of the shackle from the hoisting cable, substantially as described. 2nd. The combination with an elevator car, and guides on which the same moves, of a shackle connected with the car and comprising relatively movable jaws, jaw actuating rods extending in opposite directions from the jaws toward the guides, and co-operating devices on the rods and guides, substantially as and for the purpose specified. 3rd. The combination with an elevator car, of a shackle connected therewith and comprising pivoted and relatively movable jaws for engaging the hoisting cable, oppositely extending rods pivotally connected to said jaws, and rollers for moving said rods inward to operate the jaws when the car reaches a predetermined point. 4th. The combination with an elevator car, of a shackle connected therewith and comprising relatively movable jaws for gripping the hoisting cable, jaw actuating rods connected to the jaws and extending therefrom in opposite directions toward the elevator guides, rollers journaled in the outer ends of said rods, and other rollers co-operating therewith and mounted on the guides, substantially as described. 5th. The combination with an elevator car, of a shackle connected therewith and comprising pivoted and relatively movable jaws, housing plates at opposite sides of said jaws provided with slots, laterally projecting pins on the jaws working in said slots, and springs engaging said pins for holding the jaws normally in gripping engagement with the hoisting cable. 6th. The combination with an elevator car, of a shackle connected therewith and comprising pivoted jaws, frame plates at opposite sides of the jaws and provided with slots, laterally projecting pins on the jaws passing through and working in said slots, spring housings arranged exteriorly of said plates, and springs within said housings operating upon the pins of the jaws, substantially in the manner and for the purpose specified. 7th. The combination with an elevator car, of guides therefor, each of said guides being of sectional construction, and comprising inner and outer plates or sections, and an intermediate section consisting of a double-faced rack bar having teeth at its opposite sides which are included and housed between and protected by the inner and outer plates or sections, the several sections being securely united, by through fastening devices, which prevent relative movement of the sections, substantially as described. 8th. The combination with an elevator car, of a shackle connected therewith and comprising jaws for gripping the hoisting cable, jaw actuating rods connected to the jaws, means for actuating said rods, guides for the rods, and a break pin connected with one of the guides and engaging an opening in the adjacent rod, substantially as and for the purpose specified.

No. 66,209. Elevator. (Elevateur.)

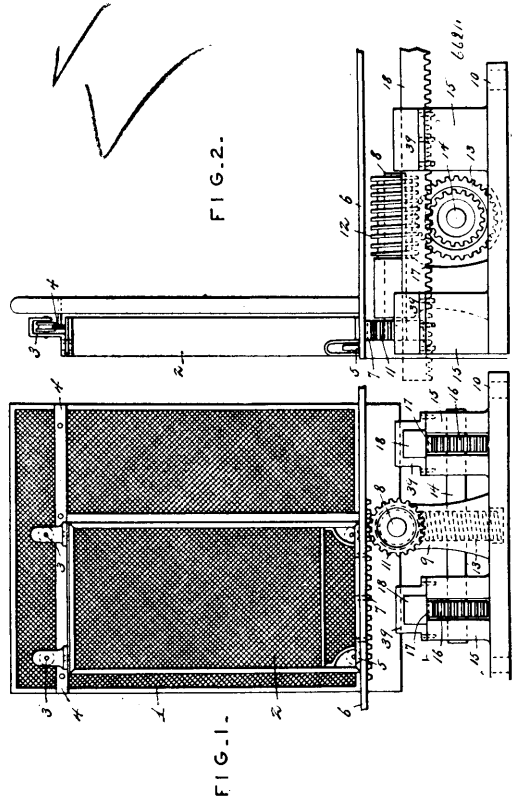


John Fletcher, Philadelphia, Pennsylvania, U.S.A., 13th February, 1900; 6 years. (Filed 1st February, 1900.)

Claim.—1st. In a safety device for elevator cars, the combination with the upper stationary cross head of a car, of a superposed cross head movable toward and away from the stationary cross head, a pair of dogs at the side of the car arranged upon opposite sides of one of the guides for co-operation therewith, rods connecting said dogs with the movable cross head, a counterweight cable connecting the two cross heads, and auxiliary means co-operating with and independently of said counterweight cable for actuating the movable cross head toward the stationary cross head upon breakage of the hoisting cable, substantially as described. 2nd. In a safety device for elevators, an elevator car having a stationary cross head, a superimposed cross head movable toward and away from the stationary cross head, a pair of dogs located on opposite sides of one of the guides for co-operation therewith, rods connecting said dogs with movable cross head, a counterweight cable connecting the movable cross head with the stationary cross head, a rod connected to the movable cross head and extending downward into the car, and a spring located within the car and connected to said rod and exerting its tension to co-operate with the counterweight cable to draw the rod downward and move the upper cross head toward the stationary cross head upon breakage of the cable, substantially as described. 3rd. In a safety device for elevators, an elevator car having a stationary cross head, a superimposed cross head movable toward and away from the stationary cross head, clutch dogs for engaging the guides at opposite sides of the elevator, rods connecting said dogs with the movable cross head, counterweight cables connecting said cross heads, rods connected to the movable cross head and extending downward into the car, spring housings arranged under the car seats and concealed thereby, and springs arranged therein, and engaging the lower ends of said rods, and acting to draw the rods downward and depress the movable cross heads upon breakage of the cable, substantially as described. 4th. In a safety device for elevators, an elevator car having a stationary cross head, a superimposed cross head by which the car is suspended, movable toward and away from the stationary cross head, clutch dogs on the car for engagement with the guides at opposite sides of the car, rods connecting said dogs with the movable cross head, a main cable connected with the movable cross head, one or more counterbalance cables extending downward past the movable cross head, under a pulley on the stationary cross head, and thence upward and attached to the movable cross head, whereby upon breakage of the cable the counterbalance cable serves to actuate the movable cross head toward the stationary cross head, and auxiliary means co-operating with said counterweight cables, substantially as and for the purpose specified. 5th. In a safety device for elevators, the combination with an elevator car, and guides therefor having teeth along their opposite sides, of shoes secured to the car and embracing said guides, each of the shoes being provided with oppositely located grooves in which the teeth are received, substantially as described. 6th. In a safety device for elevators, the combination with an elevator car, of guides at the opposite sides thereof, each guide comprising a double-

faceted rack bar and strips or sections of less width arranged upon the inner and outer surfaces of the rack bar and bolted or otherwise secured thereto, and shoes secured to the car and embracing the combined guide and double rack bar, each of said shoes being grooved to receive the teeth of the rack bar to provide oppositely located shoulders for engagement with the opposite side faces of the teeth of the rack bar, substantially as described.

No. 66,210. Elevator Lock. (Serrure d'elevateur.)



John Fletcher, Philadelphia, Pennsylvania, U.S.A., 13th February, 1900; 6 years. (Filed 1st February, 1900.)

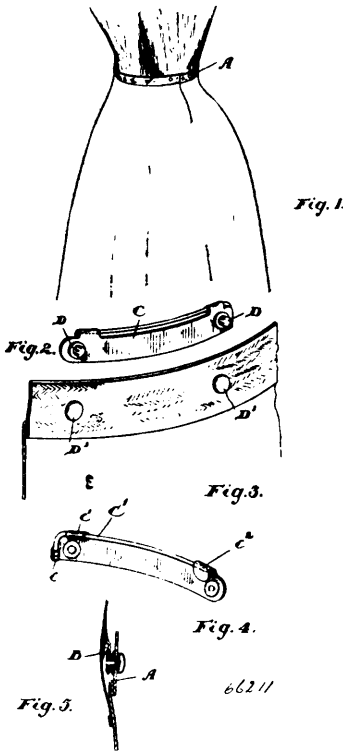
Claim.—1st. The combination with an elevator door and a rack bar carried thereby, of a sliding bolt made in rack bar form and adapted to be projected beneath the car, and gearing interposed between and connecting the rack bar on the door with said bolt for actuating the latter as the door is opened and closed, substantially as described. 2nd. The combination with an elevator door, of a rack bar secured to the bottom thereof, bolts adjacent to the elevator shaft and adapted to be moved into the path of the car, and a bolt actuating shaft operatively connected with and actuated by the rack bar on the door, substantially as described. 3rd. The combination with an elevator door, of a rack bar secured thereto, a bolt adjacent to the elevator shaft and adapted to be projected into the path of the car, a bolt actuating shaft geared to said bolt, and gearing interposed between said shaft and the rack bar on the door, substantially as and for the purpose specified. 4th. The combination with an elevator door provided with a toothed rack, of a bolt adjacent to the elevator shaft and adapted to be projected into the path of the car and movable at right angles to the plane in which the door moves, a bolt actuating shaft parallel to the line of movement of the door and geared to said bolt, a second shaft arranged at right angles to the path of movement of the door and actuated by the toothed rack thereon, and gearing interposed between said shafts and adapted to operate, substantially in the manner and for the purpose specified. 5th. The combination with a slidable elevator door, of a reciprocatory bolt adapted to be slid into and out of the path of movement of the car, and means controlled by the sliding movement of the car door for reciprocatory said bolt, substantially as specified.

No. 66,211. Shirt Waist Holder and Skirt Supporter. (Porte ceinture de corage et support de jupes.)

Jane Elizabeth Hovenden, Toronto, Ontario, Canada, 13th February, 1900; 6 years. (Filed 1st February, 1900.)

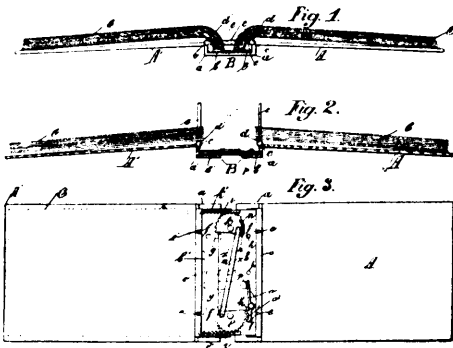
Claim.—1st. A shirt waist holder and skirt support comprising a curved plate with a fastening pin designed to extend through the band of the waist and fasteners held in the ends of the plate and correspondingly co-acting fasteners held in the band of the skirt, as

and for the purpose specified. 2nd. A shirt waist holder and skirt support comprising a flat curved plate with a pin extending longi-



tudinally at the top thereof to fit through the band of the waist and having spring stems secured near the ends thereof and sockets fastened in the band of the skirt and designed to receive the stems, as and for the purpose specified. 3rd. The combination with a flat plate curved to fit the waist, the pin held in lips at one end thereof and designed to extend through the waist and be secured in position under an overhanging lip formed from the plate, the spring ball-shaped fasteners secured in the ends of the plate and the receiving sockets secured in the waist band of the skirt, as and for the purpose specified.

No. 66,212. Temporary Binder. (Relieure temporaire.)



Frederick Michael Mees, Chicago, Illinois, U.S.A., 13th February, 1900; 6 years. (Filed 8th January, 1900.)

Claim.—1st. In a temporary binder, the combination of a back formed of longitudinal sections connected to adapt them to be spread apart and forced together, covers hinged to the outer edges of said back sections, two rock shafts, one journaled on each back section near its outer edge, and filing pins carried by said rock shafts to cause each pin on one rock shaft to coincide with another with which it telescopes on the other rock shaft, whereby spreading apart said back sections withdraws from each other the coincident filing pins to enable them, by turning both rock shafts, to be turned into upright position, and forcing together said back sections causes the opposite coincident filing pins to telescope one another, substantially as described. 2nd. In a temporary binder, the com-

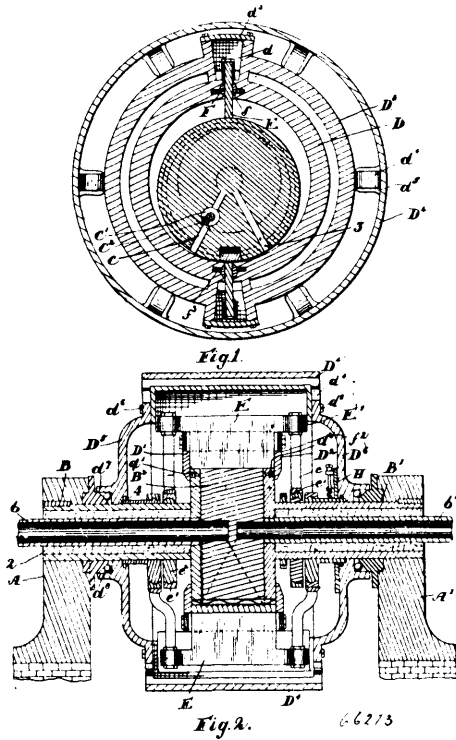
bination of a back formed of rigid longitudinal sections of rectangular cross section, reinforced with metal lining plates projecting and mutually overlapping beyond the adjacent edges of said sections, covers hinged to the outer edges of said back sections, two rock shafts, one journaled on each back section near its outer edge, and filing pins on said rock shafts adapted to telescope one with the other by turning them into alignment across the back and forcing the back sections together, and to be separated to assume upright position by spreading apart said back sections, substantially as described. 3rd. In a temporary binder, the combination of a back formed of connected longitudinal sections adapted to be spread apart and forced together, covers hinged to the outer edges of said back sections, two rock shafts, one journaled on each back section near its outer edge, filing pins on said rock shafts adapted to telescope one with the other by turning them into alignment across the back and forcing the back sections together, and to be separated to assume upright positions by spreading apart said back sections, racks on opposite ends of one back section and cog wheels pivoted on the other back section to engage said racks, substantially as described. 4th. In a temporary binder, the combination of a back formed of connected longitudinal sections adapted to be spread apart and forced together, covers hinged to the outer edges of said back sections, rock shafts journaled near the outer edges of the back and carrying filing pins adapted to telescope one with the other by turning them into alignment across the back and forcing the back sections together, and to be separated to assume upright positions by spreading apart said back sections, racks on opposite ends of one back section, connected cog wheels from opposite sides of their pivots, substantially as described. 5th. In a temporary binder, the combination of a back formed of connected longitudinal sections adapted to be spread apart and forced together, covers hinged to the outer edges of said back sections, two rock shafts journaled on each back section near its outer edge, filing pins on said rock shafts adapted to telescope one with the other by turning them into alignment across the back and forcing the back sections together, and to be separated to assume upright positions by spreading apart said back sections, racks on opposite ends of one back section to engage said racks, and a cam-controlled spring-pressed locking finger supported to engage with one of said cog wheels, substantially as described. 6th. A temporary binder, comprising in combination, a back formed of rigid longitudinal sections of rectangular cross section reinforced with metal lining plates projecting and mutually overlapping beyond the adjacent edges of said sections, covers hinged to the outer edges of said back sections, rock shafts journaled at the junctions of said covers and back sections and carrying filing pins *e* and tubular filing pins *e'* adapted to telescope by turning them into alignment across the back and forcing the back sections together, and to be separated to assume upright positions by spreading apart said back sections, guide flanges at opposite ends of one of said plates to receive the corresponding ends of the other plate, racks in said guide flanges, and connected cog wheels pivoted on said other plate to engage said racks, substantially as described.

No. 66,213. Rotary Engine. (Machine rotatoire.)

Alfred Kitchen, Dunnville, Ontario, Canada, 13th February, 1900; 6 years. (Filed 1st February, 1900.)

Claim.—1st. In a rotary engine, the combination with the main stationary shaft and the solid cylinder attached to or forming part of same located intermediate of its length and eccentric thereto, of the inlet and exhaust passageways extending through the shaft, the radial inlet and exhaust ports extending therefrom to the periphery of the solid cylinder, the rotatable cylinder concentric to the shaft forming a crescent-shaped steam chamber and supported on suitable bearings and the radial pistons suitably held in the cylinder, and means for imparting a rotary movement thereto to follow the periphery of the solid cylinder in their rotation, as and for the purpose specified. 2nd. In a rotary engine, the combination with the main stationary shaft and the solid cylinder attached to or forming part of same located intermediate of its length and eccentric thereto, of the inlet and exhaust passageways extending through the shaft, the radial inlet and exhaust ports extending therefrom to the periphery of the solid cylinder, the rotatable cylinder concentric to the shaft forming a crescent-shaped steam chamber and supported on suitable bearings and the radial pistons suitably held in the cylinder, means for imparting a rotary movement thereto to follow the periphery of the solid cylinder in their rotation and the packing dog at the point of contact of the solid cylinder with the internal periphery of the rotating cylinder, as and for the purpose specified. 3rd. In a rotary engine, the combination with the main stationary shaft and the solid cylinder attached to or forming part of same located intermediate of its length and eccentric thereto, of the inlet and exhaust passageways extending through the shaft, the radial inlet and exhaust ports extending therefrom to the periphery of the solid cylinder, the rotating cylinder concentric to the shaft forming a crescent-shaped steam chamber, the radial pistons suitably held in the cylinder, the encompassing casing attached to or forming part of the rotating cylinder and supported in suitable bearings on the stationary shaft and means for imparting a radial movement to the radially arranged pistons, so that they follow the periphery of the

solid cylinder, as and for the purpose specified. 4th. In a rotary engine, the combination with the main stationary shaft and the



solid cylinder attached to or forming part of same located intermediate of its length and eccentric thereto, of the inlet and exhaust passageways extending through the shaft, the radial inlet and exhaust ports extending therefrom to the periphery of the solid cylinder, the rotating cylinder concentric to the shaft forming a crescent-shaped steam chamber, the radial pistons suitably held to the cylinder, the encompassing casing attached to or forming part of the rotating cylinder and supported in suitable bearings on the stationary shaft and provided with recesses to allow the reciprocation of the radial pistons and means for imparting a radial movement to the radially arranged pistons, so that they follow the periphery of the solid cylinder in their rotation, as and for the purpose specified. 5th. In a rotary engine, the combination with the main stationary shaft and the solid cylinder attached to or forming part of the same located intermediate of its length and eccentric thereto, of the inlet and exhaust passageways extending through the shaft, the radial inlet and exhaust ports extending therefrom to the periphery of the solid cylinder, the rotating cylinder concentric to the shaft forming a crescent-shaped steam chamber, the radial pistons suitably held to the cylinder, the encompassing casing attached to or forming part of the rotating cylinder and supported in suitable bearings on the stationary shaft and provided with recesses to allow of the reciprocation of the radial pistons, means for imparting a radial movement to the radially arranged pistons, so that they follow the periphery of the solid cylinder in their rotation and the outer cylindrical shell or pulley suitably connected to the rotatable casing, as and for the purpose specified. 6th. In a rotary engine, the combination with the main stationary shaft and the solid cylinder attached to or forming part of same located intermediate of its length, of the inlet and exhaust passageways extending through the shaft, the radial inlet and exhaust ports extending therefrom to the periphery of the solid cylinder, the rotating cylinder concentric to the shaft and forming a crescent-shaped steam chamber supported in suitable bearings and the radial pistons suitably held in the cylinder and provided with lateral off-sets outside the cylinder, the stationary eccentric secured to the stationary shaft and the eccentric rotatable straps and rods connected to the off-sets of the radial pistons, as and for the purpose specified. 7th. In a rotary engine, the combination with the main stationary shafts and the solid cylinder attached to or forming part of same located intermediate of its length and eccentric thereto, of the inlet and exhaust passageways extending through the shaft, the radial inlet and exhaust ports extending therefrom to the periphery of the solid cylinder, the rotatable cylinder concentric to the shaft forming a crescent shaped steam chamber and supported on suitable bearings and the radial pistons suitably held in the cylinder, means for imparting a rotary movement thereto to follow the periphery of the solid cylinder in their rotation, the valve chamber and cut-off valve located therein intermediate of the length of the inlet port, the eccentric on the stationary shaft, the strap surrounding the same and con-

nected by link to the stem of the valve, the arm connected to the eccentric, the weighted arm and rod and link connected to the aforesaid arm and the plate secured to the rotatable casing on which the said weighted arm is pivoted and the spring connecting the weighted arm to said plate, all arranged as shown and for the purpose specified. 8th. In a rotary engine, the combination with the main stationary shaft and the solid cylinder attached to or forming part of same located intermediate of its length, of the inlet and exhaust passageways extending through the shaft, the radial inlet exhaust ports extending therefrom to the periphery of the solid cylinder, the tapered hole extending through the solid cylinder, the tapered plug fitting therein and connecting with the inlet and exhaust passageways extending through the shaft, the port B², the port B³, the port B⁴ and port B⁵, designed to co-act with the inlet and exhaust ports extending through the portions of the cylinder, the rotatable cylinder concentric to the shaft, the division ring situated between the two ends of the cylinder and forming two crescent-shaped steam chambers, the radial pistons and means for imparting a radial movement thereto to follow the periphery of the said cylinder in their rotation, as and for the purpose specified. 9th. In a rotary engine, the combination with the main stationary shaft and the solid cylinder attached to or forming part of same located intermediate of its length, of the inlet and exhaust passageways extending through the shaft, the radial inlet exhaust ports extending therefrom to the periphery of the solid cylinder, the tapered hole extending through the solid cylinder, the tapered plug fitting therein and connecting with the inlet and exhaust passageways extending through the shaft, the port B², the port B³, the port B⁴ and port B⁵, designed to act with the inlet and exhaust ports extending through the two portions of the double cylinder, the rotatable cylinder concentric to the shaft, the division ring situated between the two ends of the cylinder and forming two crescent-shaped steam chambers, the radial wings, means for imparting a radial movement thereto to follow the periphery of the solid cylinder in their rotation, the pipe extension of the shaft, the shoulder thereon, the threaded collar fitting against the shoulder and provided with a handle and co-acting collar fitting against the aforesaid collar and also provided with a handle for adjustment, as and for the purpose specified. 10th. In a rotary engine, the combination with the main stationary shaft and the cylinder attached to or forming part of the same located intermediate of its length and eccentric thereto, of the concentrically arranged casings supported in suitable bearings forming a crescent-shaped steam chamber and having the concentric sides thereof overlapping the stationary solid cylinder and suitable packing between such sides and the solid cylinder, as and for the purpose specified. 11th. In a rotary engine, the combination with the main stationary shaft and the cylinder attached to or forming part of the same located intermediate of its length and eccentric thereto and the concentric casing forming the crescent-shaped steam chamber, suitable pistons connected to the concentric casing deriving a radial and rotary movement, suitable inlet and exhaust port and the valve chamber and cut-off valve located in the inlet ports and suitable means for governing the movement of such valve, as and for the purpose specified. 12th. In a rotary engine, the combination with the main stationary shaft and the cylinder attached to or forming part of the same located intermediate of its length and eccentric thereto and the concentric casing forming the crescent-shaped steam chamber, suitable pistons connected to the concentric casing deriving a radial and rotary movement, suitable inlet and exhaust ports and a reverse valve situated in the solid portion of the cylinder and designed to control the admission of the steam into the crescent shaped steam chamber or chambers, as and for the purpose specified. 13th. In a rotary engine, the combination with the main stationary shaft and the solid cylindrical portions, of the concentric casings having the concentric ends overlapping the ends of the solid cylindrical portion and the intermediate concentric ring fitting into a corresponding recess in the eccentric solid cylindrical portion, as and for the purpose specified. 14th. In a rotary engine, the combination with the main stationary shaft and the solid cylindrical portions attached to or forming part of same located intermediate of its length and eccentric thereto and the revolving casing supported in suitable bearings and forming crescent-shaped steam chambers around the eccentric solid portion, of suitable inlet and exhaust ports and suitable ports leading from one crescent-shaped chamber at the exhausting point to the inlet port of the adjoining chamber in the solid cylinder as and for the purpose specified. 15th. In a rotary engine, the combination with the eccentric inner portion of the casing and the concentric outer portion forming a crescent shaped steam chamber, of the pistons, the stationary eccentrics on the shaft, the straps surrounding the eccentrics and the rods connecting them to the ends of the pistons whereby such pistons in their rotation are made to follow the periphery of the eccentric inner portion, as and for the purpose specified.

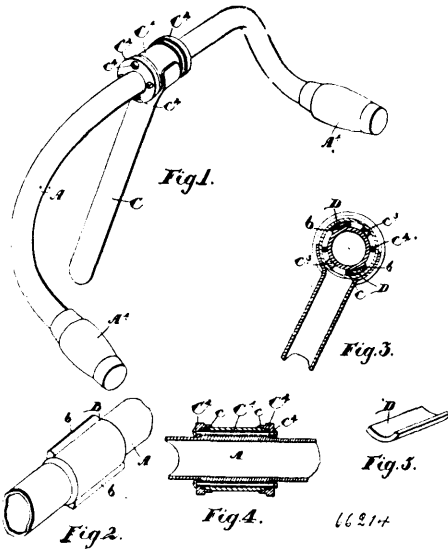
No. 66,214. Bicycle Handle Bar.

(*Mauché de barre de bicycles.*)

Archibald H. Brintnell, Toronto, Ontario, 13th February, 1900; 6 years. (Filed 7th August, 1899.)

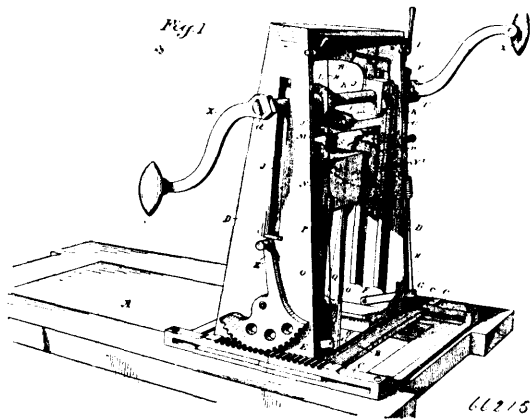
Claim.—1st. In a handle bar for bicycles, the combination with the handle bar having projection in the centre thereof, of a standard having a hollow top and projections connected internally to the top and a cushion spring or springs extending between the projection

on the handle bar and the projections in the interior of the top, as and for the purpose specified. 2nd. The combination with the handle



bar provided with a central annular enlargement having longitudinal ribs or projections, of the standard provided with a hollow cylindrical top, the end ring caps for the top through which the handle bar extends, and an arc shaped rubber spring extending between two of the rods and two of the longitudinal ribs as and for the purpose specified.

No. 66,215. Boring and Mortising Machine.
(Machine à forer et mortaiser.)



George T. Parsley and George C. Cottrell, both of Hornbrook, California, U.S.A., 14th February, 1900; 6 years. (Filed 8th January, 1900.)

Claim.—1st. In an apparatus of the character described, the combination of a main frame, a supplemental base having standards upon which the operative mechanism is mounted, guides fixed to the main frame and within which the supplemental base is slidable, and means for locking the said base including lever arms on the inner sides of the standards, and having fulcrum pins fixed to their inner ends and projecting laterally through the standards, and into grooves in the guides, and means connecting the outer ends of the

levers whereby they operate in unison to engage and disengage the locking devices. 2nd. In an apparatus of the character described, a main frame with means for holding it in position, horizontal guides fixed thereon, a supplemental base carrying standards and operative mechanism and slidable within the guides, and locking devices including lever arms at opposite sides of the base and having rigid fulcrum pins projecting at right angles therefrom and passing through the standards and engaging the guides, said pins flattened on one side and said levers connected so that they move in unison, whereby said base may be secured at any point of adjustment, rack teeth upon one of the guides, a toothed segment pivoted to the movable base and standard with its teeth engaging the rack bar whereby the apparatus may be moved and adjusted upon the main frame. 3rd. In an apparatus of the character described, a main frame, a supplemental base horizontally adjustable thereon, standards with vertical guides, a frame slidable in said guides, a crank shaft journaled across said frame, a vertical boring shaft and intermediate gears by which motion is transmitted from the crank shaft thereto, a socket in which the boring shaft and the bit shanks are fixed, a block guided and vertically movable in the frame which carries the boring mechanism, mortising chisels inclosing the bit and carried by said block, means for reciprocating the block, and means for holding the block stationary and out of operating contact with the boring shaft when no mortising is to be done. 4th. In an apparatus of the character described, vertical standards, a frame slidable therein, a horizontal crank shaft and a vertical boring shaft journaled in said frame with intermediate gears by which motion is transmitted from the crank shaft to the boring shaft, a socket fixed to the lower end of the boring shaft and adapted to receive the shank of a boring bit which is secured in its lower end, a spring pressed block slidable within the frame and through which the boring shaft and bit socket turn loosely, a cam formed upon the upper end of the bit socket, a screw plug fitting into the top of the slidable block having a corresponding cam formed on its lower end to engage the cam of the bit socket whereby the alternate pressure of the cam and the spring act to reciprocate the block. 5th. In an apparatus of the character described, a main frame, a supplemental adjustable base, with vertical standards and guides, a frame slidable in said guides carrying the crank and boring shaft as shown, a spring pressed block slidable upon guides in said frame and having sockets in its angles, mortising chisels the shanks of which fit said sockets and the blades inclose the boring bit which extends downwardly between them, a cam mechanism by which the block is raised by the rotation of the boring shaft and released and forced downwardly by the action of the spring, and a cam lever fulcrumed to the frame and engaging the block to raise it and disengage the reciprocating cams whereby the block remains stationary when no mortising is to be done. 6th. In an apparatus of the character described, a main frame, a supplemental base with standards and vertical guides and mechanism whereby it is adjustable with relation to the main frame, a frame slidable in the vertical guides with boring and mortising mechanism carried thereby and adapted to gradually move downward as the work progresses, a pinion fixed upon the crank shaft and a vertically disposed rack bar supported upon the standards and pivoted horizontal levers connected with said bar whereby it is adapted to be brought into engagement with the pinion, so that the continued rotation of the crank shaft raises the boring or mortising mechanism to the top and an automatic latching mechanism by which the sliding frame is engaged and held at said point. 7th. In an apparatus of the character described, standards having vertical guides, a frame slidable therein, boring and mortising mechanism carried upon said frame, a pinion carried by the crank shaft, a vertically disposed rack bar pivoted to horizontal levers at opposite ends whereby it may be moved into or out of engagement with the pinion, and a spring by which it is normally held out of said engagement.

No. 66,216. Insect Destroying Compound.
(Composé pour détruire les insectes.)

Walter McL. Scott, Stouffville, Ontario, 14th February, 1900; 6 years. (Filed 21st November, 1899.)

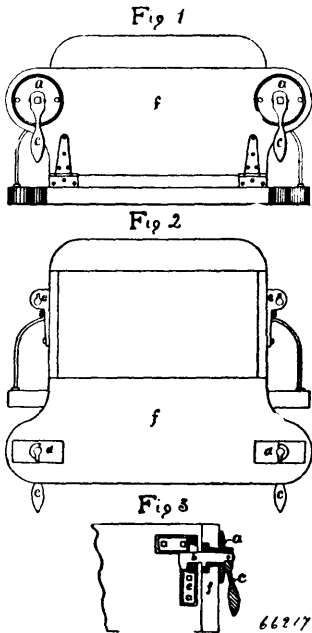
Claim.—1st. The hereindescribed composition of matter consisting of boracic acid, mag. sulph., acid carbohc (crude), acid carbohc (pure), oil of tar, caustic potash, dark liquid tobacco, and distilled liquid tobacco, substantially as described. 2nd. The hereindescribed composition of matter for destroying insects, etc., consisting of boracic acid, two pounds, mag. sulph., twenty pounds, acid carbohc (crude), one gallon, acid carbohc (pure), ten pounds, oil of tar one pint, caustic potash, five pounds, dark liquid tobacco, twenty gallons, and distilled liquid tobacco, four gallons, substantially as described.

No. 66,217. Tailboard Fastening.
(Attache pour arriere panneau de tombeureau.)

Francis L. G. Krieger, Harrierville, Ontario, Canada, 14th February, 1900; 6 years. (Filed 14th October, 1899.)

Claim.—1st. The combination of escutcheon plate A A, with stop plate D D, riveted or otherwise put together, one on the outside, the other on the inside of the tailboard. 2nd. The combination of crank C C, with crank shaft B B, and the projections thereon, the one

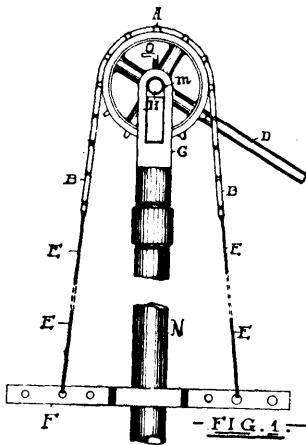
projection for striking against lock stop D D, and thereby guiding the other through key hole in striking plate E E, and turning



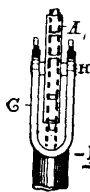
66217

behind same thus forming a secure fastening or lock, together with the said striking plate E E, fastened on waggon box as indicated in Fig. 111, the whole forming a combination necessary for working my invention.

No. 66,218. Pump Handle. (*Manche de pompe.*)



- FIG. 4 -



- FIG. 2 -

66218

James Bulpit Gay, Lucknow, Ontario, Canada, 14th February 1900; 6 years. (Filed 11th October, 1899.)

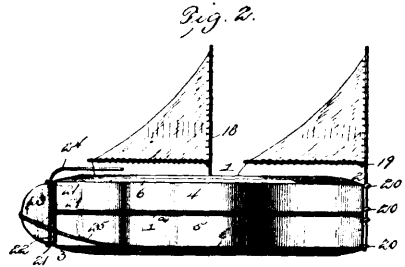
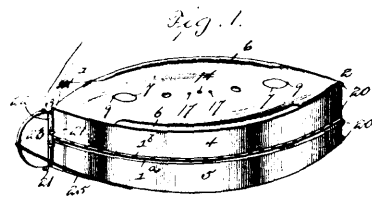
Claim.—The combination of the pipe N, handle D, sprocket wheel A, sprocket chain B B, frame C, wires E E, cross-bar F, shaft H, bearing M, and take-up screw O, substantially as and for the purposes hereinbefore set forth.

No. 66,219. Life Float. (*Canot de sauvetage.*)

Loring Willis Myers, Lubec, Maine, U.S.A., 14th February, 1900; 6 years. (Filed 19th January, 1900.)

Claim.—1st. A reversible life float comprising a closed shell consisting of side walls, and similar top and bottom portions connecting the side walls and having substantially flat exterior faces extending entirely across the float and doors arranged at the top and bottom of the float, substantially as described. 2nd. A life float comprising a hollow shell composed of sides and substantially flat top and bottom portions connecting the sides and provided with doors, and a rudder arranged at the stern of the float and extending from the top to the bottom thereof and adapted to have a tiller applied to either end of it, substantially as described. 3rd. A life float comprising a

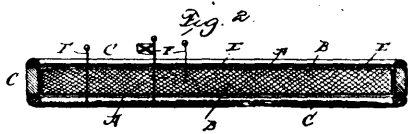
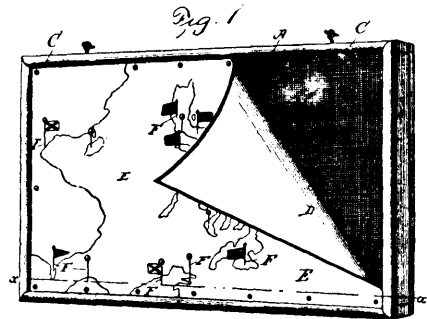
hollow shell having similar top and bottom portions and provided at opposite sides of the same with curved keels arranged at the edges



66219

of the shell, eyes arranged at the ends of the shell, the eyes of the bow being adapted to receive a mast when either top or bottom of the float is uppermost, a central tube adapted to form a step for a mainmast, and a rudder adapted to be operated from either the top or bottom of the shell and hinged to the eyes of the stern of the float, substantially as described.

No. 66,220. Educational Device. (*Appareil éducatif.*)



66220

Clarence Alburtus Evans, Chester, Pennsylvania, U.S.A., 14th February, 1900; 6 years. (Filed 26th January, 1900.)

Claim.—1st. As a new article of manufacture, a cushion for object teaching, amusement, etc., consisting of a facing or gauze, a characteristic field on said facing, a supporting mat on the back of said facing, and means for connecting said parts. 2nd. A piece of gauze, a supporting mat therefor, a characteristic field on said piece, means for connecting parts as one, and markers adapted to be inserted through said field and piece into said mat, the parts named being combined forming a device for teaching, amusement, etc., of the order stated.

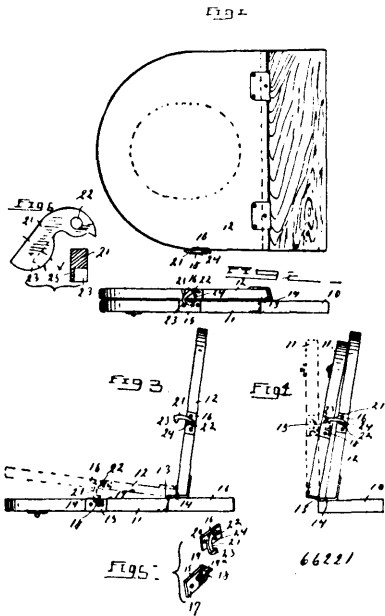
No. 66,221. Water Closet Seat. (*Siège de latrines à eau.*)

Edward Frank Chaffee, Albany, New York, U.S.A., 14th February, 1900; 6 years. (Filed 17th January, 1900.)

Claim.—1st. The combination, with a seat and a cover eccentrically pivoted, of a catch comprising two members, one mounted on the seat and having an engaging edge substantially parallel with the pivotal axis of the seat, and the other mounted on the cover and comprising a latch which normally tends to move toward the first member to engage the same, and a stop to limit said movement and

thereby positively disengage said members by reason of the relative movement of the seat and cover due to the eccentricity of their

number 51, and the outer circle of numbers extending around in an opposite direction from that of the inner circle, and beginning with



pivots, substantially as described. 2nd. The combination with a seat and a cover eccentrically pivoted, of a catch comprising two members, one mounted on the seat and having an engaging edge substantially parallel with the pivoted axis of the seat, and the other mounted on the cover and comprising a pivoted latch which normally tends to engage the first member, and a stop to limit the engaging movements of said latch and thereby disengage the same when the seat and cover are raised, substantially as described. 3rd. The combination, with the eccentrically pivoted seat and cover, of a catch comprising two members, one mounted on the seat and having an engaging edge substantially parallel with the pivotal axis thereof and a bevel or incline adjacent to said edge, and the other member mounted on the cover and comprising a latch which normally tends to move toward the first member and is adapted to be guided by the bevel or incline thereof into engagement therewith, and a stop to limit the engaging movement of the latch and disengage the same when the seat and cover are raised, substantially as described. 4th. The combination, with a hinged seat and a hinged lid or cover, the axis of the hinges being eccentric to each other, of a catch comprising two members, one carried by the seat, and the other by the cover and comprising a pivoted latch, the pivot whereof is eccentric to the engaging edge of the first member, and a stop to limit the movement of the latch toward the first member, said stop being so located as to permit the engagement of the parts of the catch when the seat and cover are down and to prevent said engagement when they are raised, substantially as described. 5th. In a device of the character described, the combination, with the eccentrically hinged seat and cover, of a catch adapted to be secured to the edges thereof and comprising a hinged latch having a hook or shoulder formed on the end thereof and the side wall of the latch being continuous along the hooked portion to provide a shield or guard for said latch, substantially as described. 6th. In a device of the character described, the combination, with the eccentrically hinged seat and cover, of a catch comprising two members adapted to be mounted respectively on the seat and cover, the one consisting of a base plate and a flange having reversely arranged bevels and engaging edges, and the other consisting of a base plate provided with a stop and a hooked latch reversely pivoted on said base plate, substantially as described.

No. 66,222. Time Calculator. (*Calculateur du temps.*)

The Metropolitan Life Insurance Company, New York City, New York, assignee of Lydia Kate Sturm, Duluth, Minnesota, U.S.A., 14th February, 1900. (Filed 10th July, 1899.)

Claim.—A device for aiding in the rapid calculation of periods of time, comprising a series of discs, the upper disc being circular and of less diameter than the lower disc, to which it is revolvably secured by a central pivot, and having an annular series of 52 numbers, arranged just within its outer circumferential line, said numbers corresponding to the consecutive monthly dates of any particular week day from January to December inclusive of any year, said numbers being separated by equidistant radial lines, and the exposed surface of the lower disc having an equal number of radial division lines, and two annular series of consecutive numbers, the inner circle of numbers extending from the character 0 to the

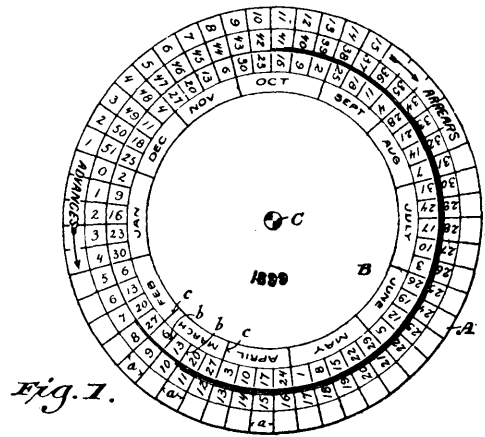


Fig. 1.

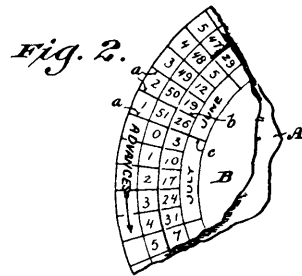


Fig. 2.

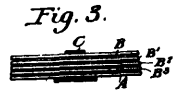
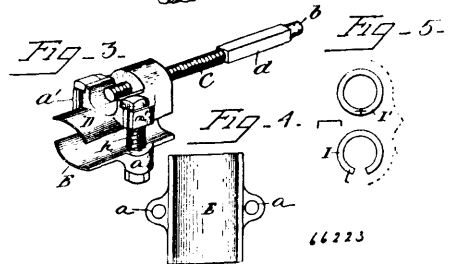
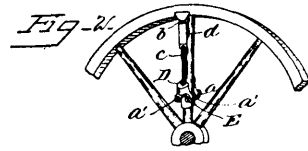
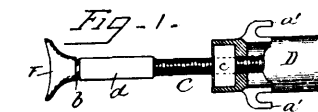


Fig. 3.

66222

number 1, the sum of any two numbers in the same radial space of the lower disc always equalling 52.

No. 66,223. Device for Tightening Spokes and Fellyes of Vehicle Wheels. (*Appareil pour serrer les rais et des roues de voitures.*)



66223

George R. Davis, St. John, New Brunswick, Canada, 14th February, 1900; 6 years. (Filed 9th August, 1899.)

Claim.—In a single legged jack for tightening fellyes, spokes and tires of vehicle wheels, the combination of cap F, slightly concaved on top, with a bone socket beneath, lifting screw C, having a nut head d, concave faced clamp D, having grasping lugs A¹, A² protruding from its sides and a female screw c, in its end, concave faced clamp E, having sleeves A, A projecting from its sides, and bolts h h, substantially as set forth.

No. 66,224. **Garment Drafting Chart.**

(Patron pour vêtement.)

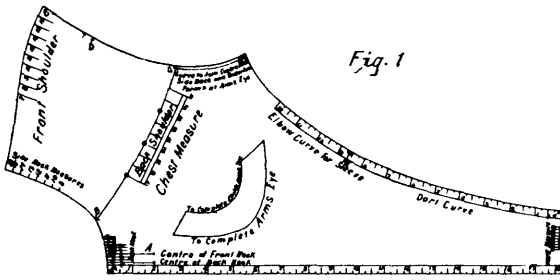
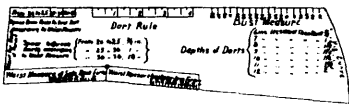


Fig. 2

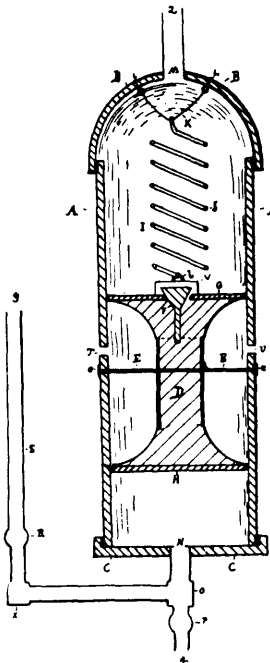


66224

Susie Reid, Dressmaker, St. Mary's, Ontario, Canada, 14th February, 1900; 6 years. (Filed 2nd October, 1899.)

Claim.—1st. A garment drafting chart consisting of the combination of a straight edge front and back, neck curves with front and back neck scales, a side neck curve with front scale, a curve and scale for front shoulder form, neck, chest, and shoulder proportions concave curve to join centre back, side back and under arm form at arm's eye, substantially as shown and described. 2nd. A garment drafting chart consisting of two separate pieces, the first of said pieces consisting of a graduated straight edge, curves situated near the middle of said first piece to complete arm's eye, an elbow curve for sleeve and also a dart curve, the second piece consists of a hip curve, a straight edge with scale for bust measure, a scale for width of side back and under arm forms, slant edge for back of forms, a scale for waist measure of side back forms, a scale for waist measure under arm forms, dart table and rules for making darts and spaces between seams, all substantially as shown and described.

No. 66,225. **Air Actuating Pump.** (Pompe à air.)



66225

Frederick Z. Bartell, Lake Benton, Minnesota, U.S.A., 14th February, 1900; 6 years. (Filed 9th October, 1899.)

Claim.—1st. The combination in an air actuated pump, of a cylinder, a double piston head therein, a coil spring for drawing the

piston up, a valve in the upper head of the piston adapted to be operated by a rod passing through the cylinder, and through a slot in the stem between the two piston heads, all as described and set forth. 2nd. Two piston heads, united by a stem, a slot extending perpendicularly along and through the stem, a rod extending through said slot and secured at its outer ends to the wall of the cylinder, all as set forth. 3rd. The combination of the double piston, G and H, the former provided with a valve F, the latter solid, a spring I, adapted to hold the piston up, means for securing the spring at its extremities, vents T and U, and a dome-shaped cap at one end of the cylinder, all as described and for the purposes specified.

No. 66,226. **Office Door Message Box.**

(Boite à messages pour bureaux.)

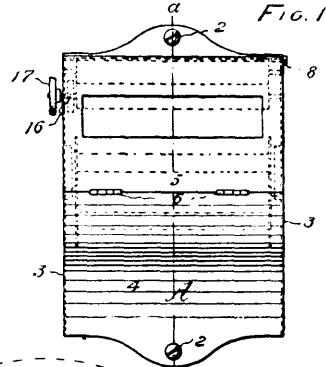


FIG. 1

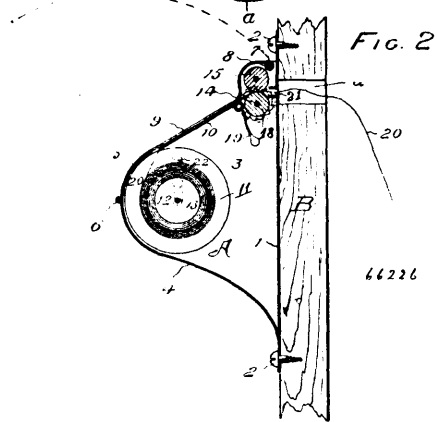


FIG. 2

66226

George Ernest Toms, Vancouver, British Columbia, Canada, 14th February, 1900; 6 years. (Filed 3rd October, 1899.)

Claim.—1st. In a device for the purposes set forth, having a closable box with an opening on its upper side for exposing the writing material of a table 10, in combination with a drum 12, for the writing material, having flanges thereon supporting the lower side of the said table, conveying rolls 14 and 15, located at the upper side of the table arranged to receive the paper therebetween, a rack and pawl mechanism to prevent the rolls from being turned backward, and a slot 21, in the rear side of the box for allowing the paper to pass through a door, as specified. 2nd. In combination with a box of the class described, having a drum 12, provided with flanges on opposite ends for holding the paper, a hinged cover designed to open outwardly, an opening 9 in said cover, a table 10 lying beneath said opening with its lower side resting on the flanges of the drum 12, rolls 14 and 15, located at the upper side of said table, means for turning said rolls forward only, and a slot 21, in the back of the box for the passage of the paper.

No. 66,227. **Pastes and Adhesive Compound.**

(Pâte et composé adhésif.)

Charles Michael Higgins, New York City, New York, U.S.A., 14th February, 1900; 6 years. (Filed 5th September, 1899.)

Claim.—1st. A compound consisting of starch in combination with a digesting salt sufficient to digest or convert the starch when the two are dissolved in hot or boiling water, substantially as herein set forth. 2nd. A compound consisting of starch in combination with a salt of alumina sufficient to digest or liquefy the starch when the two are dissolved in hot or boiling water, substantially as herein set forth. 3rd. A compound consisting of starch in combination with sulphate of alumina sufficient to digest or liquefy the starch when the two are dissolved in hot or boiling water, substantially as herein set forth. 4th. An adhesive compound consisting of a finely

divided adhesive substance in combination with a salt of alumina or its equivalent, the salt being in the proportion of one eighth or more of the weight of the adhesive, substantially as herein set forth. 5th. An adhesive compound consisting of starch, or equivalent finely divided adhesive matter, in combination with a salt of alumina or its equivalent in such proportions as will produce on solution and decomposition a substantial mass of gelatinous hydrate, substantially as and for the purpose set forth. 6th. An improved adhesive substance, consisting of starch digested in a solution of a salt of alumina, or its equivalent to a non gelatinous state, substantially as herein set forth. 7th. An adhesive compound formed of a solution of a salt of alumina or its equivalent, an adhesive substance dissolved or diffused therein, and a precipitating element producing a flocculent or gelatinous precipitate throughout the adhesive mass in the effective proportions herein specified, substantially as and for the purpose set forth. 8th. An improved adhesive compound, consisting of a solution of a salt of alumina or its equivalent, a starchy or adhesive substance dissolved or diffused therein, and an alkaline substance added thereto, in substantially the proportion herein set forth. 9th. An improved adhesive compound consisting of a starchy or adhesive substance dissolved or dissolved in a solution of a salt of alumina or its equivalent, and an alkaline borate added thereto, in substantially the proportion herein set forth. 10th. An improved adhesive paste consisting of a starchy or adhesive substance in aqueous solution, in combination with gelatinous alumina diffused through the said solution and forming a substantial part of the mass and in such proportion to the primary adhesive matter as to impart a non fluid or gelatinous consistency to the mixture, substantially as herein set forth. 11th. An improved adhesive paste formed of digested or non gelatinous starch in aqueous solution, in combination with a gelatinous hydrate such as gelatine alumina diffused through the same and in such proportion as to impart a non-fluid consistency to the said solution, substantially as and for the purpose set forth. 12th. A starch or flour paste impregnated with a gelatinous hydrate such as gelatinous alumina diffused through the same and in proportion relatively to the starch or flour as to form a substantial part of the adhesive mass, imparting body and non fluidity thereto, substantially as and for the purpose herein set forth. 13th. A paste formed of a salt of alumina, or its equivalent, water, and a starchy or adhesive substance, the salt being about one-eighth or more of the weight of the starch, substantially as herein described. 14th. A paste formed of a salt of alumina or its equivalent, water, and a starchy or adhesive substance, the salt being about one-eighth or more of the weight of the starch, and a precipitating element sufficient to neutralize the said salt or nearly so, substantially as and for the purpose set forth. 15th. The process herein described for producing an adhesive paste, viz., digesting starch in a hot solution of a salt of alumina till it becomes liquefied or non-gelatinous and then arresting the digestion and cooling the solution till it assumes a pasty form, substantially as herein set forth. 16th. The process of producing an adhesive paste, viz., dissolving or digesting a starchy or adhesive substance in solution of salt of alumina or its equivalent, then gradually adding an alkaline salt and intimately mixing the same and thereby producing a soft or gelatinous precipitate throughout the adhesive mass, substantially as herein set forth. 17th. The process herein described of treating starch in a hot solution of a salt of alumina or its equivalent until a paste is formed, and then adding an alkaline substance causing a precipitate of gelatinous alumina to become diffused through and combined with the said paste, substantially as herein set forth.

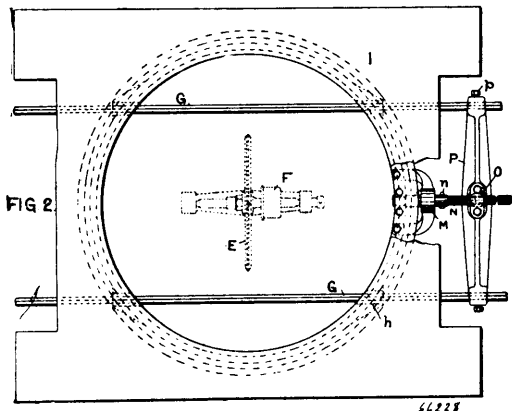
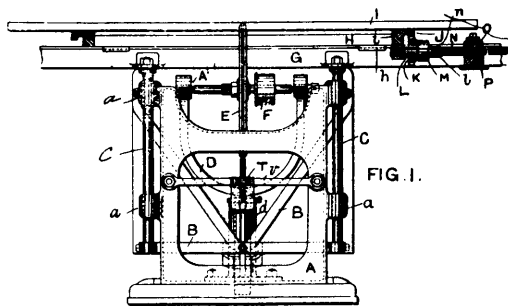
No. 66,228. Glass Cutting Machinery.

(Machine à couper le verre.)

Leonard West, Ravenhead, St. Helens, Lancaster, England, 14th February, 1900; 6 years. (Filed 6th December, 1898.)

Claim.—1st. In a machine for cutting glass, the combination with the grinding wheel and its arbour, of the frame D in which said arbour is rotatively mounted, and the fixed, socketed bearing, said frame having a foot spindle mounted adjustably in the socket, whereby the frame may be rotatively and vertically adjusted, substantially as set forth. 2nd. In a glass cutting machine, the combination of a glass carrying table, adjustable vertically and capable of horizontal movement so as to follow the lines of a given design, a revolving guider rigidly held below said table, and an adjustable device, whereby the relative heights of the surface of the table and of the grinder can be adjusted, substantially as described. 3rd. The combination of the stationary frame A, the vertically adjustable frame B, mounted thereon, the horizontally travelling table carried on the frame B, and having a face at right angles to said adjustment, means for giving the table rotary and horizontal reciprocating movements, a stationary but rotating grinder, and means for adjusting the table so that the glass thereon shall come down on the cutter, substantially as described. 4th. In a machine for cutting glass, the combination, with a rotary grinder, the horizontal rails G, the ring track H, movable on said rails, and the table I, rotatable on said track H, of means for regulating the distance of the grinder from the surface of the table I, substantially as and for the purposes described. 5th. In a machine for cutting glass, the combination of the wheel E, the table I, adjustable in height over the wheel, and means for giving said carriage both a rotary and rectilinear horizontal movement, substantially as described. 6th. The combination of the stationary, main frame A, the frame B adjustable vertically

thereon, with the lever Q, having an arm R, and the screw adjusting device U, S, substantially as described. 7th. In a glass cutting



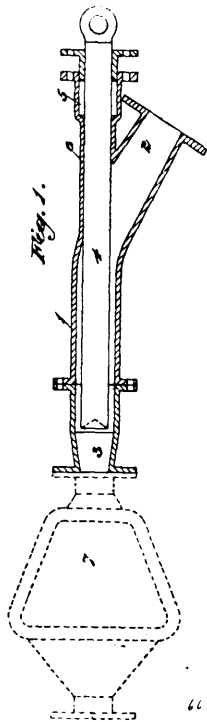
machine, the combination with the stationary frame A, a vertically adjustable frame B, mounted thereon and carrying the glass supporting mechanism, and a partially counterweighted treadle device, acting against the weight, whereby while the adjustable frame is prevented from falling below a given adjustable point, it may be freely raised above that point, substantially as described. 8th. In a machine for cutting straight and curved lines on glass, the combination with the fixed, main frame, the frame D, mounted adjustably on the main frame, the grinding wheel rotatively mounted in said frame D, the auxiliary frame B, mounted in vertical guides on the main frame, the weighted treadle lever under frame B, and a screw adjusting device for regulating the depression of said frame B, of the straight tracks G, fixed on the frame B, and a glass supporting table mounted on said tracks G and adapted for horizontal movement along said tracks, substantially as set forth.

No. 66,229. Pump. (Pompe.)

Frederick Edwards, London, Middlesex, Ontario, Canada, 14th February, 1900; 6 years. (Filed 6th December, 1898.)

Claim.—1st. A pump comprising a pump barrel, a reciprocating plunger or bucket therein, a passage between said plunger or bucket and said barrel connecting the suction and delivery pipes of the pump, unobstructed by valves or valve seats and through which water can flow during both the inward and outward strokes of the plunger or bucket with the least possible change of direction, as set forth. 2nd. A pump comprising a pump barrel, a reciprocating plunger or bucket therein, a passage between said plunger or bucket and said barrel connecting the suction and delivery pipes of the pump, unobstructed by valves or valve seats and through which water can flow with the least possible change of direction. 3rd. A pump comprising a pump barrel, a reciprocating plunger or bucket therein, a passage between the bucket or plunger and the barrel and leading from the suction to the delivery pipe of the pump, and through which water can flow unobstructedly during both the inward and outward strokes of the plunger or bucket with least possible change of direction. 4th. A pump having a bucket or plunger tapered or coned at its inner end and a passage leading from the suction to the delivery pipe of the pump and unobstructed by valves and valve seats through which passage water can flow during both the inward and outward strokes of the bucket or plunger with the least possible change of direction. 5th. A pump having a bucket or plunger tapered or coned at its inner end and a passage leading from the suction to the delivery pipe of the pump and unobstructed by valves and valve seats, through which passage water can flow with the least possible change of direction during the inward and outward strokes of the bucket or plunger and in which passage a series of vanes project towards the outlet as set forth. 6th. A pump the barrel of which is in free communication

with the suction pipe, a passage between the bucket or plunger and the barrel and connecting said suction pipe and the outlet openings



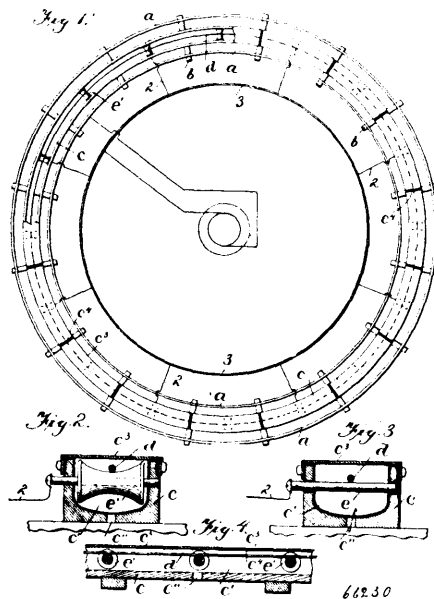
of the pump and through which water can flow during both the inward and the outward strokes of the bucket or plunger with the least possible change of direction, and a delivery valve. 7th. A pump having a bucket or plunger tapered or coned at its inner end, a passage between the bucket or plunger and the barrel through which water can always flow from the suction pipe, which is in free communication with the barrel, to the outlet opening of the pump with the least possible change of direction, and a delivery valve, as set forth. 8th. A pump having a bucket or plunger tapered or coned at its inner end, a passage between the bucket or plunger and the barrel through which water can always flow from the suction pipe which is in free communication with the barrel, to the outlet opening of the pump and a delivery valve located in an air chamber. 9th. A pump the barrel of which is in free communication with the suction pipe and which has a passage between the plunger or bucket and the barrel and connecting the suction and delivery pipes of the pump and through which water can always flow with the least possible change of direction and a discharge passage formed with a pocket or pockets, as and for the purpose specified. 10th. A pump having a passage between the plunger or bucket and the barrel and connecting the suction and delivery pipes through which water flows during both the inward and outward strokes of the pump bucket or plunger and a suction valve or a delivery valve or both adapted to be moved in and out of action. 11th. A pump comprising a barrel and a reciprocating bucket or plunger, wherein the bucket or plunger in making its suction stroke, travels in the opposite direction to the entering water and during its return stroke travels in the same direction, the water being forced through the pump by the combined action of atmospheric pressure and the inertia of the moving body of water assisted by the action of the bucket or plunger as described. 12th. A pump wherein the plunger and the pump barrel are formed each with one or more projecting rings or enlargements so arranged that the plunger ring or enlargement or rings or enlargements will come opposite that of those of the barrel at the period or periods of the stroke when greater pressure is required, as set forth. 13th. A pump comprising a barrel and a reciprocating plunger or barrel having in either, or both the plunger and barrel, recesses adapted to allow the water to enter the pump freely but to offer obstruction to the backward flow of water, as set forth. 14th. A pump having either, or both the suction or delivery pipes formed with vanes which project towards the outlet adapted to prevent backward flow of the water, as set forth. 15th. A pump comprising a reciprocating plunger and a stationary barrel, said plunger being formed at its inner end with a cup or conical recess, as and for the purpose specified.

No. 66,230. Electric Railway. (*Chem de fer électrique.*)

Harry Barringer Cox, New-York City, New York, U.S.A., 14th February, 1900; 6 years. (Filed 6th June, 1899.)

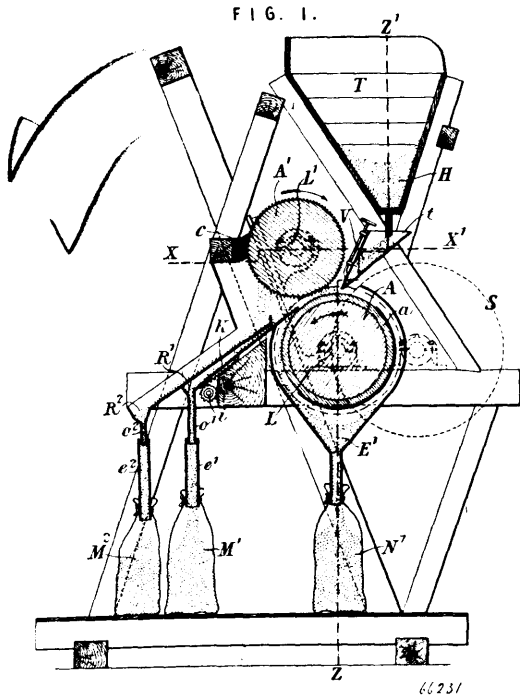
Claim.—1st. In an electric railway system, the combination of a continuous conduit formed of non-conducting and non-magnetizable

material and capped by insulated conducting sections, and a continuous live magnetizable conductor loosely and movably located



within the groove or passage of the conduit and in direct connection with a generator so that a magnet may move said conductor into electrical contact with said conducting sections, substantially as described. 2nd. In an electric railway, the combination of an insulated conduit having insulated conducting sections, a continuous magnetizable bare line conductor resting loosely in said conduit normally out of contact with said conducting sections and movable laterally and longitudinally, a magnet for moving said loose line conductor into contact with said conducting sections, and contact devices for taking off the power current from said conducting sections, substantially as described. 3rd. In an electric railway system, the combination with an insulated grooved conduit having insulated conducting sections, of a continuous live conducting wire loosely and movably arranged in said conduit and without mechanical connections which would prevent free movement of the same, substantially as described. 4th. A safety electric railway system, comprising a closed insulated conduit, a live movable line wire loosely arranged in said conduit, and raised supports of conducting material on which said line wire loosely rests at intervals and electric feeder connections to said supports at intervals. 5th. A safety electric railway system, comprising a closed insulated conduit having conducting elevated supports, a main feed conductor, feeder connections therefrom to several of said insulated supports, and a movable line wire resting loosely and movable on said supports and electrically supplied wholly or in part therefrom. 6th. A safety electric railway system, comprising a closed conduit along the track, having exposed insulated conducting sections, a live line conductor movably located in said conduit, means to facilitate the longitudinal movement of said line conductor, a main feed connection from the generator and enclosed and insulated, and feeder connections from said main feeder arranged at intervals and electrically but not mechanically connected with said line conductor. 7th. A safety electric cable railway system for a double track, comprising live line conductors for the tracks respectively, arranged in closed insulated conduits having exposed conducting sections normally electrically dead, a single main feed conductor insulated and having lateral feeder connections at intervals to both of said live line conductors, generators for said tracks respectively, each having its track return connected thereto, and both generators connected with the single main feed conductor, substantially as described. 8th. In a safety electric railway system, the combination of a closed insulating conduit having a sectional exposed conductor, a movable line wire or conductor within the conduit, and means facilitating the longitudinal movement of said line wire within the conduit, substantially as described. 9th. In a safety electric railway system, the combination of a closed insulated conduit having a sectional exposed conductor, a live line wire movably located in said conduit and means elevating said wire, and facilitating the longitudinal movement thereof, substantially as described. 10th. In combination, a sealed conduit having exposed conductors, insulated feed conductors in said conduit, an enclosed insulated main feeder outside of said conduit and provided with branch feed connections to said feed conductors, and a live line wire located in the conduit, and at intervals loosely resting on or movable contacting said feed conductors within the conduit and receiving, in whole or in part, current therefrom, substantially as described.

No. 66,231. Ore Separator. (Séparateur de minerais.)

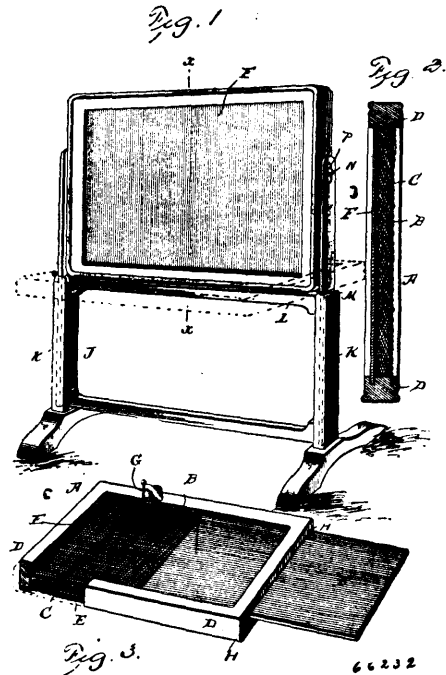


Emil Kreuser, Mechernich, Germany, 14th February, 1900; 6 years. (Filed 23rd February, 1899.)

Claim.—1st. In an electromagnetic ore separator, the combination of two opposite revolving iron cylinders of T or T-shaped section and wound as bar magnets, said cylinders being arranged one above the other, so that a space intervenes between the opposite cylindrical poles, which are of opposite sign, distance rings on the ends of the magnets which abut against each other and serve both to maintain the cylindrical polar surfaces the required distance apart and to transmit the rotary motion imparted to the one magnet in the contrary direction to the other magnet, means for supplying the pulverized ore to be separated into the spaces between the cylindrical poles of the magnets, and shoots extending into the spaces between the cylindrical poles for receiving the separated ore as it falls from the polar surfaces, substantially as described. 2nd. In an electromagnetic ore separator, the combination of two opposite horizontal revolving iron cylinders of T or T-shaped section and wound as bar magnets, said cylinders being arranged one above the other so that a space intervenes between the opposite cylindrical poles which are of opposite sign, a covering of diamagnetic material fitting tightly around the cylindrical poles of the lower magnet, so as to confine the magnetic attraction to the poles of the upper magnet, means for imparting rotary motion to the cylindrical magnets in opposite directions, means for supplying the pulverized ore to be separated into the spaces between the magnet poles, and shoots projecting into the said spaces for receiving the separated ore as it falls from the poles of the upper magnet, substantially as described. 3rd. In an electromagnetic ore separator, the combination of two opposite horizontal cylindrical bar electromagnets arranged one above the other with the spaces between their opposite poles which are of opposite sign, the said cylindrical poles of the upper electromagnet being formed with milling or flutings, while the poles of the lower magnet are covered with diamagnetic material, means for supplying the pulverized ore to be separated into the spaces between the poles of the electromagnets, and inclined adjustable shoots extending to the strongest magnetic field between the magnet poles, for receiving the separated ore as it falls from the upper magnet poles, substantially as described. 4th. In an electromagnetic ore separator, the combination of two opposite horizontal cylindrical bar electromagnets wound so as to each have poles of the same sign at each end and an intermediate pole of opposite sign in the middle, said magnets being arranged one above the other, with spaces either between the opposite end poles, the middle poles being in contact, or between the middle poles, the end poles being in contact, means for supplying the ground ore to be separated into the spaces between the said poles which are not in contact, and means for conveying away the separated ore as it falls from the magnetic poles, substantially as described. 5th. In an electromagnetic ore separator, the combination of two opposite horizontal cylindrical bar electromagnets arranged one above the other with spaces between their opposite poles which are of opposite sign, the said poles of the upper electromagnet being formed with milling or flutings, while the poles of the lower magnet are covered with a dia-

magnetic material, distance rings at the ends of said poles which abut against each other for maintaining these the required distance apart, and which are made changeable so as to vary such distance, means for supplying the pulverized ore to be separated into the spaces between the said poles, and adjustable inclined sheets for conveying away the separated ore as it falls from the poles of the upper cylinder, substantially as described.

No. 66,232. Educational Device. (Appareil éducatif.)



Clarence Albutus Evans, Chester, Pennsylvania, U.S.A., 15th February, 1900; 6 years. (Filed 2nd February, 1900.)

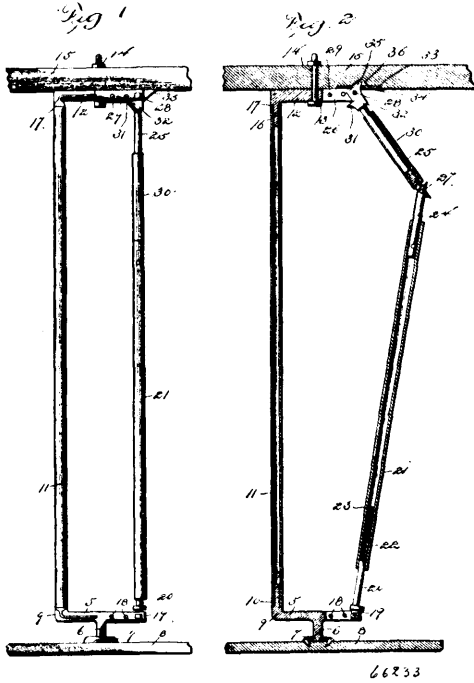
Claim.—1st. An educational device provided with two faces, one formed of a gauze or other perforated material, and the other face consisting of a blackboard, a pad interposed between said faces, and a frame connecting said parts. 2nd. An educational device of the character stated, in combination with a support formed of vertically extending sections telescopically fitted to each other, and a table top on the lower stationary section of said support, the frame of said device being mounted by a horizontal axis on the upper movable section of said support and adapted in its various adjustments to be supported by said table top. 3rd. An educational device provided with two faces, one formed of a gauze or other perforated material, and the other face consisting of a blackboard which is removable, a pad interposed between said faces, and a frame carrying said parts and provided with an opening in its side through which said blackboard is movable.

No. 66,233. Cattle Stanchion. (Stalle à bétail.)

John Hacker, Greenlake, Michigan, U.S.A., 15th February, 1900; 6 years. (Filed 2nd February, 1900.)

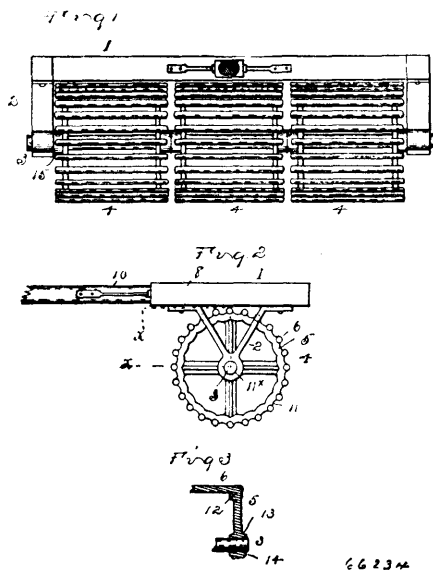
Claim.—1st. A cattle stanchion comprising a base piece and a head piece pivotally mounted, an upright fixed to the head piece and base piece, a second upright pivoted to the base piece, a rod pivotally connected with the head piece and with the second upright, and a sleeve adapted to enclose portions of the rod and the second upright to hold them rigid. 2nd. A cattle stanchion comprising a base piece and a head piece, a rod pivoted to the head piece, a rod pivoted to the base piece, a tube disposed upon the last-named rod and adapted to slide with respect thereto, a pivoted connection between the tube and the first-named rod, and a sleeve adapted to enclose said pivotal connection and extending at opposite sides thereof to hold the first rod and the tube rigid. 3rd. A cattle stanchion comprising a head piece and a base piece having an upright rigidly connected therewith, a rod pivoted to the base piece, a hollow upright disposed to receive said rod, a spring in the hollow upright and bearing at one end upon the rod, a stop for the other end of the spring, a second rod pivoted to the head piece and to the hollow upright, and a sleeve slidably mounted and adapted to enclose portions of the hollow upright and of the rod pivoted thereto. 4th. A cattle stanchion comprising a head piece and a base piece pivotally mounted, an upright fixed to the head piece and to the base piece, a second upright pivoted to the base piece, a rod pivoted to the head piece and to the second upright, and adapted to

permit movement of the second upright toward and away from the first-named upright, said rod having a portion adapted to pro-



ject beyond the head piece and hold the stanchion against pivotal movement. 5th. A cattle stanchion comprising a head piece and a base piece having an upright fixed thereto, and a second upright pivoted to the base piece and having a pivotal connection with the head piece. 6th. A cattle stanchion comprising a head piece and a base piece having an upright fixed thereto, a second upright pivotally connected with the base piece and adapted for longitudinal movement with respect thereto, and a rod pivoted to the second upright and to the head piece. 7th. A cattle stanchion comprising a head piece and a base piece having an upright connected therewith, a second upright having pivotal connection with the head piece and adapted for movement, toward and away from the base piece, a rod pivoted to the head piece and to the second upright, and a sleeve adapted to enclose portions of the rod and second upright to hold them in mutual alignment.

No. 66,234. Soil Pulverizer. (Brise-mottes.)

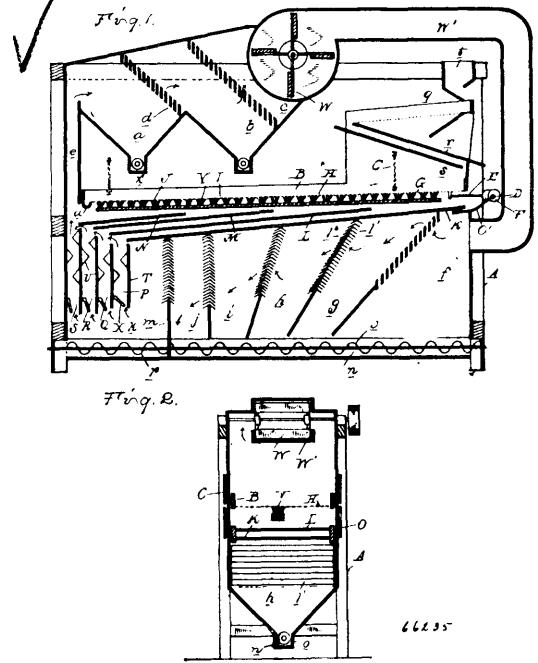


Edwin E. Porter, Canal Fulton, Ohio, U.S.A., 15th February, 1900; 6 years. (Filed 2nd February, 1900.)

Claim.—1st. In a soil pulverizer, the combination with a frame, of a transverse shaft journalled therein, and a roller carried by said

shaft, said roller comprising a series of independently mounted roll sections of narrow widths, said sections each having a pair of spiders supporting on their outer peripheries parallel bars with spaces between them, said bars interconnecting said spiders and projecting beyond said peripheries, substantially as shown and described. 2nd. In a soil pulverizer, the combination with a frame, of a transverse shaft journalled therein, and a series of roll sections mounted upon the shaft for independent rotation, each roll comprising two head sections, having formed in their peripheries a series of semicircular indentations and a series of cross bars connecting the head sections, the cross bars being arranged one in each alternate pair of indentations, substantially as and for the purpose described. 3rd. In a soil pulverizer of the kind described, a roll section comprising two head or ends, each having formed thereon adjacent to its periphery, an inwardly extending annular flange, and having a series of semi-circular indentations formed in said periphery and flange, and a series of cross bars connecting the heads, said bars being arranged one in each alternate pair of indentations, substantially as and for the purpose set forth. 4th. In a soil pulverizer, the combination with a supporting frame, of a shaft hanger depending from each side of the frame, a bearing face formed upon the inner side of each hanger in proximity to its free end, a transverse shaft arranged within the hangers, a series of roll sections mounted upon the shaft for independent rotary movement, each roll comprising two head sections, an inwardly extending annular flange upon each section forming an enlarged periphery for said sections, said periphery having a series of semi-circular indentations formed therein, a series of cross bars connecting the heads, said bars being arranged one in each alternate pair of indentations, as described, and extending some distance beyond each head, elongated hubs carried by the sections, centrally of their ends, and bearing faces formed upon the meeting ends of the hubs, all arranged and constructed in the manner and for the purposes set forth.

No. 66,235. Middlings Purifier. (Epurateur des granaux.)

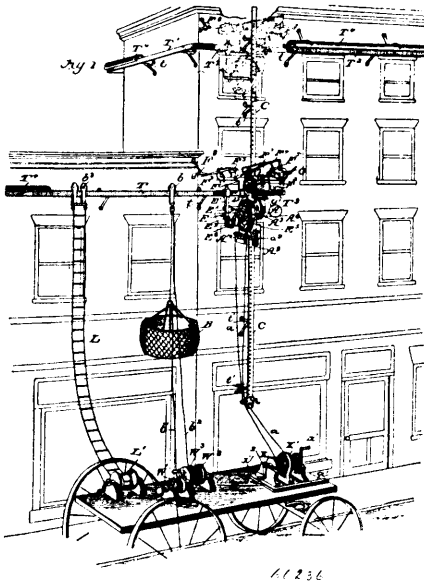


Carl G. Thompson, Huntington Indiana, U.S.A., 15th Februar J, 1900; 6 years. (Filed 2nd February, 1900.)

Claim.—1st. A purifier, comprising a series of air conduits, means for passing separated grades of the unpurified stock through the respective conduits in opposition to the air current therein, and means for independently regulating the air currents in said conduits. 2nd. A purifier, comprising a series of vertically arranged parallel air conduits, having upwardly directed air currents passing therethrough, means for delivering separate grades of unpurified stock respectively in the upper ends of said conduits, and a valve at the lower end of each conduit for independently regulating the air current passing therethrough. 3rd. A purifier, comprising means for separating the stock into a plurality of unpurified grades, a series of air conduits into the upper ends of which the separate grades of the stock are respectively delivered, means for passing air currents upwardly through said conduits and means for independently regulating the current of each conduit. 4th. In a purifier, the combination with a horizontally arranged vibratory screen having a plurality of graded screen sections, carrier aprons for collecting and delivering the graded sifting from said sections and a series of air conduits to

separate purifying air currents into which said grades are respectively delivered. 5th. In a purifier, the combination with a horizontally arranged vibratory grading screen, of an auxiliary screen carried by said grading screen onto which the stock is first delivered and delivering aprons for the siftings and tailings of said auxiliary screen arranged to deliver the latter upon the upper end of said grading screen. 6th. In a purifier, the combination of a horizontally arranged vibratory grading screen, a vibrating frame beneath said screen carrying the aprons thereon, a rotary shaft and connections between said shaft and said screen and frame respectively adapted to oppositely reciprocate the same whereby the movement of the one will counter balance the movement of the other. 7th. In a purifier, the combination of a casing, a series of lattice partitions therein forming a series of settling chambers therebetween, means for passing the dust laden air successively through said chambers and partitions for the purpose described. 8th. In a purifier, the combination of a casing, a lattice partition therein having inclined bars and means for passing the dust laden air through said partitions to impart a downwardly inclined direction thereto, for the purpose described. 9th. In a purifier, the combination of a casing, a series of lattices partitions therein forming a series of chambers, said lattice partitions comprising a series of inclined bars for imparting to the current a downwardly direction in entering said chamber, and a series of oppositely inclined bars for catching the upward currents for the purpose described.

No. 66,236. Fire Escape. (*Sanveteur d'incendie.*)

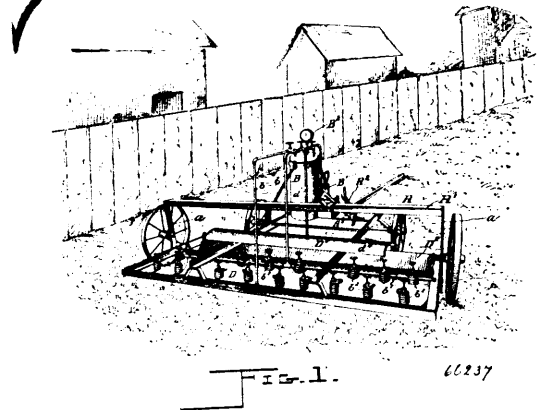


Robert Watson and Charles Edward Stevenson, both of Naniamo British Columbia, Canada, 15th February, 1900; 6 years (Filed 19th January, 1900.)

Claim.—1st. A combined brake and gear operating mechanism, consisting of a set of gears, a cable wheel connected with the same and provided with a peripheral strap brake normally held to the periphery with frictional contact, a cable surrounding the said wheel between its periphery and the strap brake, and two guide sheaves or pulleys for the cable arranged in loops of the cable as it extends from each side of the wheel, a movable device sustaining said sheaves and connected to the strap brake, said device being arranged to release the brake and operate the cable wheel with a positive movement in either direction, substantially as and for the purpose described. 2nd. The combination with a cable operated wheel, a cable, and a strap brake surrounding the same, of a pair of guide pulleys arranged in loops of the cable, and a spring actuated device carrying said pulleys arranged to normally apply the brakes from a tension of the spring and to release the brakes from a tension on the cable in operating the wheel, substantially as shown and described. 3rd. The combination with a cable operated wheel, a cable, and a strap brake surrounding the same, of a lever connected to the ends of the strap brake, a second lever with T-head bearing cable pulleys connected to the first named lever, and a spring acting upon the T-headed lever to apply the brake, substantially as and for the purpose described. 4th. The combination with a cable operated wheel, a cable and a strap brake surrounding the same, of a lever a^2 jointed to the strap brake on opposite sides of the fulcrum, the elbow lever A^2 connected to lever a^2 and having a T-head with pulleys A^3 A^3 , the stationary pulleys A^{11} A^{11} , the spiral spring a^9 , and the swing stem a^{10} , substantially as and for the purpose described. 5th. A climbing device for a fire escape or analogous purpose, comprising a fixed upright elevator bar attached to the building and provided with a continuous row of tooth seats, a main frame guided upon said bar and having a gear wheel posi-

tively engaging said tooth seats, a cable operated wheel for said gear, and a cable extending from said wheel to the ground, substantially as and for the purpose described. 6th. A climbing device for a fire escape, comprising a fixed upright elevator bar attached to the building and provided with a continuous row of tooth seats, a main frame guided upon said bar and having a gear wheel positively engaging said tooth seats, a cable operated wheel for said gear, a cable extending therefrom to the ground, and a cable guide attached to the lower end of the upright bar, substantially as and for the purpose described. 7th. The combination with the upright elevator bar, of a cable guide C^1 , consisting of a channelled plate slipping over said bar and provided with a set screw and a locking bolt, and having upon one side two sheaves C^4 C^6 , a hinged housing C^6 for the same, and an articulated screw C^7 and nut C^8 , to permit its lateral insertion and removal of the cable substantially as and for the purpose described. 8th. A fire escape comprising horizontal trolley rails, brackets for sustaining the same fixed to the upper part of a building, an upright elevator bar, with tooth seats therein, a climbing device arranged thereon and provided with a gear wheel engaging the tooth seats, means for rotating said gear wheel, and a movable trolley rail section carried by said climbing device and arranged to raise a trolley, and suspended attachments, to the level of the fixed trolley rails, and when in alignment therewith to permit the trolley rail onto the fixed trolley rail onto the fixed trolley rails substantially as and for the purpose described. 9th. A fire escape, comprising horizontal trolley rails fixed to the upper part of a building, an upright elevator bar, a climbing device arranged thereon, a movable trolley rail section carried by said climbing device and arranged to raise a trolley to the level of the fixed trolley rails, and an automatic signalling device to determine when the movable trolley rail is in alignment with the fixed trolley rails, substantially as and for the purpose described. 10th. The combination with the upright elevator bar with tooth seats and climbing gears guided thereon, of an internal gear E^5 connected to the operating gears, a hanger E^1 bearing operator's seat E , the crank axle E^3 with pinion E^4 engaging gear E^5 , and a suitable brake, substantially as and for the purpose described. 11th. The combination with the upright elevator bar and the climbing device thereon, of an ice cutter for the elevator bar consisting of a plate or frame with a T-shaped channel through it embracing the bar and giving passage to its supporting brackets, and two pairs of sharp disc cutters arranged at opposite edges and upon opposite sides of the bar, and chisel cutters or plough bits arranged between each pair of disc cutters, substantially as and for the purpose described. 12th. In combination with the fixed trolley rails on the building, the upright elevator bar and climbing devices mounted thereon and carrying a movable trolley rail, an audible signal device, a stationary arm or abutment on the building, and a signal operating device adapted to strike the said stationary arm or abutment on the building and be in turn made to sound the signal, substantially as and for the purpose described. 13th. In a fire escape of the kind described, the combination with the climbing devices carrying the movable trolley rail, the stationary trolley rails, and fixed arm or abutment on the building, of an automatic cartridge exploding device mounted on the climbing devices and operating when the trolley rail sections are in alignment, substantially as and for the purpose described. 14th. A fire escape apparatus comprising horizontal trolley rails and a vertical elevator bar permanently attached to the building, a climbing device with portable trolley rail, a trolley with cable basket and windlass, a second windlass, with cable for the climbing device, said climbing device, portable rail, trolley, basket and windlasses, being transported upon a waggon and adjusted to the fixed fire escape friction of different buildings, substantially as and for the purpose described.

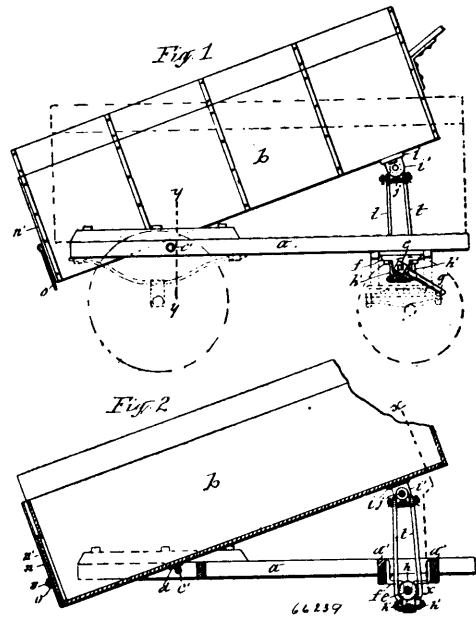
No. 66,237. Stubble Burner. (*Bruleur de chaume.*)



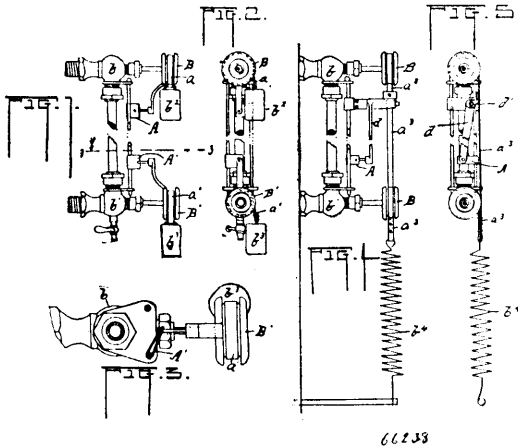
Robert Ireland, Arthur Locke Ashdown and Morris Sanford Holmes, all of Portage la Prairie, Manitoba, Canada, 15th February, 1900; 6 years. (Filed 1st February, 1900.)

Claim.—1st. An apparatus for burning stubble, comprising a frame, a reservoir for fluid fuel mounted upon said frame, a plurality of burners carried by said frame, and pipes connecting said reservoir with said burners, substantially as described. 2nd. An apparatus for burning stubble, comprising a frame, a reservoir for fluid fuel mounted upon said frame, a plurality of burners carried by said frame, and an air pump communicating with said reservoir, whereby the fluid fuel is conveyed under pressure to the burners, substantially as described. 3rd. An apparatus for burning stubble, comprising a frame, a reservoir for fluid fuel mounted upon said frame, a plurality of burners carried by said frame, a spraying device arranged on said frame in front of said burners, and feed pipes connecting said reservoir with said burners and said spraying device, substantially as described. 4th. An apparatus for burning stubble, comprising a frame, a reservoir for fluid fuel, mounted upon said frame, a plurality of burners carried by said frame, a spraying device mounted upon said frame in front of said burners, feed pipes connecting said burners and said spraying device with the reservoir, and guards pivotally connected to said frame and located in front of said burners and said spraying device, substantially as described. 5th. An apparatus for burning stubble, comprising a frame, a reservoir for fluid fuel mounted upon said frame, a plurality of burners carried by said frame, feed pipes connecting said burners to said reservoir, each of said burners being constructed in the form of a vertical coil terminating in a nozzle arranged in the centre of said coil, whereby the flame is directed downwardly into the centre of said coil, substantially as described.

body as set forth. 4th. In combination with the frame mounted on the running gear and the body supported at its rear end portion on

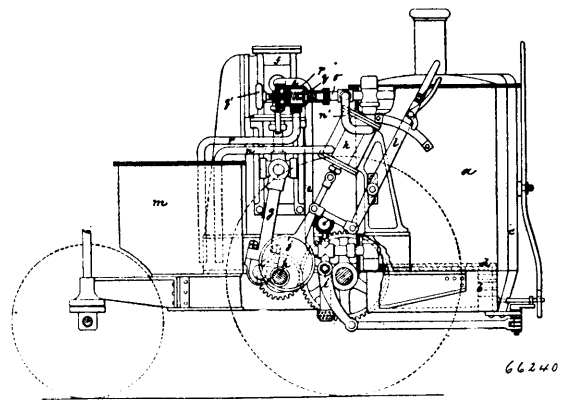


No. 66,238. Water Gauge. (Indicateur du nireau de l'eau.)



said frame by transverse pivotal bearings, a right and left screw supported transversely on said frame under the front end portion of the body, a block pivoted transversely to a plate fastened to the centre of the underside of the body, directly over the aforesaid screw, nuts on said screw, toggle levers connected to said nuts and to the aforesaid block, and means for turning said screw, as set forth. 5th. In combination with the frame mounted on the running gear and the body supported at its rear end portion on said frame by transverse pivotal bearings, a right and left screw journaled transversely on said frame under the front end portion of the body, nuts on said screw, toggle levers connected to said nuts and to the body directly over the screw, a bearing secured to the frame and supporting the screw at the centre of its length, and means for turning the screw, as set forth.

No. 66,240. Steam Generation Controlling Apparatus. (Appareil contrôleur de générateur de vapeur.)



Marcel Gourdeau, Taunton, Massachusetts, U.S.A., 15th February, 1900; 6 years. (Filed 7th September, 1899.)

Claim.—The improved valve gauge above described comprising valves to open and close the connections to the sight tube of the gauge to the boiler, power storing apparatus put under tension when such valves are open and closing such valves when free to operate, and a strip of paper, the tensile strength of which under normal conditions resists the stress of such power storing apparatus and which when wetted as by the breaking of the sight tube allows the operation of such power storing apparatus to close the valve.

No. 66,239. Dumping Wagon. (Wagon à bascule.)

Charles Sheldon Pharis, Syracuse, New York, U.S.A., 15th February, 1900; 6 years. (Filed 12th October, 1899.)

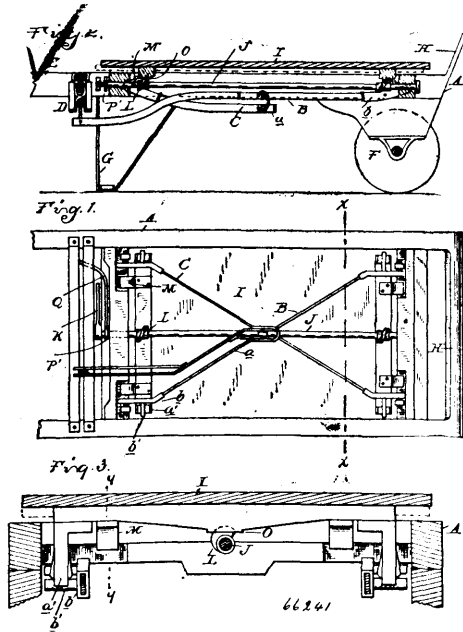
Claim.—1st. The combination, with the two axles, of the body pivotally supported over the rear axle and extending over the front axle, a right and left screw journaled in bearings secured to supports carried stationary on the front axle, adjacent to the wheels, means for turning the screw, and levers transmitting motion from said screw to the body, as set forth. 2nd. The combination, with the two axles, of the body pivotally supported over the rear axle and extending with its front end over the front axle, a right and left screw journaled in bearings secured to stationary supports carried on the front axle adjacent to the wheels, means for turning said screw nuts on the screw, levers extending from said nuts to the body and transmitting the weight of the front end portion of the tilted body directly to the screw, and a stationary bearing supporting the screw between the two nuts, as set forth. 3rd. The combination of a frame mounted on the running gear adjacent to the wheels, the body supported at its rear end portion on said frame by transverse pivotal bearings and extending with its front end portion over the axle, a right and left screw supported transversely and at a uniform elevation on said frame and under the front end portion of the body, means for turning said screw, nuts mounted on said screw, and toggle levers extending from said nuts to the underside of the

Theodore Miller, New York City, New York, U.S.A., 15th February, 1900; 6 years. (Filed 2nd February, 1900.)

Claim.—1st. The method of generating steam which consists in feeding water into a generator, and blowing out an excess of water admitted, substantially as specified. 2nd. The method of generating steam which consists in feeding water under pressure into a generator and ejecting by the steam pressure within the generator any excess of water admitted, substantially as specified. 3rd. The method of maintaining an equilibrium in a steam generator between the quantity of feed water admitted and the steam pressure within the generator which consists in ejecting the excess of feed water by means of steam pressure, substantially as specified. 4th. The method of automatically controlling the generation of steam by means of the variations of the steam pressure within the generator,

and thereby automatically varying the area of contact between the water and the generating surfaces, by discharging from the generator by increased steam pressure a quantity of water for the purpose of reducing said area of contact, and by increasing the quantity of water contained in the generator for the purpose of increasing the area of contact of the water with the heat generating surfaces, substantially as specified.

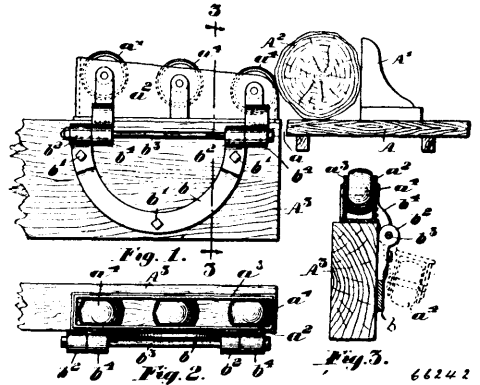
No. 66,241. Platform Scales. (Balance.)



Walter F. Stimpson, Detroit, Michigan, U.S.A., 15th February, 1900; 6 years. (Filed 28th August, 1899.)

Claim.—1st. In a scale, the combination of the levers, the platform resting on the lever pivots, means for lifting the platform from the pivots, and means being arranged centrally and longitudinally of the platform, a single actuating device for operating the raising means, and side bearings independent of said raising means for preventing the tilting of the platform members, comprising lugs upon the platform corners, and co-operating shoulders upon the scale frame. 2nd. In a platform truck scale, the combination of a truck, the scale levers, a platform mounted upon the truck and normally out of engagement with the pivots and adapted to be lowered into engagement with said lever pivots and to be shifted longitudinally, and means for lowering and longitudinally shifting the platform. 3rd. In a platform truck scale, the combination of a truck, the scale levers, a platform mounted upon the truck and normally out of engagement with the lever pivots and adapted to be lowered into engagement with said pivots and to be shifted longitudinally, and means for simultaneously lowering and shifting the platform. 4th. In a platform truck scale, the combination of the truck, a nose piece thereon, the scale levers, a platform mounted upon the truck normally out of engagement with the lever pivots, connection between the platform and the truck, permitting the frame to be gradually lowered into engagement with the pivots and to be shifted longitudinally away from the nose piece, and a single actuating device for operating the connections adapted to simultaneously lower and shift the platform. 5th. In a platform scale, the combination of the frame, the platform, a longitudinal shaft journaled in the frame, across the middle line of the platform, worm-shaped cams thereon, and bearings on the platform with which said cams engage to raise and lower and longitudinally move the platform. 6th. In a platform scale, the combination with the beam, the levers and the platform, means for separating the platform bearing and the pivots of the scale levers, and a locking means for the beam, operated by and upon the actuation of said separating means. 7th. In a platform scale, the combination with the beam, the levers and the platform, of a raising and lowering device for the platform, and a device for locking the beam which is operated when the platform is raised. 8th. In a platform scale, the combination with the beam, the levers, the platform resting upon the pivots thereof, of means for raising the platform from, and lowering it, upon the pivots, a lock to prevent the oscillations of the weighing beam, and a common actuating device for the platform and for the beam locking device arranged so that as the platform is raised from the pivots the beam is locked, and as the platform is lowered, into weighing position, the beam is released.

No. 66,242. Log Dumper. (Bascule à billots.)

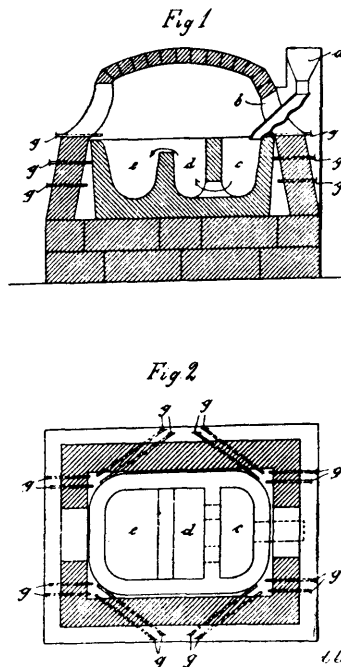


W. F. Curtis, Miller's Falls, Massachusetts, U.S.A., 15th February, 1900; 6 years. (Filed 23rd June, 1899.)

Claim.—1st. A log dumper, comprising a fixed member adapted to be attached to the side of the bed of a log sawing machine below the upper surface thereof, and a movable member consisting of a roll supporting frame adapted to rest upon the upper surface of said bed and provided with a plurality of rollers journaled in said frame to present an inclined supporting surface for the log, substantially as described. 2nd. A log dumper, comprising the plate or bar *b* adapted to be fastened to the side of the bed of a log sawing machine and having hubs *b*², and the supporting box adapted to rest upon the upper surface of the bed and having one of its sides provided with lugs or ears *b*⁴ projecting below the upper surface of said bed and pivotally secured to the said hubs, and a plurality of rolls *a*⁴ journaled in said box to present an inclined supporting surface for the log, substantially as described. 3rd. The combination with a log sawing machine, of a log dumper comprising a fixed member attached to the side of the bed of said machine below its upper surface, and a movable member consisting of a frame provided with sides *a*², *a*³ adapted to rest upon the upper surface of said bed and having lugs or ears *b*⁴ extended below said upper surface, a pivot pin or bolt *b*³ to secure said lugs or ears to the said hubs, and a plurality of rolls *a*⁴ journaled in the sides of said frame and arranged to afford a log supporting surface inclined downward toward the carriage of said machine, substantially as described.

No. 66,243. Glass Melting Furnace.

(Fournaise à fondre le verre.)



Franz Henrick Becker, Wevelinghoven, Rheinland, (Germany, 15th February, 1900; 6 years (Filed 3rd May, 1898.)

Claim.—1st. A process for making glass by means of the electric arc, in which the raw materials are treated in one continuous series of operations, by first being melted upon a hearth by the electric arc and then being forced to run off as a molten glass mass in thin layers over a further series of hearth surfaces b^1, b^2, b^3 which are arranged step-like above each other and acted upon by the electric arcs f^1, f^2, f^3 , for the purpose of being purified and clarified. 2nd. A process for making glass by means of the electric arc in which the raw materials are treated in one continuous series of operations, by first being melted upon a hearth by the electric arc, said hearth having projections or ribs on its surfaces for the purpose of removing bubbles from the molten mass forced to flow over the said projections and the melted glass being forced to run off as a molten glass mass in thin layers over a further series of hearth surfaces b^1, b^2, b^3 , which are arranged step-like above each other and acted upon by the electric arcs f^1, f^2, f^3 , for the purpose of being purified and clarified.

No. 66,244. Heel Attaching Device.

(Appareil à assujettir les talons.)

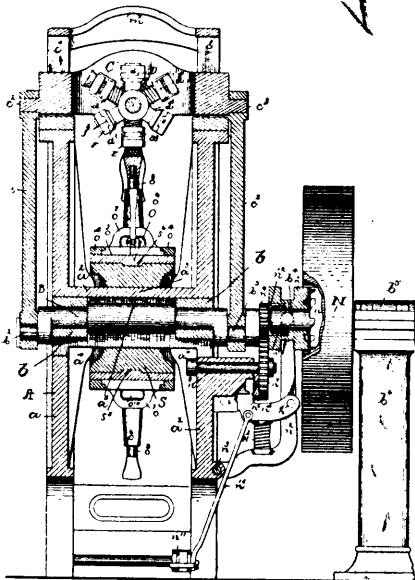


Fig. 1.

66244

Freeborn F. Raymond, Newton, Massachusetts, U.S.A., 15th February, 1900; 6 years. (Filed 2nd February, 1900.)

Claim.—1st. In a heel attaching machine, the combination with the heel attaching and nail driving devices, mounted on a rotary shaft, of a rotary jack hub mounted upon a horizontal shaft at right angles to the said shaft on which the heeling and nailing devices are mounted, slides carried by said hub, jacks mounted on said slides in radial positions relative to said hub, and adjusting and holding devices for varying the positions of said slides, substantially as set forth. 2nd. The combination in a heel attaching machine, of the frame A, the combination a^2 , having a hole extending through the same, a rotary jack hub mounted upon said connecting section, the main shaft B, extending through said hole, the cross head reciprocating cranks, carried by said shaft, and the cross head and connecting rods c, c^1 , substantially as described. 3rd. The combination of the arm, the nail block, a spring carried upon said arm, a washer mounted upon said arm, and pins for restricting the movement of the washer, as and for the purposes described. 4th. The combination of a heel attaching machine, of a rotary hub supporting a number of jacks having the sections s^1 , to enter the recess s^2 , of a bearing block, with said bearing block provided with the recess s^3 , as and for the purposes described. 5th. The combination, in a heel attaching machine, of the stile frames connection by a section a^2 , the bearing block S, made in two or more parts fitted upon the inside to said section, bolted thereto and having the cylindrical bearing, with a rotary hub supporting the jacks mounted upon said bearing block. 6th. In a heel attaching machine, the combination with a series of lasts or work supports contained in the machine and adapted to be successively, or otherwise moved into and out of operative relation with the attaching devices, of a single set of shoe centering devices movable toward and from each other and common to each of said lasts or work supports. 7th. The combination, in a heel attaching machine, of a reciprocating cross head, a rotary hub mounted thereon, appropriate heel holding and nail driving devices carried by said rotary hub, a series of lasts or work supports adapted to be moved into the same operative position, and a single set of shoe centering devices common to each of said lasts or work supports, and having vertical yielding movements. 8th. The combination, in

a heel attaching machine, of a reciprocating cross head, a rotary head or block mounted thereon and heel holding and nail driving devices carried by said rotary head, a series of lasts or work supports contained in the machine and adapted to be moved into same operative position, and a single set of shoe centering devices having an inward movement and held closed upon the shoe by a yielding pressure. 9th. The combination in a heel attaching machine, of a reciprocating cross head, a rotary head or block mounted thereon, heel holding or nail driving devices carried by said rotary head, a series of lasts or work supports contained in a machine and adapted to be moved into the same operative position, a single set of shoe centering devices common to each of said lasts or work supports, and means for opening the same. 10th. The combination, in a heel attaching machine, of a rotary hub or support, a series of lasts or work supports mounted thereon, and an automatic registering device for each jack carried upon said hub or support, a lever or arm for each jack, for disengaging said registering devices, arranged to movable inward to make the said disengagement, and a registering hole arranged to receive the registering device of the last or work support in advance of the one which is in operative position, whereby the operator, by one motion, unlatches the jack support and moves the jacks or lasts onward, substantially as described. 11th. In a blank holder, a breast gauge against which the breast of the blank is adapted to be held, and two blank holding arms connected together at or near the said breast gauge, and in such a manner that the movement of one causes the movement of the other in a reverse direction, said arms extending forward from the breast gauge and being shaped and actuated to yieldingly bear against a blank near its rear end and thus serving to press and hold its breast in contact with the breast gauge. 12th. The combination, in a heel nailing machine, of a block, the plate e^{13} , arranged to extend upon the surface of the block, the heel blank or top lift grasping arms e^{12} , pivoted to said plate and geared together, and adjusting devices for moving said plate and arms upon the face of said block. 13th. In a heel attaching machine, the combination with a last or work support, of shoe centering devices adapted to move toward and from each other, a moving part of the machine for operating said shoe centering devices, and yielding connections between said moving part and said shoe centering devices. 14th. The combination, in a heel attaching machine, of the cross head, the centering devices connected with said cross head to be moved inward or toward each other upon its descent and away from each other upon its upward movement, and interposed springs between the cross head and said centering devices, whereby said devices are caused to be closed upon the beginning of the downward movement of the cross head and are held closed during the continuation of said downward movement, substantially as and for the purposes described. 15th. The combination, in a heel nailing machine, of the reciprocating cross head, one or more heel attaching devices carried thereby, one or more top lift spankers carried thereby, a last or work support, shoe centering devices connected with the cross head, as specified, and interposed springs between the cross head and the centering devices, whereby the shoe is adapted to be centred alike during the attaching of the heel and the spanning of the top lift, as and for the purposes set forth. 16th. The combination, in a heel nailing machine, of a support for the shoe which is movable from a shoe receiving position to a heel attaching position, a holder or support for the heel to hold or support it in attaching position, nail driving devices, mechanism for operating said nail driving devices, and means for automatically starting said mechanism upon the movement of the shoe support into nailing position and for automatically stopping said mechanism after the nailing of the heel. 17th. The combination, in a heel nailing machine, of a support for the shoe which is movable by hand from a shoe receiving to a heel attaching position, a holder or support for the heel to hold or support it in an attaching position, a holder or support for a top lift, nail driving and top lift spanning devices, mechanism for successively operating said nail driving and top lift spanning devices to cause them to drive the attaching nails and spank the top lift, and means for automatically starting said mechanism upon the movement of the shoe support into position and for automatically stopping said mechanism after the spanning of the top lift. 18th. In a heel nailing machine, the combination with the frame A, having the connecting section a^2 , of a rotary jack mounted upon said connecting section, a last carried by said jack, and rotary heel attaching devices mounted in a reciprocating frame above said rotary jack and moving vertically toward and from the same, substantially as described. 19th. In a heel nailing machine, as a means for receiving the heel attaching nails and a heel blank and for moving them from a receiving position to an attaching position and for attaching the heel blank to the sole of a boot or shoe, a pressure arm mounted upon a horizontal pivot and adapted to be moved upon a vertical arc and to have a reciprocating movement imparted to it, a group of drivers attached to the end of said arm, and carried thereby, a nail block into which said drivers extend, also carried by said pressure arm and movable relatively thereto and to the drivers, a spring to act against the nail block, and means for moving said pressure arm and its attaching devices from a receiving position to an attaching position, and guides or stops for holding them in each of said positions, and whereby the nail block is adapted when inverted to receive the attaching nails and the heel to be attached by them, and whereby also the attaching nails and heel are adapted to be moved from said receiving position upon a vertical arc to an attaching position, and whereby, by means of the vertical movement of the arm, the heel blank is compressed

against the sole of the boot or shoe, and the heel attaching nails driven and the heel attached, all as and for the purposes described.

20th. In a heel nailing machine, in combination with a last or work support, a pressure arm adapted to be vertically reciprocated and provided with a movement upon a vertical arc, a group of drivers at the end of the arm supported and carried thereby, a nail block into which the drivers extend carried by said pressure arm and movable relatively thereto, and to the drivers, a spring to act against the block and to hold it from the drivers, the group of drivers being of a length less than the length of the holes in said nail block whereby the said devices are adapted to receive attaching nails and a heel blank, transfer them to a driving position and attach the heel blank to the boot or shoe by driving the nails through the heel blank in a manner to leave the outer ends of the attaching nails slightly projecting from the surface of the attached heel, as and for the purposes described.

21st. In a heeling machine, a vertically reversible heel attaching and top lift applying device comprising a reversible head having two arms in line with each other, one of which has a gang of drivers at the end and a yielding perforated nail block attached to it to be movable toward and from its end, but which nail block is non-movable laterally in relation to its carrying arm, and the other of which arms has attached to its end a top lift spanker and holder.

22nd. The combination, in a heel nailing machine, of a reciprocating pressure head and two arms or supports mounted thereon to be movable alternately into and out of operative position, and devices for attaching a loaded heel blank carried by one of said arms and comprising a group of drivers at the end of the arm, and a yielding heel block into which the drivers extend, carried by the said arm and having a flat outer surface adapted to receive a heel blank of any size, the upper surface of said heel blank resting against the surface of the block and the nails entering the holes thereof, and unyielding top lift centreing, holding and spanking devices rigidly attached to the second of said arms but adapted to be adjustable crosswise it, as and for the purpose described.

23rd. In a heel nailing machine, the combination of a reciprocating pressure head, two arms mounted thereon, each to be movable from an operative to an inoperative position, a heel blank attaching device carried by one of said arms, comprising a group of drivers at the end of the arm, and a yielding heel block attached to the arm and into which the drivers extend, and top lift centreing, holding and spanking devices attached to the other of said arms, the first of said arms and its attached yielding block being longer than the second of said arms with its spanking block, whereby the first of said arms is adapted to deliver pressure directly to a heel blank at a different level from that delivered by the second arm, as and for the purposes described.

24th. In a heel nailing machine, the combination of a pressure head having a wide opening extended through it, a shaft extending across said opening and a rotary head carried by said shaft and having two arms, loaded heel attaching devices of the character specified attached to one of said arms, and a top lift carrying, holding and spanking device attached to the other of said arms, the said rotary head being adapted to be turned so as to permit the loaded heel blank and the top lift to be applied to their respective attaching devices through the upper part of the opening in said head, or when they are uppermost, and to permit them to carry said loaded heel blank and top lift and to attach them successively when they are in their lowest position, as and for the purposes described.

25th. In a heeling machine, a vertically reversible nail receiving and nail driving and heel blank holding device, comprising a pressure arm and means for reversing it, a gang of drivers at the end of said arm, a yielding perforated nail block attached to said arm to be movable toward and from its end but non-movable laterally in relation thereto, and heel holding devices for holding a heel blank to the face of said nail block.

26th. In a heel nailing machine, the combination of a reciprocating pressure head, a rotary head carried thereby having a series of groups of arms, each group of which consists of two arms, loaded heel blank attaching devices carried by one of said arms, top lift centreing, holding and spanking devices carried by the other of said arms, automatic means for rotating said head, and automatic devices for stopping the machine at the end of two reciprocations of the cross head.

27th. In a heel nailing machine of the character specified, the combination of a pressure arm circular in shape and having a flat face to which a block holding a gang or group of drivers is attached, a sleeve or slide block having a circular hole of the size of the arm mounted thereon above the driver holding block, a yielding heel block attached by plates or arms to said sleeve or slide block, and a spring surrounding the arm to bear against the said sleeve or slide block and force it outwardly.

28th. As an attachment to the arm of a heel attaching machine, the combination of a block holding drivers and having a spindle adapted to be extended into the hole of a holding arm and to be locked thereto, a sleeve at the upper side of said driver block, a movable heel block upon the under side thereof, having holes into which the drivers extend, and arms or plates connecting the heel block with the sleeve.

29th. In a heel nailing machine, the combination with a last or work support adapted to present and hold an unheeled boot or shoe, of an arm movable into and out of operative position relative to said last or work support, a gang of drivers attached to the end of the said arm, a templet having holes into which the ends of said drivers extend, said templet being joined to said arm so as to be movable therewith into and out of operative position, and being also movable toward and from the end of said arm, and a spring for pressing said

templet outward, the said templet having an unobstructed operating face and being thus adapted to receive thereon a loaded heel blank with the projecting ends of the nails extending into its holes, so that the face of said heel will be in contact with the opposing face of said templet, the whole being so organized that upon the movement of the arm and templet to operative position, and upon the vertical movement of the arm, the heel blank will be forced against the sole of the boot or shoe with an attaching pressure, and the attaching nails will be driven through the heel blank into the sole of the boot or shoe.

30th. In a heel attaching machine, a series of heel attaching devices, comprising a number of radial pressure arms connected together and adapted to be brought in successive or any other order over a jack common to all, each heel attaching arm having a group of drivers at its end, and a yielding perforated nail block attached to it to be movable toward and from its end, but which nail blocks are non-movable laterally in relation to their carrying arms.

31st. In a heel attaching machine, a series of heel attaching and top lift applying devices, comprising a number of radial pressure arms connected together and adapted to be brought in successive or any other order over a jack common to all, each alternate arm having a group of drivers and a yielding perforated nail block which is movable toward and from the end of its carrying arm, but which nail blocks are non-movable laterally in relation to their carrying arms, the interposed or other alternate arms having at their ends top lift and holding devices.

32nd. In a heel attaching machine, a series of movable groups of heel attaching and top lift applying devices, each group consisting of an arm, a group of drivers attached to the end of said arm and carried thereby, a nail block into which the drivers extend also carried by said arm and movable relatively thereto and to the drivers, a spring to act against the nail block, and a second arm and adjustable top lift carrying, centreing and spanking devices attached thereto, the drivers and nail holes of the heel attaching device of each group differing as to arrangement of number, as and for the purposes described.

33rd. In a heel attaching machine the combination with a suitable supporting frame, of a movable head having two arms mounted in said frame, one of said arms carrying at its end a gang of drivers and perforated nail block attached thereto and movable toward and from the same but non-movable laterally in relation thereto, and the other of which arms carries at its end top lift applying devices.

34th. In a heel nailing machine, in combination with nail driving devices, a vertically reversible heel carrier comprising a block having a flat face, its movable supporting arm, the said block being non-movable laterally in relation to the said supporting arm, and heel holding devices to hold the heel to the face of the carrier block.

35th. The combination, in a heel nailing machine, of a support for the shoe which is movable from a shoe receiving position to a heel attaching position, an automatic device for locking the said support when the said support is moved to its attaching position, a holder or support for the heel to hold or support it in attaching position, nail driving devices, mechanism for operating said nail driving devices, and means for automatically starting said operating mechanism upon the automatic locking of the said shoe support in nailing position and devices for automatically stopping said operating mechanism after the nailing of the heel.

36th. The combination, in a heel nailing machine, of a support for the shoe which is movable from a shoe receiving position to a heel attaching position, a holder or support for the heel which is movable from a heel receiving position to a heel attaching position, nail driving devices, mechanism for operating said nail driving devices, and means for automatically starting said mechanism upon the movement of the shoe support into attaching position and for automatically stopping said mechanism after the nailing of the heel.

37th. The combination, in a heel attaching machine, of a support for the shoe which is movable from a shoe receiving position to a heel attaching position, a holder or support for the top lift which is movable from receiving position to a spanking position, nail driving devices, mechanism for operating said nail driving devices, and for moving said heel holder and said top lift holder from receiving to attaching positions, and means for automatically starting said mechanism upon the movement of the shoe support into nailing position and for automatically stopping said mechanism after the spanking of the top lift.

38th. A plate or blank holder having a front gauge against which the breast of the lift or blank is adapted to be pressed, and two yielding separable rear pressers connected with each other to be movable uniformly in respect to the front gauge, said pressers being constructed and arranged to bear against the back edge of the lift or blank upon each side of a median line drawn through its centre from front to back, and automatic means to close said pressers toward each other and the breast gauge with a yielding closing movement.

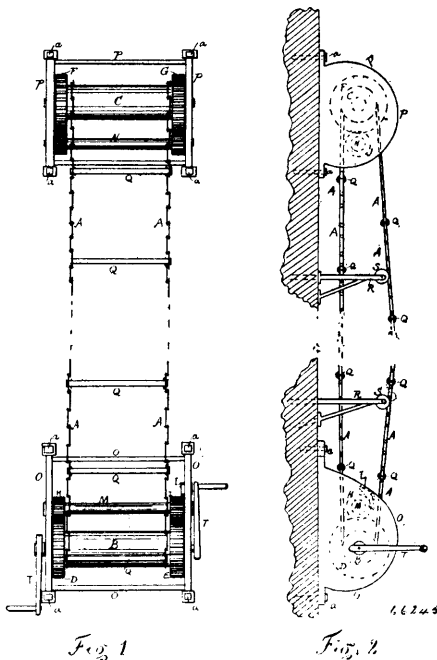
39th. In a heel attaching machine, a vertically reversible heel carrier and attaching device consisting of a supporting arm provided with nail drivers, and a nail block carried by said supporting arm and arranged thereon so as to be movable towards and from it.

40th. In a heel nailing machine, a heel carrier and attaching device turning in a vertical plane and consisting of a supporting arm provided with a gang of drivers and carrying a nail block movable toward and from said supporting arm to co-operate with said gang of drivers.

41st. In a heel attaching machine, a heel carrier and attaching device movable vertically in the arc of a circle and consisting of a supporting arm carrying a gang of drivers, and a nail block arranged to co-operate with said gang of drivers and capable of movement toward and from said

supporting arm. 42nd. In a nailing machine, as a means for attaching a wheel blank to a boot or shoe and a separate top lift to the attached wheel blank, a vertically reversible head having two arms, one of which arms is adapted to carry and attach the heel and is provided with nail drivers and a nail block arranged on said arm so as to be movable toward and from it, and the other of which arms is provided with top lift applying devices. 43rd. In a heel nailing machine, as a means for attaching a heel to a boot or shoe and a separate top lift to the attached heel, a head turning in a vertical plane and having two arms, one of which arms is adapted to carry and attach the heel and is provided with a gang of drivers and a nail block movable toward and from said arm, to co-operate with said gang of drivers, and the other of which arms is provided with top lift applying devices. 44th. In a heel nailing machine, a head carrying two arms movable vertically in the arc of a circle, one of which arms is adapted to carry and attach the heel and is provided with a gang of drivers and a nail block movable toward and from said arm, to co-operate with said gang of drivers, and the other of which arms is provided with top lift applying devices. 45th. The combination, in a heel nailing machine, of a support for the shoe, an arm, a holder or support for the heel, nail carrying and nail driving devices mounted upon said arm with the heel holder or support and said nail carrying and nail driving devices simultaneously from a receiving to an attaching and driving position, and means for operating the nail driving devices to drive the nails. 46th. The combination, in a heel nailing machine, of a support for the shoe, an arm, a holder or support for the heel, nail carrying and nail driving devices mounted upon said arm, a top lift applying device, automatic mechanism for moving successively into operating position first the said arm with the heel holder or support and the said nail carrying and nail driving devices, and second said top lift applying devices, and means for operating the nail driving devices while the heel holder and nail carrier are in operative position. 47th. The combination, in a heel nailing machine, of a series of devices each comprising a holder or support for a heel, nail carrying and nail driving devices, an arm upon which they are mounted, automatic mechanism for moving said series of devices progressively or successively from a receiving to an attaching position and for successively operating the nail driving devices of each when in attaching position. 48th. The combination, in a heel nailing machine, of a series of devices each comprising a holder or support for the heel, nail carrying and nail driving devices, an arm upon which said nail carrying and nail driving devices are mounted, a top lift applying device, automatic mechanism for moving said arm with the said heel holder and nail carrying and nail driving devices and said top lift applying devices progressively or successively from a receiving to an attaching position and for successively operating the nail driving devices of each and the top lift applying devices when in an attaching position.

No. 66,245. Fire Escape. (Sauveteur d'incendie.)

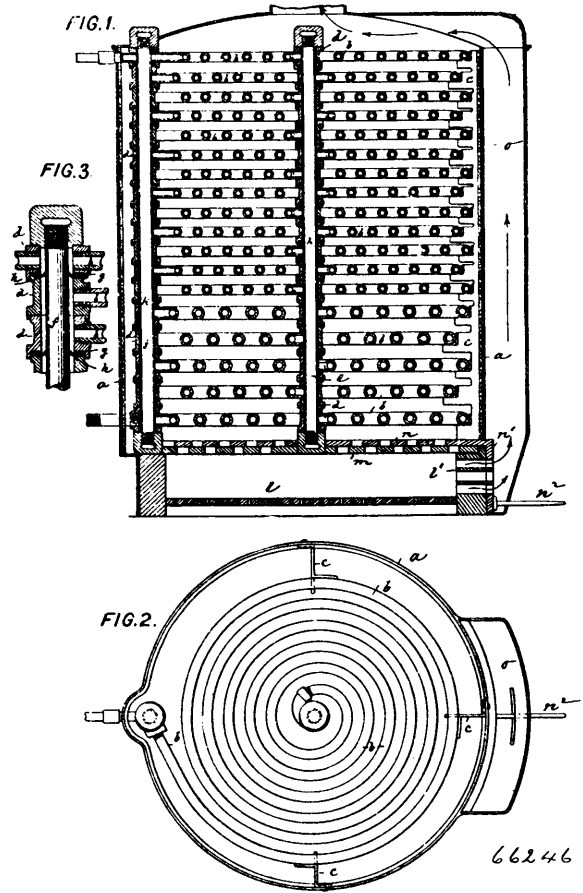


John Reidy, London, Ontario, Canada, 15th February, 1900; 6 years. (Filed 2nd February, 1900.)

Claim.—In a fire escape, the combination of a pair of rotary endless steel chains A A, having rungs or steps Q suspended thereby,

with shafts or drums B C, gear wheels D, E, F, G, pinions H, I, J, K, and cranks T, T, all substantially as set forth and for the purpose described.

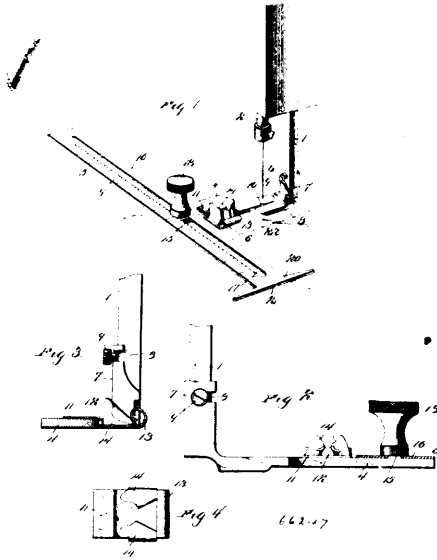
No. 66,246. Steam Generator. (Générateur à vapeur.)



Theodore Miller, New York City, New York, U.S.A., 15th February, 1900; 6 years. (Filed 2nd February, 1900.)

Claim.—1st. A steam generator having a water relief valve, and a feed water inlet between the generator and said valve, substantially as specified. 2nd. A steam generator having a spring actuated adjustable water relief valve, and a feed water inlet between the generator and said valve, substantially as specified. 3rd. A steam generator having a water relief valve, a feed water pump, and a feed water inlet between the generator and said valve, substantially as specified. 4th. A steam generator composed of a shell, an enclosed series of communicating tubes, a fire chamber for heating said tubes, a flue communicating with the fire chamber, and means for directing the heat either into the shell or into the flue, substantially as specified. 5th. A steam generator composed of a shell, an enclosed series of communicating tubes, a fire chamber having a perforated top and side, a flue communicating with the fire chamber, and a register adapted to conduct the heat either into the shell or into the flue, substantially as specified. 6th. A steam generator composed of a shell, an enclosed series of coiled tubes, fittings connecting the tubes alternately at inner and outer ends, a feed water pump connected to the uppermost tube, and means for automatically controlling said pump, substantially as specified. 7th. A steam generator composed of a shell, an enclosed series of coiled tubes, fittings connecting the tubes alternately at inner and outer ends, a feed water pump communicating with one of said tubes, a steam pipe communicating with another tube, a fire chamber, a flue communicating therewith, and means for conducting the heat either into the shell or into the flue, substantially as specified. 8th. A steam generator composed of a shell, an enclosed series of coiled tubes, fittings connecting the tubes alternately at inner and outer ends, a feed water pump communicating with the uppermost tube, a steam pipe having a blow-off cock and communicating with the lowermost tube, a fire chamber, a flue communicating therewith, a register adapted to conduct the heat either into the shell or into the flue, and means for simultaneously operating said register and blow-off cock, substantially as specified.

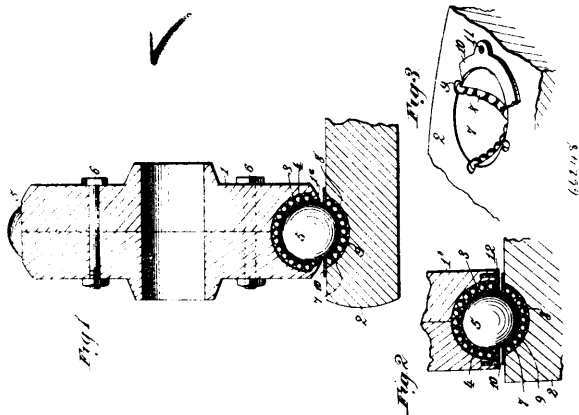
No. 66,247. Hemmer. (*Appareil à ourler.*)



John J. Gillis and John F. Bennett, both of Hattiesburg, Mississippi, U.S.A., 15th February, 1900; 6 years. (Filed 13th January, 1900.)

Claim.—1st. An attachment for a sewing machine of the character set forth, comprising a foot having an arm extending forwardly from one side portion thereof and provided with a flat plate projecting in the plane of the foot in a right angle to and in advance thereof, the inner end of the plate having an edge turner approximately in line with the needle eye of the said foot, feeding guides on the plate, of a conical form and directed at a downward incline toward the under portion of the said edge turner and positioned in a plane at right angles to the latter, and a gauge movably mounted on a projecting portion of the arm in advance of the edge turner and guides and having a guiding edge in a plane parallel with the said edge turner. 2nd. An attachment for a sewing machine of the character set forth comprising a foot supporting an edge turning tube approximately in line with the needle eye and feeding guides in planes at right angles to the said tube and directed downwardly towards the under portion of the latter, and a gauge also adjustably supported by said foot in operative relation to the edge turning tube. 3rd. An attachment for a sewing machine of the character set forth, comprising a foot having an arm extending therefrom provided with a flat plate projecting in a plane at right angles thereto, said plate having a terminal spirally bent tube to form an edge turner and downwardly directed conical feeding guides leading to the lower portion of the said tube, a space formed between the edge turner and the foot proper, and a gauge adjustably mounted on a portion of the arm in advance of said edge turner and guides and provided with a guiding edge in a parallel with the said end turner.

No. 66,248. Gearing. (*Engrenage.*)



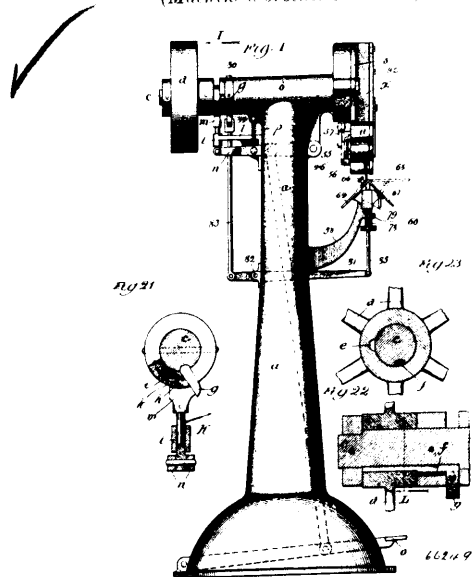
K. L. Ryman, Newark, New Jersey, and C. L. Aird and J. W. Shone, both of Rochester, New York, all in the U.S.A., 15th February, 1900; 6 years. (Filed 26th June, 1899.)

Claim.—1st. In a gearing, the combination with two wheels arranged at an angle to one another, one of said wheels being pro-

vided with a plurality of projecting balls rotatably arranged in pockets formed in its periphery, and the other wheel having an annular series of sockets formed in its face, of a plurality of anti-friction balls arranged in said sockets, and means for retaining said balls in place, the balls of the one wheel being arranged to successively engage the sockets of the other wheel, substantially as described. 2nd. In gearing, the combination with two wheels arranged at an angle to one another, one of said wheels being provided on its periphery with a plurality of nearly spherical sockets, a plurality of small anti-friction balls arranged in each of said sockets, a relatively large ball disposed in and projecting from each of the sockets and having a rolling bearing on the small balls, the other wheel having an annular series of sockets formed in its face arranged to be engaged by the projecting balls of the adjacent wheel, substantially as described. 3rd. In a gearing, the combination with two wheels arranged at an angle to one another, one of said wheels being provided at its periphery with a plurality of nearly spherical sockets, a plurality of small anti-friction balls arranged in each of said sockets, a relatively large ball disposed in and projecting from each of said sockets and having a rolling bearing on the small balls, the other wheel having an annular series of sockets formed in its face, a plurality of anti-friction balls arranged in said sockets and means for retaining said balls in place, substantially as described. 4th. In gearing, the combination with two wheels arranged at an angle to one another, one of said wheels being provided with a plurality of projecting balls rotatably arranged in pockets formed in its periphery, and the other wheel having an annular series of partially spherical sockets formed in its face, each of said sockets having intersecting undercut grooves formed in its wall, anti-friction balls arranged in said grooves, and means for retaining the balls in the grooves, the projecting balls of the one wheel being arranged to successively engage the sockets of the other wheel, substantially as described. 5th. A gear wheel, comprising two annular discs separately secured face to face, and having nearly spherical sockets formed in its rim or periphery, a relatively large ball housed in each of said sockets and projecting therefrom, and a plurality of small anti-friction balls arranged between the large ball and the wall of the socket, substantially as described.

No. 66,249. Book Stitching Machine.

(*Machin à brocher les livres.*)

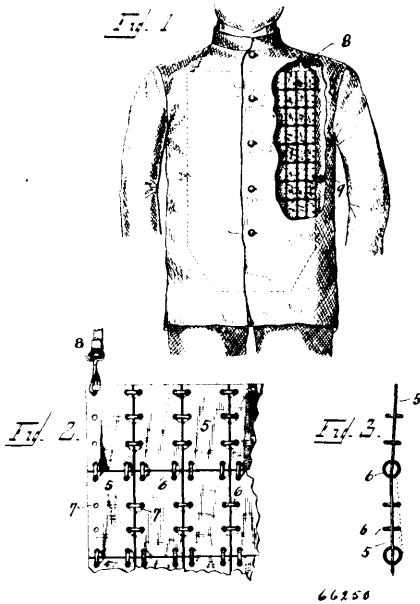


William P. Healy, assignee of Frederick Peter Roseback, both of Chicago, Illinois, U.S.A., 15th February, 1900; 6 years. (Filed 29th August, 1899.)

Claim.—1st. In a book stitching machine, the combination with the drive shaft and means for actuating it, the staple wire feeder, staple forming and driving bars and forming bar carrier, of a cam on the shaft engaging said carrier to raise and lower the same and operating to produce prolonged delay in the movement of the carrier to raise and lower the same and operating to produce prolonged delay in the movement of the carrier at the upper and lower limits of its movement, substantially as and for the purpose set forth. 2nd. In a book stitching machine, the combination with the drive shaft and means for actuating it, the staple wire feeder, staple forming and driving bars and their carriers, of an eccentric on the shaft operatively connected with the driving bar carrier, to raise and lower the same, and operating to produce prolonged delay in the movement of the forming bar at the upper and lower limits of its movement, substantially as and for the purpose set forth. 3rd. In a book stitching machine, the combination with the drive shaft and means for actuating it, the staple wire feeder, staple forming and

driving bars and forming bar carrier, of bearing faces 8 and 9 on said carrier, and a cam *r* on the drive shaft having the segmental working faces 5, 6 and 7, all constructed and arranged to operate, substantially as and for the purpose set forth. 4th. In a book stitching machine, the combination with the drive shaft and means for actuating it, the staple wire feeder, and staple forming and driving bars operatively connected with the drive shaft, of a pivoted spring staple guiding cam on the forming bar having a shoulder 24, and a staple engaging hook 22 at the lower end of the driving bar, substantially as and for the purpose set forth. 5th. In a book stitching machine, the combination with the drive shaft, anvil, and the wire feeder and staple forming and driving bars actuated from the drive shaft, of a sliding wire guide between the said feeder and anvil movable to one position to guide the wire to the anvil and movable from said position to be out of the way in the staple bending operation, and operating mechanism for the wire guide in the path of the forming bar to be actuated thereby, substantially as described. 6th. In a book stitching machine, the combination with the supporting stand, drive shaft and staple forming and driving devices actuated thereby, of a platform supported upon the stand, clinchers upon the platform support, clinker operating mechanism actuated by the drive shaft and extending through the support, and means for simultaneously positioning the platform and clinchers by raising or lowering them with reference to the staple forming and driving devices, and changing the length of the clinker operating mechanism, substantially as described.

No. 66,250. Armor. (Armure.)



Norval C. Vaughan, Cincinnati, Ohio, U.S.A., 16th February 1900; 6 years. (Filed 3rd February, 1900.)

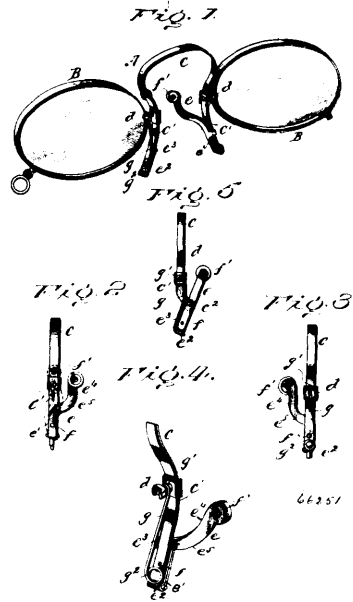
Claim.—1st. An armor for the purpose described, consisting of a collection of metallic plates of equal size assembled edgewise to form rows, perforations near their edge, circular links connecting adjoining rows or plates by passing through their perforations to form a sheet sufficiently pliable to permit folding up and means to hold this latter in position. 2nd. An armor for the purpose described, consisting of metallic plates of equal size which are assembled in parallel rows, circular links whereby they are all connected edgewise to form a pliable sheet substantially rectangular which may be folded, straps whereby this latter is held in position and catch devices at the ends thereof, whereby the straps are detachably connected to the armor.

No. 66,251. Eye Glass. (Binocle.)

Edwin F. Elwood, West Superior, Wisconsin, U.S.A., 16th February, 1900; 6 years. (Filed 21st March, 1899.)

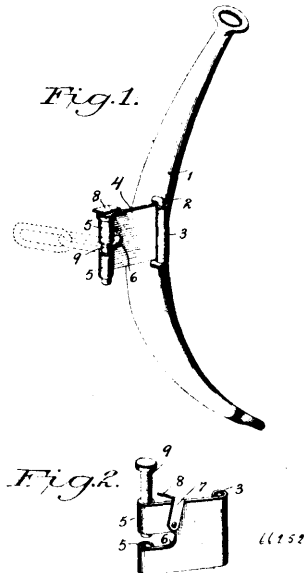
Claim.—1st. In nose pieces for eye glasses, the combination, with a bridge extension, of a nose piece pivoted thereto at one end to fold substantially in the plane of the frame of the glasses, and a spring independent of both the said extension and nose piece for automatically projecting the free end of the latter beyond the plane of the frame. 2nd. In nose pieces for eye glasses, the combination with a bridge extension and its clamping post, of a nose piece comprising a plate pivoted adjacent to its lower end to the extension to fold substantially in the plane of the glasses and having said lower end projecting below the extension and formed with a socket, and a detachable spring for automatically projecting the upper free end of the nose piece beyond the plane of the frame, said spring being provided

with a hook at its upper end to engage the post and having its lower end bent at right angle and fitted in said socket. 3rd. In nose



pieces for eyeglasses, the combination of a bridge extension, a nose piece pivoted at its lower end thereto, one of said parts being offset centrally so that the lower portion of the nose piece stands normally in the plane of the lower portion of the extension while the upper free end thereof projects outwardly beyond the plane of said extension, a stop on the nose piece to abut against the extension and limit the outward movement of the nose piece, and a spring for normally holding the nose piece projected in the position stated, substantially as described. 4th. A folding nose piece for eye glasses, consisting of a clamping plate pivoted near its lower end to the bridge piece and having its upper end arranged at an angle thereto and carrying a pad, a stop to limit the outward movement of the plate, and a spring secured at its upper end the clamping post and at its lower end to the plate and provided adjacent to the latter with a coil, substantially as described.

No. 66,252. Hame. (Attelles.)

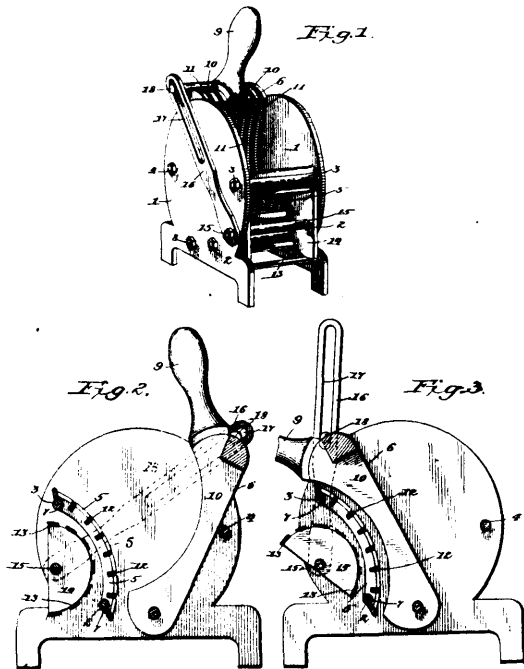


William Wood Adkins, Jacksonville, Mississippi, U. S. A., 16th February, 1900; 6 years. (Filed 3rd February, 1900.)

Claim.—The improved hame attachment herein described, consisting of a plate having at one end an elongated knuckle to receive a staple on a hame, a longitudinal slot at the opposite end of said plate open at the outer end with a knuckle upon each side of the outer end of the slot, a coupling bolt adapted to engage in the outer knuckle and to traverse said slot, and a keeper consisting of a sub-

stantially vertical arm pivotally mounted on said plate in proximity to the inner end of said slot and having an angularly disposed head extending across the upper edge of the plate and to engage over the head of the coupling bolt after the latter is inserted in the knuckles, all substantially as shown and described.

No. 66,253. Vegetable Cutter. (*Coupe racines.*)

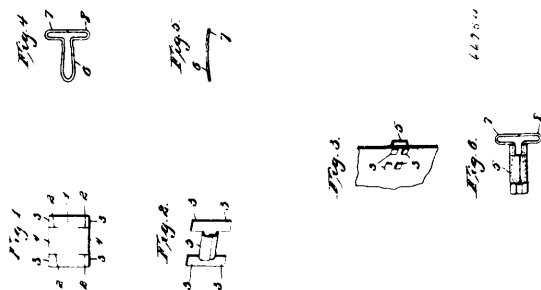


66253

Joseph Blonde, Lenoxdale, Massachusetts, U.S.A., 16th February, 1900; 6 years. (Filed 3rd February, 1900.)

Claim.—1st. In a fruit and vegetable cutter, the combination with a frame consisting of parallel sides, of a series of fixed curved knives secured within the frame and arranged to present a convex cutting surface, a pivoted presser bar having a concave face co-operating with the knives, and a semi-circular frame carrying knives and mounted upon a shaft in the rear of the said fixed knives, and a connection between the presser bar and said semi-circular frame whereby the latter is operated by the movement of the presser bar. 2nd. In a fruit or vegetable cutter, the combination with the supporting frame consisting of the parallel sides connected by transverse bolts, a fixed convex cutting frame consisting of curved knives connected by transverse knives, a presser bar having a concave face and a handle, a supplemental cutting frame pivotally supported in rear of the fixed cutting frame, and a connection between said supplemental frame and the presser bar. 3rd. In a fruit and vegetable cutter, the combination with the supporting frame, and fixed cutting knives, of the concave presser bar, and an oscillating frame supported in the rear of the fixed knives and a slotted lever secured at one end to the oscillating frame, and loosely connected at its opposite end to a pin projecting from the presser bar.

No. 66,254. Shoe Fastener. (*Attache de chaussures.*)



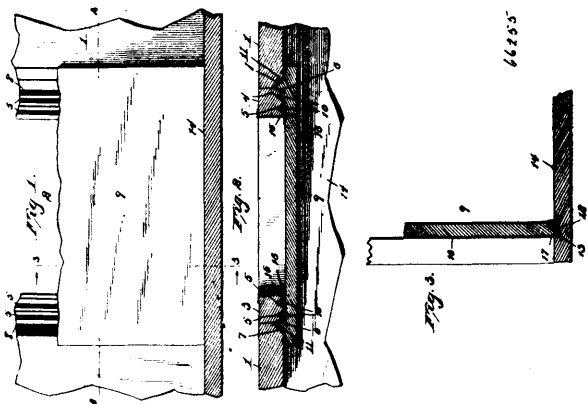
A. L. Fishell, Agner, Maryland, U.S.A., 16th February, 1900; 6 years. (Filed 3rd February, 1900.)

Claim.—1st. A fastening for shoes, gloves, etc., comprising a plate of metal slitted to form central ears, and end lugs, said ears being

bent toward each other to form a socket, and said end lugs being bent at right angles to form engaging prongs, and a catch formed from a single piece of resilient wire bent to form two loops at right angles to each other, one of said loops constituting a spring catch to engage the socket while the ends of the other loop form eyes for attaching the catch to the shoe or other article. 2nd. A fastening for shoes, gloves, etc., comprising a plate of metal formed with central ears bent and overlapped to form a socket, and with end lugs bent to form attaching prongs, and a catch member consisting of a single piece of resilient wire bent to T-shape to form a spring loop and oppositely projecting attaching loops or eyes and curved longitudinally.

No. 66,255. Freight Car Door.

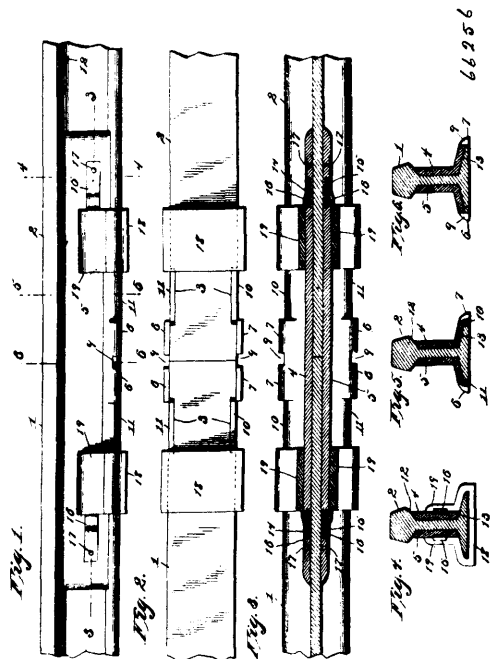
(*Porte de chars à marchandises.*)



Robert Asa Packer Meade, Sayre, Pennsylvania, U.S.A., 16th February, 1900; 6 years. (Filed 3rd February, 1900.)

Claims.—1st. The combination with a car provided on its inner side adjacent the door opening, with parallel vertical grooves, and with a floor groove across said opening, of a vertically movable door provided on its outer side with parallel ribs fitting the parallel grooves and bevelled at the bottom edge to fit the floor groove. 2nd. The combination with a car provided on its inner side adjacent each side of the door opening, with parallel vertical grooves, and with a bevelled floor groove, of a vertically movable door provided with parallel ribs fitting the parallel side grooves, and bevelled at its bottom edge to fit the floor groove, and metallic wear plates bent to conform to the grooves and ribs.

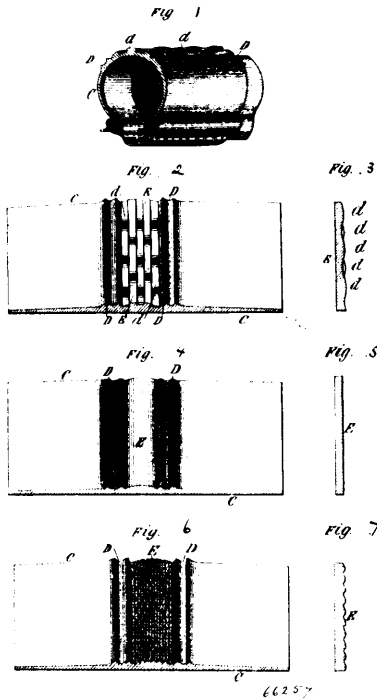
No. 66,256. Rail Joint. (*Joint de rails.*)



Frank Norbert Plomondon, Matlock, Washington, U.S.A., 16th February, 1900; 6 years. (Filed 3rd February, 1900.)

Claims.—1st. In a rail joint, the combination with the meeting ends of two rail sections, recessed at their bases of splice bars provided with flanges fitting the recesses in the rail bases, springs secured to the outer sides of the splice bars, and clamps adapted to fit over the ends of the splice bars and be held by said springs. 2nd. In a rail joint, the combination with the meeting ends of two rails sections, recessed at their bases, of splice bars formed with flanges which engage the edges of the rail bases, and flanges fitting the recesses of said bases, springs secured to said splice bars, and clamps adapted to fit over the ends of the rail sections, and be held by the said springs. 3rd. In a rail joint, the combination with the meeting ends of two rail sections, recessed at their bases, of splice bars formed with depending flanges engaging the edges of the rail bases, and recessed on opposite sides, and with supplemental flanges fitting the recesses in the rail bases, springs secured to the outer sides of the splice bars, and clamps adapted to be driven over said springs into contact with said supplemental flanges.

No. 66,257. Pneumatic Tire. (Bandage pneumatique.)



Charles Kingston Welch, Park House, Coventry, England, 16th February, 1900; 6 years. (Filed 20th September, 1898.)

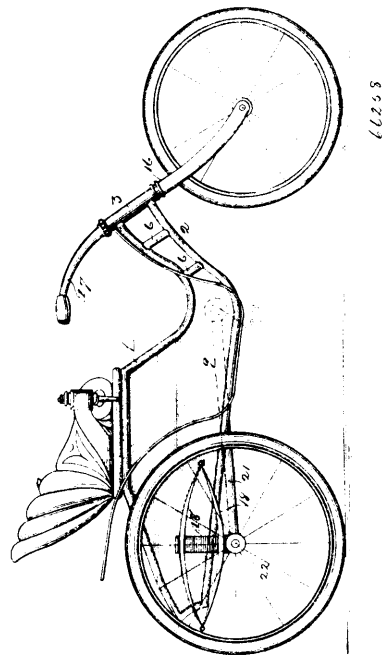
Claim.—A pneumatic tire having a tread surface comprising parallel circumferential ridges D, D', at a suitable distance apart to touch the ground when the wheel leans to either side, and a roughened surface E, intervening said ridges, as set forth.

No. 56,258. Motor Vehicle. (Vehicule moteur.)

Henry F. Eastman, Cleveland, Ohio, U.S.A., 16th February, 1900; 6 years. (Filed 12th August, 1899.)

Claim.—1st. In a motor vehicle frame, a metallic body portion in combination with a rigidly trussed front portion terminating in a stem for a front wheel fork, substantially as described. 2nd. In a frame for a motor vehicle, steel tubing supporting the body portion, the said tubing being extended to form a goose neck connection with a single front fork stem, and removable siding for said frame, substantially as described. 3rd. In a motor vehicle, a frame composed of steel tubing outlining the body portion, and extending forwards to form a goose neck connection with the front fork stem, in combination with detachable siding for the body portion, the said siding being partly composed of insulating and incombustible material, substantially as described. 4th. In a motor vehicle, the combination with a body portion outlined in weldless tubing, of a front stem, and a goose neck connection therewith extending in continuous lines of tubing from said body portion and a truss formation in said goose neck, substantially as and for the purpose set forth. 5th. In a motor vehicle frame, in combination, a body portion formed from metal tubing, in upper and lower portions following the outline of said body portion, a front stem, goose neck shaped continuations of said body portion connecting the same with said stem, and sections of tubing connecting the upper and lower members of the goose neck to form a truss of triangular section, substantially as described. 6th. In a motor vehicle frame, in combination, a body portion formed of metal tubing and reinforcing

angle bars secured longitudinally to said tubing, substantially as described. 7th. In a motor vehicle frame, in combination, body



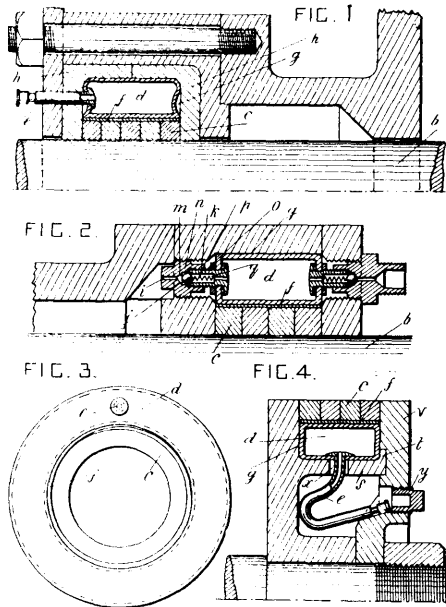
and front goose neck portions formed by continuous metal tubing outlining the same, cross braces forming a truss in the goose neck portion, and cross bars connecting the tubing in the frame, substantially as described. 8th. In a frame for a motor vehicle in combination, rigid body and goose neck portions composed of metal tubing, reinforcing angle bars secured longitudinally to the tubing of said body portion, and detachable insulating siding and covering plates for said body portion, substantially as described. 9th. In the body of a motor vehicle, in combination a tubular metal frame, and an insulating siding and covering therefor, consisting of asbestos plates, reinforced by metal plates on either side, substantially as described. 10th. Means for covering the body of a motor vehicle consisting of plates of insulating and incombustible material, in combination with reinforcing metal plates upon either side thereof, substantially as described. 11th. In a motor vehicle, in combination, a frame composed of body and goose neck portions formed of continuous metal tubing, an insulating covering for said body portion, an insulating partition in said body portion, and means for mounting said body and goose neck portions upon the front fork stem and rear axle, substantially as described. 12th. In a motor vehicle, in combination, a vehicle body and rear axle, a transverse shaft in front of said axle, hounds pivotally secured to said rear axle and transverse shaft, and springs mounted upon said rear axle upon which said body rests, substantially as set forth.

No. 66,259. Pneumatic Packing. (Garniture pneumatique.)

Robert Edward Byle, Harry Atherton Fillmore and Robert Harle Nicholson, all of Pennsylvania, U.S.A., 16th February, 1900; 6 years. (Filed 26th July, 1899.)

Claim.—1st. A packing for rods, plungers, pistons and the like, comprising one or more rings of packing material, an annular inflatable tube for setting up the packing material, and a spring band interposed between the said tube and the packing material and supporting the packing material when the tube is deflated, substantially as set forth. 2nd. The combination with the packing material, and the annular inflatable tube for setting it up, of a packing chamber, and a liner of non-heat conducting material interposed between the said tube and chamber, substantially as set forth. 3rd. The combination with the packing material, and the annular inflatable tube for setting it up, and a packing chamber provided with a hole, of means for inflating the said tube automatically comprising a tubular screwthreaded stem secured to the said tube and projecting into the said hole, a plug provided with a valve seat and engaging with the said hole and stem, a valve, and a spring normally holding the said valve to its seat, substantially as set forth. 4th. The combination with the packing material, and the inflatable annular tube for setting it up, of a piston body provided with a flange which supports the said tube and which has a circumferentially projecting guard lip at its edge, and a cover plate which engages with the said guard lip and the edge of the flange, substantially as set forth. 5th.

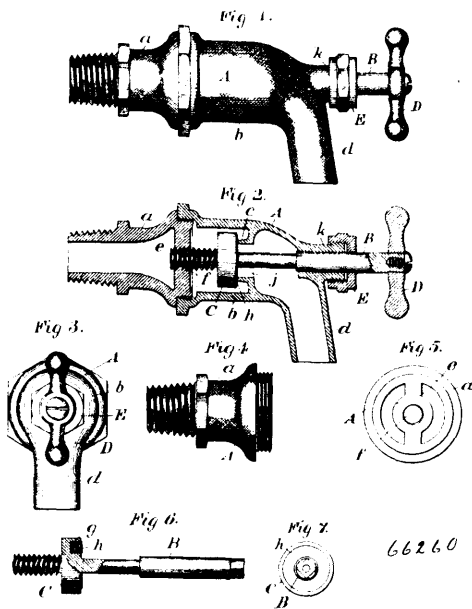
The combination with the packing material, and the inflatable annular tube for setting it up provided with a flexible inflating pipe,



66259

of a piston provided with a flange which supports the said tube and which has an opening for the said pipe to project through, and a removable stopper arranged at one side of the piston and affording access to the said pipe, substantially as set forth.

No. 66,260. Cock. (Robinet.)

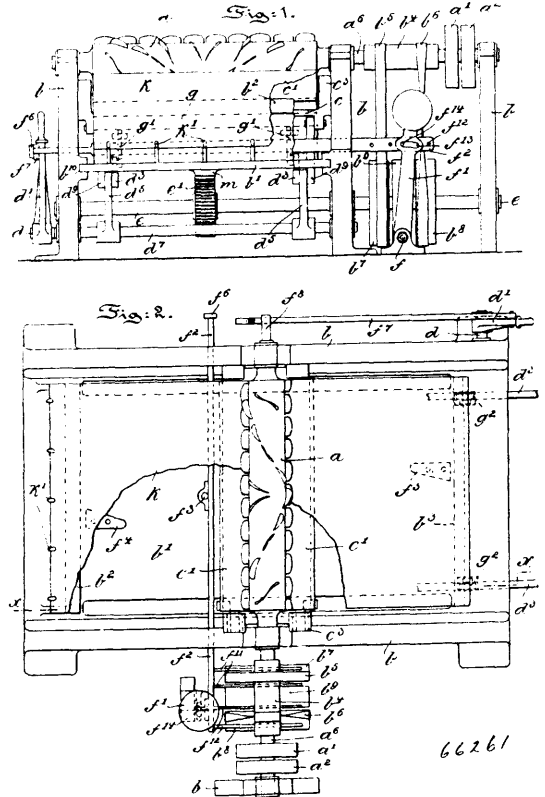


66260

Henry Chataud Schmidt, Baltimore, Maryland, U.S.A., 16th February, 1900; 6 years. (Filed 21st October, 1899.)

Claim.—In a compression cock, the shell thereof composed of two parts screwed together, one part having a waterway, and an interiorly threaded bridge at a right angle with the waterway, and the other provided with a discharge nozzle, and a waterway in alignment with the first waterway, the latter waterway being surrounded by a raised valve seat, combined with a stem, one end of which is threaded so as to screw into the threaded bridge, and the other which passes through a smooth or unthreaded aperture in the shell, provided with a handle, and a valve integral with the stem, which consists of a flat faced circular disc with an annular recess for a joint forming gasket, the said valve being situated between the raised valve seat and the threaded bridge, substantially as specified.

No. 66,261. Improvements in Machines for Treating Hides, Skins and Leather. (*Machine pour le traitement des peaux et du cuir.*)



66261

Joseph Hall, Leeds, England, 16th February, 1900; 6 years. (Filed 2nd March, 1899.)

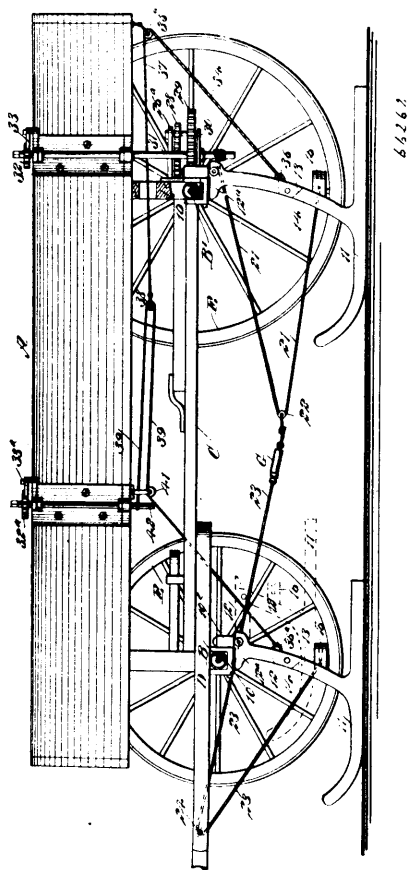
Claim.—1st. In a machine of the character described, a single working roll, a table, a flexible bed supported by said table, means for reciprocating said table below the roll, and means for elevating the flexible bed into operative position with respect to said roll, substantially as and for the purposes described. 2nd. In a machine of the character described, a single working roll, a horizontally arranged table, a flexible bed supported by said table and located below the working roll, means for reciprocating said table, mechanism for elevating said flexible bed during the reciprocation of the table so as to present the bed to the periphery of the working roll, and mechanism for securing the work to the bed during the reciprocation of the table, substantially as and for the purposes described. 3rd. In a machine of the character described, a working roll, a table, means for reciprocating the table beneath the working roll, an apron supported by said table, two rollers located below the apron and on either side of the working roll, and means for elevating said rolls to present the apron in operative position to the working roll during the reciprocation of said table, substantially as and for the purposes described.

No. 66,262. Sleigh Attachment for Vehicles. (*Attache de traicneau pour vehicules.*)

Andrew Christian Nygaard, Rowlins, Wyoming, U.S.A., 16th February, 1900; 6 years. (Filed 18th March, 1899.)

Claim.—1st. A running gear for vehicles, runners, knees for the runners pivotally attached to the running gear, the knees being constructed in pivoted sections, flexing in a rearwardly and locking in a forwardly direction, spreaders for the knees constructed in pivotally connected main sections, each main section being provided with a longitudinal section, and means, substantially as described, for exerting tension on the spreaders in a forwardly direction, and tension on the knees in a rearwardly direction. 2nd. A running gear for vehicles, runners, knees for the runners pivotally attached to the running gear, the knees being constructed in pivoted sections, flexing in a rearwardly and locking in a forwardly direction, spreaders for the knees, constructed in pivotally connected main sections, each main section being provided with an adjustable longitudinal section, and clips adapted to attach the knees to the axle, the said clips consisting of a sectional body adapted to receive the axle, the fastening device for the sections of the body, and a pin adapted for attachment to the knees and carried by a member of the body. 3rd. A running gear for vehicles, runners, knees for

the runners pivotally attached to the running gears, the knees being constructed in pivoted sections, spreader bars for the sleigh



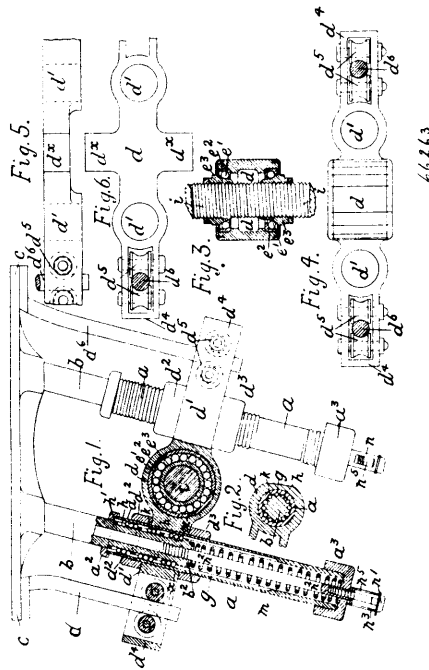
knees, constructed in pivotally connected main sections, each main section being provided with an adjustable longitudinal section, clips adapted to attach the knees to the axle, the said clips consisting of a sectional body adapted to receive the axle, a fastening device for the sections of the body, and a pin adapted for attachment to the knees and carried by a member of the body, a manipulating rod or chain, a tension device comprising a spring-controlled plunger and a casing for the plunger, opposite ends of the plunger and casing being adapted for attachment to said manipulating rope or chain, as described.

No. 66,263. Vibration Cushion. (*Coussinet de vibration.*)

Henry Nevill, Southampton, England, 16th February, 1900; 6 years. (Filed 30th October, 1899.)

Claim.—1st. The combination, in an apparatus for counteracting or cushioning vibration between the under-carriage or wheels, and the body or upper frame of wheeled vehicles, of a cylinder or cylinders having ball bearing races provided with balls, with a piston having ball bearing races to receive the said anti-friction balls and adapted to attach to the body of the vehicle, a coil spring for supporting said piston, and a bracket or bearing for carrying said cylinder or cylinders, and adapted to receive or attach to the wheel axle of the vehicle, all substantially as set forth. 2nd. In a cylinder and piston, and coil spring bearing for wheeled vehicles the combination of anti-friction balls placed loosely in tiers, and close together in the horizontal plane, and spring rings, stops, or studs which separate said tiers, substantially as set forth. 3rd. A coil spring bearing for wheeled vehicles comprising the closed cylinder or cylinders *a* having anti-friction ball races *a*, piston or pistons *b*, having corresponding anti-friction ball races *b*, spring separating rings *b*¹, anti-friction balls *k*, the coil spring *m* having the adjustment device *n*, the bracket *d* to bear the vehicle axle *l*, and having a boss or bosses *d*¹ to carry the cylinder or cylinders *a*, and the plate *c* to attach the piston or pistons *b* to the vehicle body, all substantially as set forth. 4th. A coil spring bearing for wheeled vehicles comprising the closed cylinders *a* having anti-friction ball races *a*, pistons *b* having corresponding anti-friction ball races *b*, spring separating rings *b*¹, anti-friction balls *k*, the coil spring *m* having the adjustment device *n*, the bracket *d* to bear the vehicle axle *l* having bosses *d*¹ to carry the cylinders *a* and extensions *d*² provided with anti-friction rollers *d*³, and the stays *d*⁴

to steady the spring bearing all substantially as set forth. 5th. A coil spring bearing, comprising the cylinder *a*, and piston *b* con-



structed substantially as herein described, the bracket *d* and plate *c*, as and for the purposes set forth.

No. 66,264. Faucet. (*Canule.*)

Fig. 1.

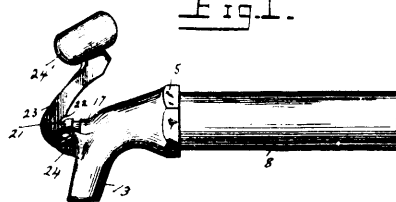
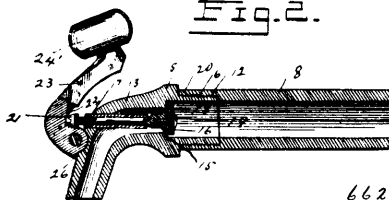


Fig. 2.



Edmond Randolph, Jacksonville, Florida, U.S.A., 16th February, 1900; 6 years (Filed 8th November, 1899.)

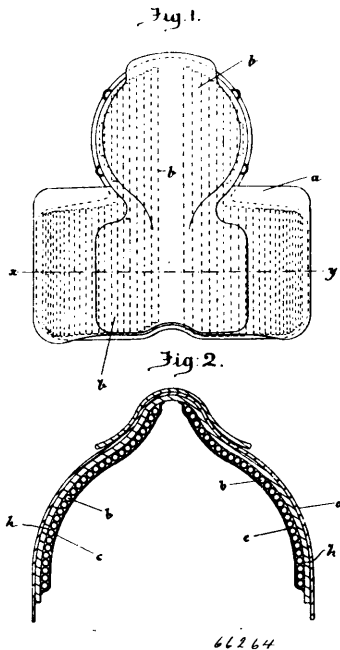
Claim.—A faucet, comprising a casing consisting of the base and a spout formed integral, the interior diameter of the base being greater than the internal diameter of the adjacent portion of the spout, a valve adapted to lie upon the seat and having a stem passed exteriorly of the casing, a combined guide and casing for the stem fixed to the casing of the faucet and extending inwardly thereof, an adjustable screw in the outer end of the stem, and a lever pivotally connected with the casing and having a cam-surface adapted to engage the screw and move the valve from its seat

No. 66,265. Saddle or Seat. (*Selle ou siege.*)

Joseph John Harris and Edwin Toft, both of Brighton, Sussex, England, 16th February, 1900; 6 years. (Filed 2nd December, 1899.)

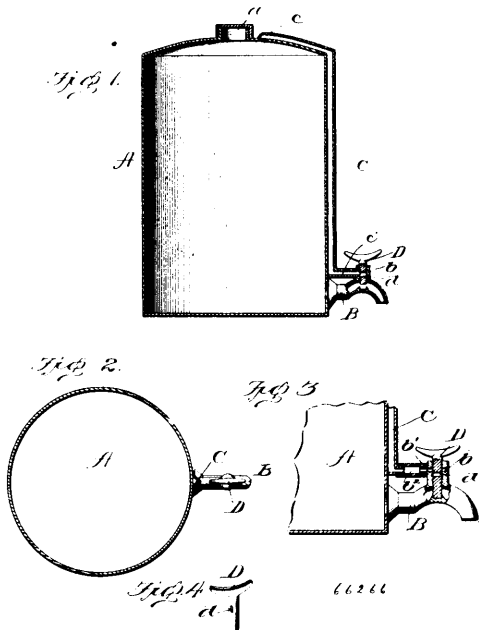
Claim.—1st. In saddles, seats or supports for human or other bodies, the employment of a series of air chambers, channels or passages interposed between the supporting surfaces and the body

to be supported, substantially as described and illustrated herein and for the purpose set forth. 2nd. In saddles, the combination



therewith of a series of air chambers, channels or passages, substantially as described and illustrated herein and for the purpose set forth. 3rd. In means for supporting the human body for the purpose of reducing shock or jar and providing ventilation, a series of air chambers, channels or passages arranged and secured to two bases formed of suitable material, substantially as described and illustrated herein and for the purpose set forth.

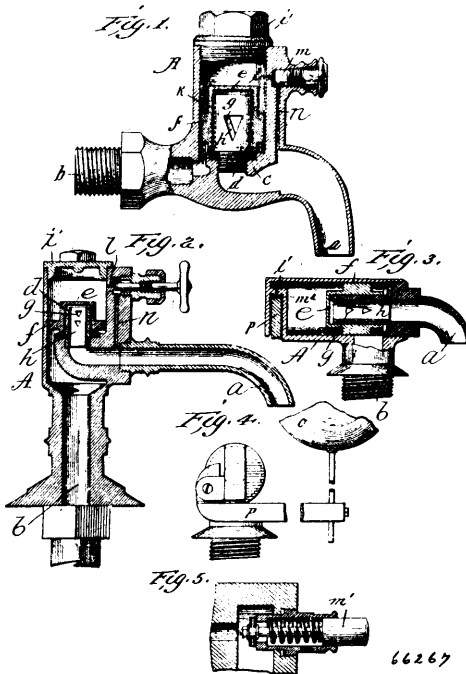
No. 66,266. Venting Faucet. (Candle.)



Arthur Milton Schauck, Galion, Ohio, U.S.A., 16th February, 1900; 6 years. (Filed 2nd January, 1900.)

Claim.—As an improved article of manufacture, a can or tank A, provided with the filling cap a and the V-shaped tube C, the outer wall of the tank or can forming the inner wall of the tube, and having its upper end closed to the atmosphere and communicating with the tank through the medium of the orifice c, the faucet B having its socket formed with the orifice b, the lateral pipe c' connecting the lower end of the vent tube and socket, and the faucet key D formed with the transverse and axially elongated orifice d, substantially as shown and described.

No. 66,267. Valve. (Sourpce.)



Charles Gulland, Pittsburg, Pennsylvania, U.S.A., 16th February, 1900; 6 years. (Filed 27th January, 1900.)

Claim.—1st. In a valve, a valve chamber, inlet and outlet openings therefrom, a central piston or guide having graduated openings therethrough and a movable valve guided by said piston and covering said openings, with means for controlling the movement of the valve, substantially as described. 2nd. In a valve, a chamber, inlet and outlet openings therefrom, a guide or piston, a discharge opening from the pressure to the outlet side of the chamber, means for adjusting the size of said opening to regulate the normal flow of fluid, and a valve covering said opening, with means for controlling the movement of the valve, substantially as described. 3rd. In a valve, a chamber, inlet and outlet openings therefrom, a guide or piston, an opening therethrough, a shell having a like opening and fitted to the piston and capable of being adjusted to diminish the size of the opening through the piston, a valve covering the opening, and means for controlling the movements of the valve, substantially as described. 4th. In a valve, a casing or chamber, inlet and outlet openings, a diaphragm within the casing having an opening, a piston and guide secured therein having openings through its walls and open at each end, a shell fitting the guide and having a like opening, said shell being adjustable to cut off more or less of the flow, a movable valve fitting the guide, and a removable cap for the casing, substantially as described. 5th. In a valve, a casing or chamber, a piston or guide arranged therein, an automatically operating main valve fitted thereto and held to its seat by the water pressure, a passage for the water to the rear of the main valve, means for controlling the movement of the valve by draining the chamber above the same, consisting of an independent escape duct or passage leading directly from said chamber through the casing to the main outlet, and an independent valve for said escape duct, substantially as described. 6th. In a valve, a casing or chamber, inlet and outlet openings, a guide or piston, a valve fitted thereto and movable in relation thereto, and graduated openings in the wall of said guide arranged at different elevations so as to be uncovered in succession, and thus make the action of the valve gradual without shock or strain, substantially as described.

No. 66,268. Mowing Machine. (Faucheuse.)

Maurice Kane, Austin, Illinois, U.S.A., 17th February, 1900; 6 years. (Filed 5th February, 1900.)

Claim.—1st. In a mowing machine, a main frame, a coupling arm connected thereto, the end of said arm being deflected or bent into angular relation with respect to the axial line of said arm, a cutter bar supported upon said angularly bent end, a pitman for reciprocating said cutter bar, and means for rotarily adjusting said arm axially. 2nd. In a mowing machine, a main frame, a coupling arm made in sections, one of said sections connected to the frame work, a cutter bar supported upon the other of said sections but out of axial alignment therewith, and means for rotarily adjusting said sections relative to the first mentioned section. 3rd. In a mowing machine, a main frame, a coupling arm having an end piece connected to said frame work, a flange formed upon said end piece, a cutter bar supported upon said coupling arm but out of axial align-

ment therewith, and a flange carried by said coupling arm, and means for connecting said flanges, whereby said coupling arm may

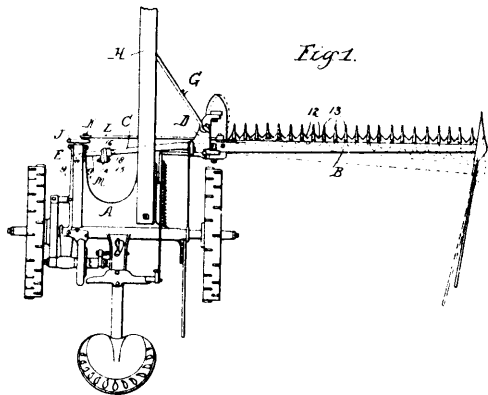


Fig. 2.

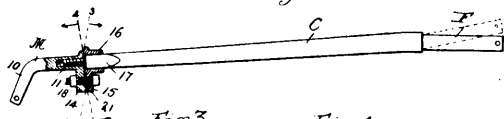


Fig. 3.

Fig. 4.

66265

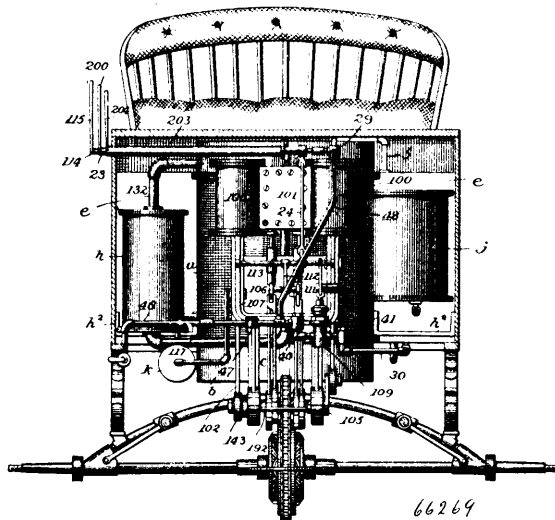
be rotarily adjusted. 4th. In a mowing machine, a main frame, a coupling arm having an end piece connected to said frame, a flange carried by said end piece, a collar mounted upon said coupling arm and provided by a co-operating flange, a bolt for connecting said flanges, whereby said coupling arm may be rotarily adjusted relative to said end piece, and a cutter bar supported upon said coupling arm out of axial alignment therewith. 5th. In a mowing machine, a main frame, a coupling arm having an end piece connected to said frame, a flange carried by said end piece, a collar mounted on the adjacent end of said coupling arm for endwise movement thereon, said collar provided with a co-operating flange, one of said flanges provided with teeth and the other with an engaging lug, a bolt for coupling said flanges, one of said flanges being provided with an elongated slot, through which said bolt passes, whereby said coupling arm may be rotarily adjusted axially, and a cutter bar supported upon said coupling arm but out of axial alignment therewith. 6th. In a mowing machine, a coupling arm, a cutter bar supported upon said arm in eccentric relation to the axis thereof, a pitman for actuating said cutter bar, and means for adjusting the position of the coupling arm, whereby through such eccentric relation alignment between the pitman and the cutter bar is restored. 7th. In a mowing machine, a cutter bar, a coupling arm upon which said bar is mounted, the line of movement of said cutter bar being normally inclined relative to the axial line of said arm, a pitman for reciprocating said cutter bar, and means for axially adjusting said coupling arm, whereby the backward sag of the outer end of the cutter bar is compensated for.

No. 66,269. Engine. (*Voiture à vapeur.*)

Francis E. Stanley and Freedland O. Stanley, both of Newton, Massachusetts, U.S.A., 17th February, 1900; 6 years. (Filed 5th February, 1900.)

Claim.—1st. The combination with the boiler, engine, water tank, and feed pump for the boiler, of means whereby the water from the pump may be directed from the boiler to the tank, and an operating handle controlling such means, substantially as set forth. 2nd. The combination of the engine, boiler, water tank, pump communicating with the water tank and with the boiler through a pipe having a check valve, and means for directing the water through the pump back to the tank, substantially as set forth. 3rd. The combination of the engine, boiler, water tank and pump, pipes extending from the pump to the tank and to the boiler, a return pipe from the pump to the top of the tank, and valves arranged to direct the flow from the pump to the boiler of the tank, substantially as set forth. 4th. The combination of the engine, boiler, water tank and pump, pipes extending from the pump to the tank and to the boiler, a return pipe from the pump to the top of the tank, valves arranged to direct the flow from the tank to the boiler or the tank, and a shaft extending from the valve in the return pipe to the tank and provided with an operating handle, substantially as set forth. 5th. The combination with a boiler and engine, of a pump adjusted to feed to the boiler an amount of water in excess of that which can

be evaporated when the boiler is filled, but less than can be carried out by the saturation of the steam, substantially as set forth. 6th.



66269

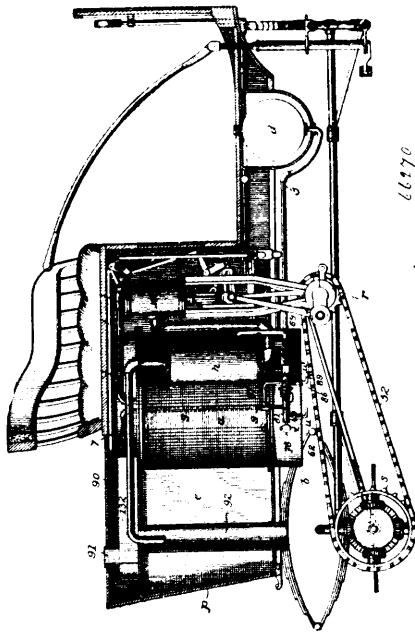
The combination of an engine, crank shaft and cranks, connecting rods, and roller bearings between the cranks and connecting rods, substantially as set forth. 7th. The combination of the engine, frame having side pieces, crank shaft and roller bearings therefor in the side pieces, and means for separating or bringing the side pieces towards each other, substantially as set forth. 8th. The combination of the engine, boiler, return pipe, cock and shaft 114, reversing devices, and tubular shaft 23, connected therewith and enclosing the shaft 114, and provided with an operating handle, substantially as set forth. 9th. The combination of the engine, boiler, return pipe, cock and shaft 114, reversing devices, tubular shaft 23, connected therewith and enclosing the shaft 114, and provided with an operating handle, and a tubular shaft provided with an operating handle enclosing the shaft 23, and connected with the throttle, substantially as set forth. 10th. The combination with an engine shaft, of bevelled rings 141, 142, upon the shaft, a rod having a head with an inner annular V-shaped groove, and balls within said groove, and between the bevelled faces of said rings, substantially as set forth. 11th. The combination with an engine shaft, of bevelled rings 141, 142, and means for securing one of the rings detachably on the shaft, a rod having a head with an inner annular V-shaped groove, and balls within said groove and between the bevelled faces of said rings, substantially as set forth. 12th. The combination of the shaft of an engine, bevelled faced rings 147, and filler rings 148, on said shaft, the engine frame being recessed to receive the rings 147, and 148, and with an internal groove for a ring 150, the frame being divided on a line crossing the axis of the shaft, substantially as set forth.

No. 66,270. Burner for Steam Generators.
(*Brûleur pour générateurs à vapeur.*)

Francis Edgar Stanley and Freedland Oscar Stanley, both of Newton, Massachusetts, U.S.A., 17th February, 1900; 6 years. (Filed 5th February, 1900.)

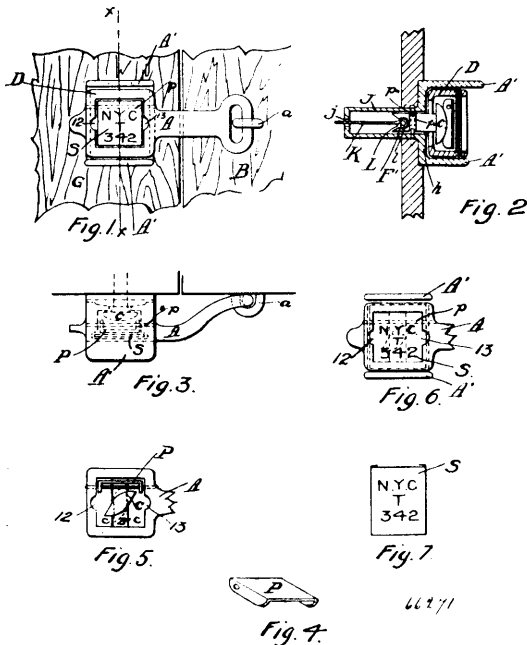
Claim.—1st. The combination in a portable steam generator, of a boiler, a burner consisting of a casing having a continuous top plate, burning openings therein, a combustion chamber above the said plate closed at the bottom by the burner and at the top by the bottom of the boiler, and also closed at the sides, air tubes extending through the top plate and through the bottom of the casing and communicating directly with the external air, a mixing tube extending through the side of the casing, and means for injecting directly a forcible jet of gas under pressure into said tube, substantially as described. 2nd. The combination in a portable steam generator, of a burner having vertical air tubes communicating at the bottom directly with the external air, and gas burning openings encircling the upper ends of the tubes, a boiler having vertical tubes arranged above the burner, both arranged to permit an unobstructed flow of the air through the burner into the boiler tubes, and an intermediate combustion chamber closed at the sides and at the bottom by the burner, substantially as described. 3rd. The combination in a portable steam generator, of a vertical tubular boiler and a burner consisting of a casing having a flat perforated top and air tubes extending from the top to the bottom of the said casing to communicate directly with the external atmosphere, an intermediate combustion chamber closed at the sides and arranged below the boiler, and means for supplying the casing with a burning mixture under pressure, whereby all the air and gaseous matter passing to the boiler pass unobstructedly through the burner casing and meet the flow upward with the flame from the burner, substantially as

set forth. 4th. The combination with the nozzle 62 communicating with the burner and oil pipe leading thereto, and a heater independent-



ent of the burner for heating part of the oil pipe above the nozzle, of a blow-off cock arranged to discharge oil from the pipe below the said heater, substantially as set forth.

No. 66,271. Seal Lock. (*Serrure à cachet.*)

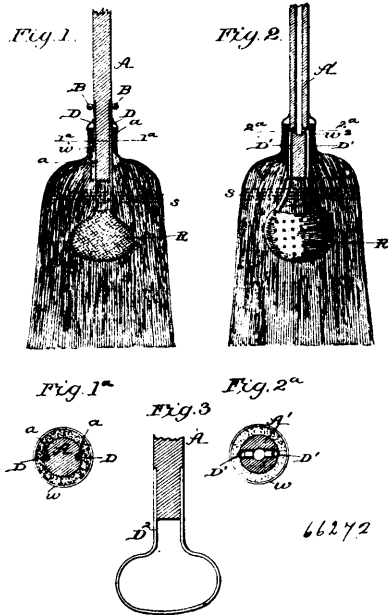


John Mackenzie, Waterloot, New York, U.S.A., 17th February, 1900; 6 years. (Filed 5th February, 1900.)

Claim.—1st. A seal lock consisting of a hasp, a locking bolt, a plate secured to said hasp and arranged to cover the head of the bolt when locked, with a wheel plate adapted to be inserted in the hasp over the locking plate, said wheel plate adapted to be broken before the lock can be opened, substantially as described. 2nd. In

a seal lock, a hasp provided with a slotted opening, a locking bolt, provided with bevelled sides to its head, a spring adapted to be automatically put under tension by the action of closing the hasp over the bolt head and locking the bolt, said spring assuming its normal position automatically after the bolt has been locked, a locking plate arranged to cover the locking bolt, with a seal plate arranged to be placed over said locking plate, all substantially as described.

No. 66,272. Antiseptic Broom. (*Balai antiseptique.*)



Oscar Samuel Kulman, Savannah, Georgia, U.S.A., 17th February, 1900; 6 years. (Filed 3rd February, 1900.)

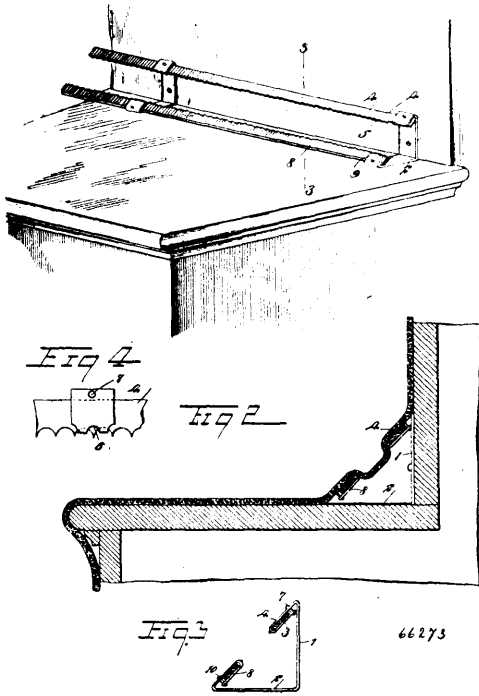
Claim.—1st. A broom having an antiseptic retainer incorporated in its straws entirely below the lowest line of stitching, and supporting devices for the retainer passing through said line of stitching, as described. 2nd. A broom having an antiseptic retainer incorporated in its straws entirely below the line of stitching, combined with supports connected to the handle and extending through and below the line of stitching, substantially as described. 3rd. A broom having one or more external longitudinal grooves in its handle, supporting wires arranged in these grooves, and a retainer for antiseptic material carried on the lower ends of said wires, substantially as and for the purpose described. 4th. A broom having a channelled handle, a retainer embedded in its straws and wires for the retainer, made in tubular form and connecting the hollow handle with the retainer, substantially as described. 5th. A broom having one or more external longitudinal grooves in the lower portion of the handle, a supporting wire laid therein and retained by the convolutions of the broom wires that secure the straws, and a retainer secured upon the lower end of said supporting wire or wires and embedded in the straw of the broom, substantially as described. 6th. A broom having one or more external longitudinal grooves in the lower portion of the handle, one or more supporting wires laid therein and having their upper ends turned inwardly toward the centre of the handle, said wires being retained by the straw wrapping wire, and a retainer carried on the lower ends of said supporting wires, substantially as described. 7th. A broom having attached to its handle at the lower end a bowed or loop-shaped support, combined with a bag-shaped receptacle for antiseptic or other material, said receptacle being both distended and supported by said loop, substantially as described.

No. 66,273. Stair Carpet Fastener. (*Attache pour tapis d'escaliers.*)

Harry C. Adams, New York City, New York, U.S.A., 17th February, 1900; 6 years. (Filed 3rd February, 1900.)

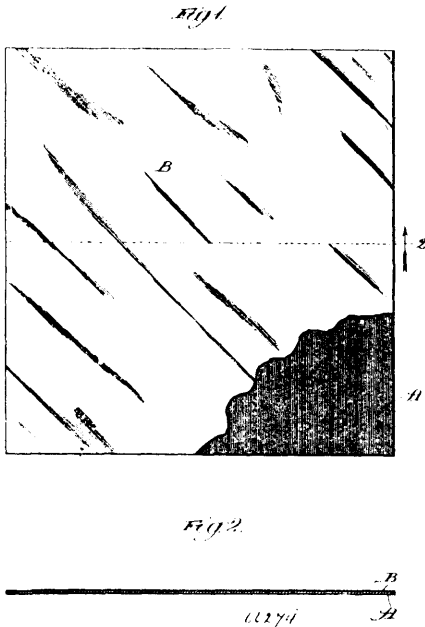
Claim.—1st. A stair carpet fastener, comprising brackets, each bracket consisting of sections arranged at an angle to each other, guides extended from the ends of the bracket sections, and toothed plates adapted to be removably engaged in said guides, substantially as specified. 2nd. A stair carpet fastener, comprising brackets adapted to be attached to the stairs, and each bracket consisting

of a vertical section and a horizontal section, the ends of said sections being turned to form guides, toothed plates removably



seated in said guides and having teeth engaging in openings in the guides, and pins for holding the plates from movement in the guides, substantially as specified.

No. 66,274. Dental Dam. (*Barrage dentaire.*)



Charles Channing-Allen, Kansas City, Missouri, U.S.A., 17th February, 1900; 6 years. (Filed 11th July, 1899.)

Claim.—1st. As a new article of manufacture, a dental dam formed of flexible elastic material having a light-reflecting substance on one side, substantially as described. 2nd. As a new article of manufacture, a dental dam formed of rubber or similar elastic yielding substance having one side provided with a coating of aluminium bronze, substantially as described.

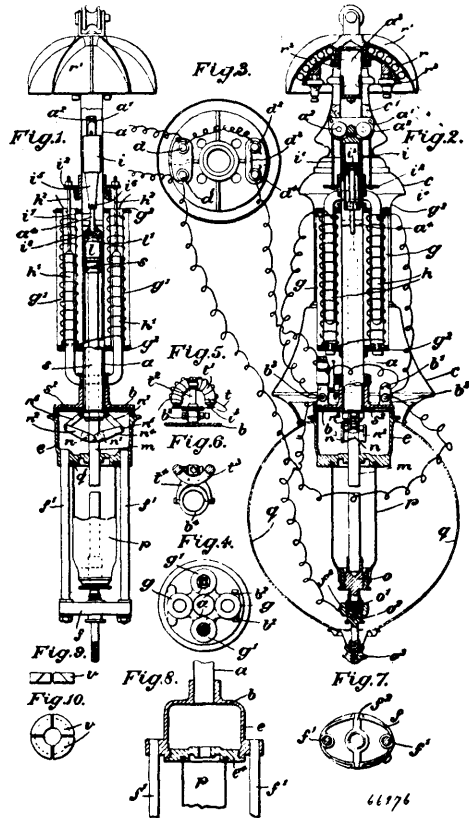
No. 66,275. Graphite Article Manufacture.

(*Fabrication d'articles de plombagine.*)

Edward Goodrich Acheson, Buffalo, New York, U.S.A., 17th February, 1900; 6 years. (Filed 25th April, 1899.)

Claim.—1st. The method, substantially as hereinbefore set forth of producing articles containing a greater or less percentage of graphite, which consists in forming the articles from a mixture of carbon, and a metallic salt, having a base capable of being reduced by and combining with carbon, and then subjecting them to a temperature sufficiently high and for a sufficient time to form and then decompose a carbide, and thereby convert the carbon into graphite. 2nd. The method, substantially as hereinbefore set forth, of producing articles containing a greater or less percentage of graphite, which consists in forming the articles from a mixture of carbon and a metallic salt, having a base capable of being reduced by and combining with carbon, the relative proportions of the carbon and salt being less than that necessary to form a carbide of all the carbon desired to be converted into graphite, and then subjecting them to a temperature sufficiently high to progressively form and then decompose a carbide, and thereby progressively convert the carbon into graphite.

No. 66,276. Electric Arc Lamp. (*Lampe à arc électrique.*)

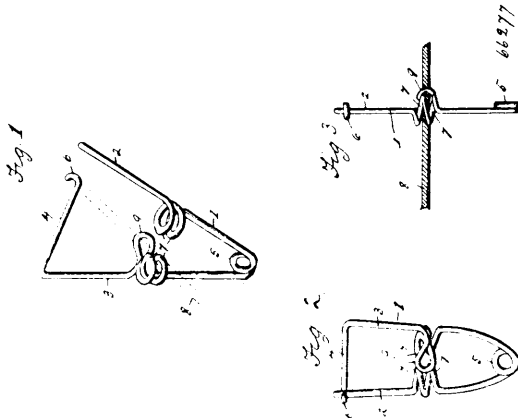


William James Davy and George Thomas Davies, both of High-bury, London, England, 17th February, 1900; 6 years. (Filed 7th March, 1898.)

Claim.—1st. The construction and arrangement of the enclosed arc lamp consisting of the closed mechanism chamber, the central frame tube fixed to and entering into the mechanism chamber, the enclosing bell supported from the mechanism chamber and the carbon holder sliding in the frame tube and operatively connected to the exterior controlling devices through a link working in a snugly fitting aperture in a plug closing the frame tube. 2nd. The construction and arrangement of the frame of the enclosed arc lamp consisting of the central frame tube closed at its upper end by a plug, the frame disc with mechanism chamber secured to the frame tube, the lower yoke secured by yoke rods to the chamber, the enclosing glass bell forced up against the mechanism chamber and the carbon holder sliding in the frame tube and operatively connected to the exterior controlling devices through a link working in a snugly fitting aperture in the closing plug, the whole forming a perfectly closed chamber with the exception of the small sliding joint. 3rd. The means for connecting the controlling mechanism to the regulating mechanism consisting of the central frame tube, a solenoid coil secured to the central frame tube, a solenoid core, a guide pulley mounted on the frame tube, a flexible cord passing over the pulley and connected to the solenoid core, and a tube or

link connected to the cord and passing down the central tube to the regulating mechanism. 4th. The means for connecting the controlling mechanism to the regulating mechanism consisting of the central frame tube, the two solenoid coils secured symmetrically to the frame tube, the two solenoid cores, a guide pulley mounted on the frame tube, a flexible core passing over the pulley and connected at its ends to the solenoid cores, and a tube or link connected to the cord and passing down the central tube to the regulating mechanism. 5th. The arrangement of the controlling magnets and their cores consisting of the central frame tube, of the two symmetrically placed solenoid coils, of the discs supporting the solenoids and fixed on the central tube, and the U core whose centre piece or yoke surrounds the central tube. 6th. The arrangement of the controlling magnets and their cores consisting of the central frame tube, of the two symmetrically placed solenoid coils, of the discs supporting the solenoids and fixed on the central tube, and the inverted U core whose centre piece or yoke surrounds the central tube.

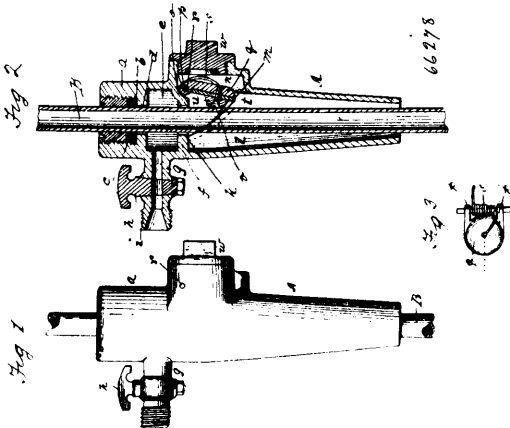
No. 66,277. Clothes Pin. (Épingle à linge.)



Walter Lowrie Martin, Moffatt's Creek, Virginia U.S.A., 17th February, 1900; 6 years. (Filed 5th February, 1900.)

Claim.—1st. A substantially U-shaped clothes pin, the side portions of which are provided at intermediate points with oppositely located co-operating clamping coils, one of the arms having an eye located adjacent to one of the engaging coils and designed to receive the clothes line, combined with means at the extremities of the arms for holding the latter together, whereby the engagement of the coils with each other and the clothes line is maintained, substantially as described. 2nd. A substantially U-shaped clothes pin, both sides of which are provided at points intermediate, their ends with oppositely located co-operating clamping coils serving to engage a clothes line on opposite sides, combined with means at the extremities of the sides for holding the sides toward each other and maintaining the engagement of the coils with each other and the line, substantially as described. 3rd. A clothes pin comprising two sides provided with clamping coils arranged in pairs, an eye located at one side of the pin adjacent to clamping coils, and an arm arranged at one end of the clothes pin, connected with one side thereof, and provided with a hook detachably engaging the other side, substantially as described.

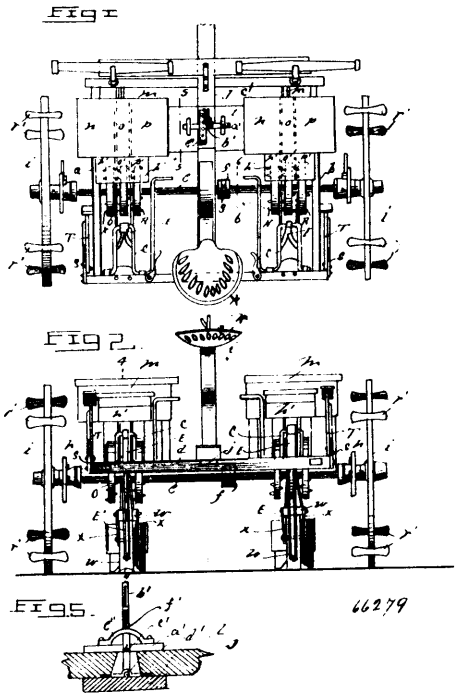
No. 66,278. Beer Tap. (Pompe à Bière.)



Robert E. Kabisch, Lebanon, Pennsylvania, U.S.A., 17th February, 1900; 6 years. (Filed 5th February, 1900.)

Claim.—1st. A beer tap having an air chamber whose lower wall is formed by a transverse partition provided with a central opening, a valve chamber below the air chamber and into which said partition extends and provided with a valve seat on its lower surface, an opening in said valve chamber extending above said valve seat, a valve, and a plug closing said opening. 2nd. A beer tap having an air chamber whose lower wall is formed by a transverse partition having a central opening, a valve chamber below the air chamber and having a side opening, and into which chamber said partition extends and provided with a valve seat below the upper end of said openings, a valve pivotally secured in the body of the tap and having a spring engaging the valve in the centre thereof at one end and the body of the tap at the opposite end. 3rd. A beer tap having an air chamber whose upper and lower walls are provided with central openings, a branch communicating with said chamber and having a valve extending through the branch a valve chamber below the air chamber, a valve seat into which said seat extends, an opening in the valve chamber opposite and extending above said seat, a valve, and a cover for said opening. 4th. A beer tap having a packing chamber at its outer end, a packing ring and a follower in said chamber and a passage in the bottom thereof, the diameter of the draft tube, an air chamber having a transverse bottom provided with an opening opposite the opening in the packing chamber and also the diameter of the draft tube and having a valve seat formed on its lower surface, a laterally extending branch communicating with the air chamber, a valve chamber below the air chamber and having an opening in one side extending above said valve seat and provided with a detachable cover, a valve pivotally supported and engaging the valve seat, and a spring engaging the back of the valve and the body of the tap, in combination with a draft tube which passes through the packing chamber, both of said openings and the tap.

No. 66,279. Planter. (Planteur.)



Edward H. Grim, East Radford, Virginia, U.S.A., 17th February, 1900; 6 years. (Filed 5th February, 1900.)

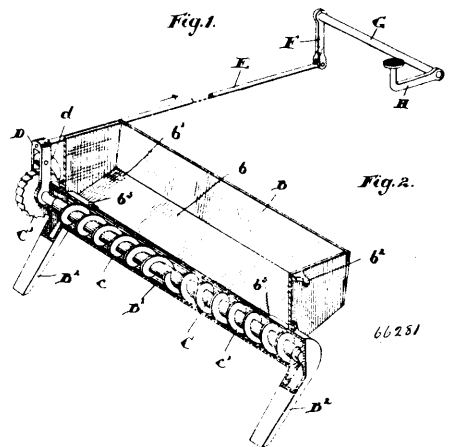
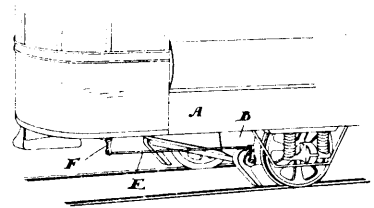
Claim.—1st. In a planting machine, the combination with hoppers, of throats leading therefrom, slides within the throats having openings therein, means for bringing said openings alternately into operative relation with the throats to discharge material from the hopper, and alarms arranged to receive the discharge from the hoppers. 2nd. In a planting machine, the combination with hoppers of throats leading therefrom, slides in each throat having each an opening therein, a lever connected with each slide, supporting wheels for the machine having an axle rotatable therewith, drums carried by the axle, and pins on said drums adapted to engage the levers. 3rd. In a planting machine, the combination with hoppers of throats leading therefrom, slides in each throat having each an opening, a lever connected with each slide, supporting wheels for the machine having an axle rotatable therewith, drums carried by the axle, said drums having pins adapted to engage the said levers successively, a boot adapted to receive the discharge from each hopper, a colter in advance of each boot, covers following the boots, and means for raising and lowering the boots, the covers and colters. 4th. In a planting machine, the combination with hoppers of throats leading

therefrom, slides in each throat having each an opening, a lever connected with each slide, supporting wheels for the machine having an axle rotatable therewith, drums carried by the axle, said drum having pins adapted to engage said levers successively, boots adapted to receive the discharge from the throats, levers supporting the boots, covers following the boots and carried by the levers, colters in advance of the boots, rollers adjustably connected with the levers, means for adjusting the rollers and means for adjusting the levers. 5th. In a planting machine adapted for automatic checking, the combination of a frame having supporting wheels, hoppers carried by the frame, throats leading from the hoppers, slides in the throats adapted to open and close the throats to permit passage of material therethrough, connections between said slides and the wheels for operating the slides, valves below the slides to prevent passage of the material from the throats, knockers arranged to operate the valves, and cleats upon the wheels adapted to mark simultaneously with the operation of the valves. 6th. In a planting machine adapted for automatic checking, the combination of a frame having supporting wheels, which wheels are independently movable hoppers carried by the frame, throats leading from the hoppers, slides in the throats adapted to open and close the throats to permit passage of material therethrough, connections between said slides and wheels for operating the slides, valves below the slides, knockers arranged to operate the valves, cleats upon the wheels adapted to mark simultaneously with the operation of the valves, and means for moving the slides into and out of operation with the wheels. 7th. In a planting machine adapted for automatic checking, the combination of a frame having an axle journaled therein, supporting wheels carried by the axle and having ratchet connections therewith, hoppers carried by the frame, throats leading from the hoppers, an upper and lower slide within each throat, connections between the slides and the wheels for operating the slide, a third slide intermediate the upper and lower slide adapted to vary the space therebetween, valves below the slides, knockers arranged to operate the valves, cleats upon the wheels adapted to mark simultaneously with the operation of the valves, and means for moving the slides into and out of operative connection with the wheels. 8th. In a planting machine, the combination of a frame having supporting wheels, hoppers carried by the frame, discharge apparatus having operative connections with supporting wheels carried by the frame, a throat leading from each hopper, a lever pivoted to the frame, a boot carried by the lever arranged to receive discharge from the adjacent throats and convey it to the furrow, a colter in advance of each boot and secured to the lever, a coverer in the rear of each boot, a roller adjustably connected with the lever and adapted to roll the furrow after engagement of the coverer, and means for operating the lever to raise and lower the mechanism carried thereby.

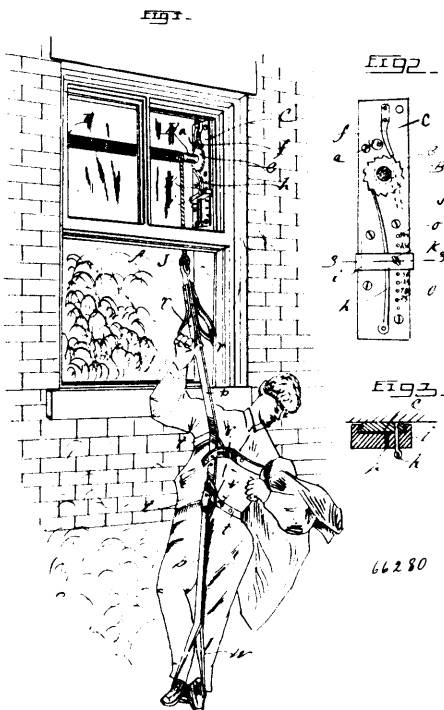
a building, a rope or chain attached by one end to said shaft and normally wound round the same, a ratchet wheel fixed on one end of said shaft, a shaft and pawl supporting plate having weight indicating figures thereon, secured on said frame at one end of said shaft, a pawl C fixed on said plate and engaging said ratchet wheel with a constant pressure, the spring pawl *b*, the adjustable slide *i* engaging the last named pawl, and means for holding said slide in different positions on said plate between the extremities thereof, substantially as described.

No. 66,281. Track Sander.

(Appareil à soupoudrer le sable sur les rails.)



No. 66,280. Fire Escape. (Saurteur d'incendie.)



Edward Peter Feiker, Northampton, Massachusetts, U.S.A., 17th February, 1900; 6 years. (Filed 5th February, 1900.)

Claim.—A fire escape of the class described comprising a revoluble shaft extending between the opposite sides of the window frame of

Oliver Sharvell Hammond, Toronto, Ontario, Canada, 17th February, 1900; 6 years. (Filed 5th February, 1900.)

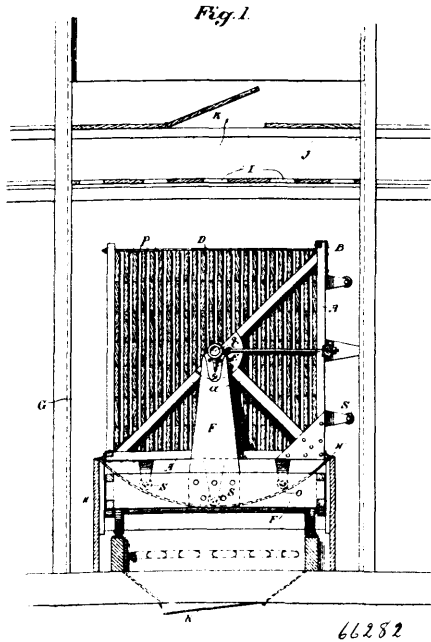
Claim.—1st. The combination with the hopper having a longitudinal conveying tube at the bottom thereof and end spouts for the same, of means for conveying the sand simultaneously towards each end of the spout, as and for the purpose specified. 2nd. The combination with the hopper having a longitudinal conveying tube at the bottom thereof and end spouts for same, of the spindle provided with right and left hand threads suitably journaled in the ends of the tube and means for operating the same, as and for the purpose specified. 3rd. The combination with the hopper having a longitudinal conveying tube at the bottom thereof, and end spouts for same, of the spindle provided with right and left hand threads suitably journaled in the ends of the tube, means for operating the same and shields covering the ends of the conveying tubes in proximity to the spout, as and for the purpose specified. 4th. The combination with the hopper having a longitudinal conveying tube at the bottom thereof and end spouts for same, of the spindle provided with right and left hand threads suitably journaled in the ends of the tube, the ratchet wheel secured on the end of the spindle, the double arm and pawl and means for operating the same, as and for the purpose specified. 5th. The combination with the hopper having a longitudinal conveying tube at the bottom thereof and end spouts for same, of the spindle provided with right and left hand threads suitably journaled in the ends of the tube, the ratchet wheel secured on the end of the spindle, the rod connected to the arm supporting the pawl and the arm P, shaft G, and foot crank H and spring I, as and for the purpose specified.

No. 66,282. Lumber Drier. (Schoir à bois.)

George X. Wendling and Orlin W. Crawford, both of San Francisco, California, U.S.A., 17th February, 1900; 6 years. (Filed 31st October, 1899.)

Claim. 1st. A device for drying lumber, consisting of a frame whose sides are open for the passages of air and which forms a support for the stack of lumber to be dried, said frame being supported to turn about a horizontal axis, substantially as and for the purpose set forth. 2nd. A support for a stack of lumber, consisting of a frame supported to turn about a horizontal axis, said frame comprising two sides extending at a right angle from each other and open for the passage of air, said sides being rigidly secured together

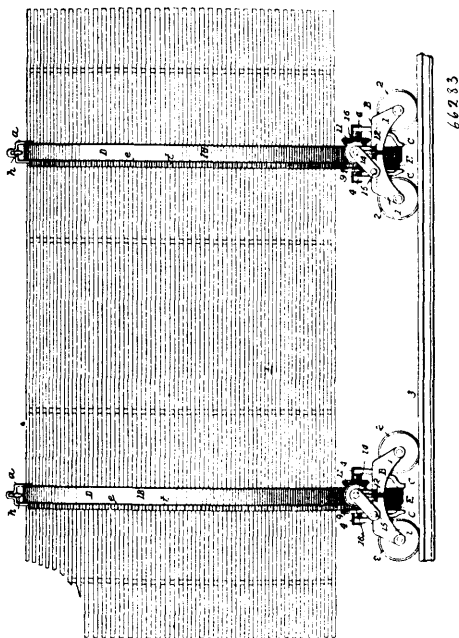
at their meeting edges, and their outer edges connected by diagonally extending braces, substantially as and for the purposes set forth.



3rd. A support for a stack of lumber, consisting of a frame supported to turn about a horizontal axis, said frame comprising two sides extending from each other at a right angle and formed of open framework, said sides being rigidly connected to the outer edges of the frame sides and to each other, said rods supporting the stack on sides opposite those supported by the sides of the frame, substantially as set forth. 4th. In an apparatus for drying lumber, an enclosing chamber, a heating medium within the chamber, a movable car within the chamber above the heating medium, a support for a stack of lumber mounted upon the car to turn about a horizontal axis, said frame having open work sides, and boards or plates H and L, removably supported to enclose the sides and ends of the car, substantially as and for the purpose specified.

No. 66,283. Lumber Drying Truck.

(*Chariot pour sécher le bois.*)

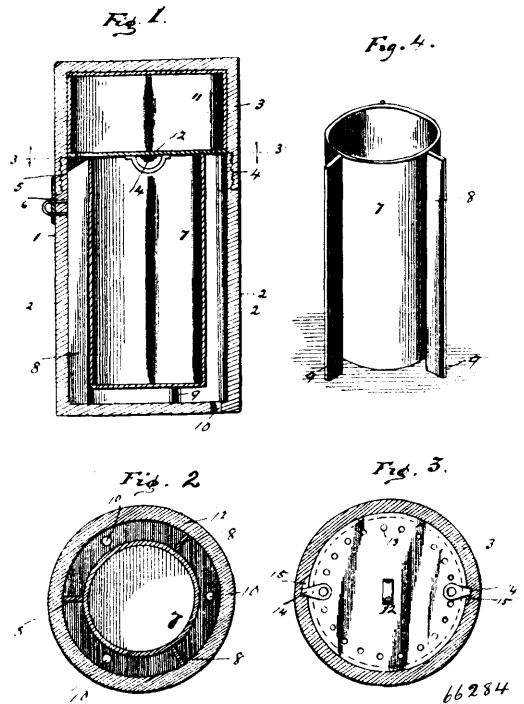


George X. Wendling and Orlin W. Crawford, both of San Francisco, California, U.S.A., 17th February, 1900; 6 years. (Filed 31st October, 1899.)

Claim.—1st. In an apparatus for drying lumber, a plurality of trucks, each carrying a frame upon which the lumber is supported, said trucks and frames being spaced apart, and mechanism mounted upon the trucks and connected to the respective frames to cause the latter to turn about their axial centres, substantially as set forth.

2nd. In an apparatus for drying lumber, a truck provided with supporting and guiding rollers, and a lumber supporting frame comprising in part a segmental bar to engage said rollers, and gearing mounted on the truck and engaging teeth on the semi-circular bar, whereby the latter may be turned about its radial centre, substantially as and for the purpose set forth. 3rd. In an apparatus for drying lumber, a truck having spaced parallel beams, and guiding and supporting rollers, combined with a lumber supporting frame having as a part thereof a segmental bar adapted to be supported upon the rollers and extend between the beams, a rack bar, and gearing mounted on the truck and engaged with the rack bar, substantially as and for the purpose set forth. 4th. In an apparatus for drying lumber, a truck having spaced parallel beams, guiding and supporting rollers mounted above said beams, and guide plates depending from said beams, combined with a lumber supporting frame, having an outer segmental bar adapted to be supported upon said rollers and work between said guide plates, substantially as and for the purpose set forth. 5th. In an apparatus for drying lumber, a truck having spaced parallel beams, guiding and supporting rollers mounted above said beams, one of said rollers having a gear wheel and guide plates depending from the beams, combined with a lumber supporting frame having an outer segmental bar adapted to be supported upon said rollers and to move between said plates, a rack bar on the semi-circular bar to engage the gear wheel on the roller, and means to rotate the latter, substantially as set forth. 6th. A lumber supporting frame, comprising the segmental bar 18, the bars 19 and 21 arranged at a right angle to each other, and braces for rigidly connecting the bars 19 and 21 to the bar 18, substantially as set forth. 7th. A lumber supporting frame comprising the segmental bar 18, the bars 19 and 21 arranged at a right angle to each other, the bar 20 extending diagonally between the adjacent ends of the bars 19 and 21, and braces and tie plates to rigidly connect the bars 19, 20 and 21 to each other and to the bar 18, substantially as set forth. 8th. A truck for use in a lumber drying apparatus, comprising the spaced parallel beams A A, tie plates B, bearings 1 projecting from from said plates, supporting wheels 2 journaled in said bearings, bearings 4 extending upwardly from said plates B, supporting and guiding rollers 5, 6, journaled in the bearings 4, and means to rotate one of said rollers, substantially as set forth.

No. 66,284. Refrigerator Case. (*Boite de réfrigérant.*)

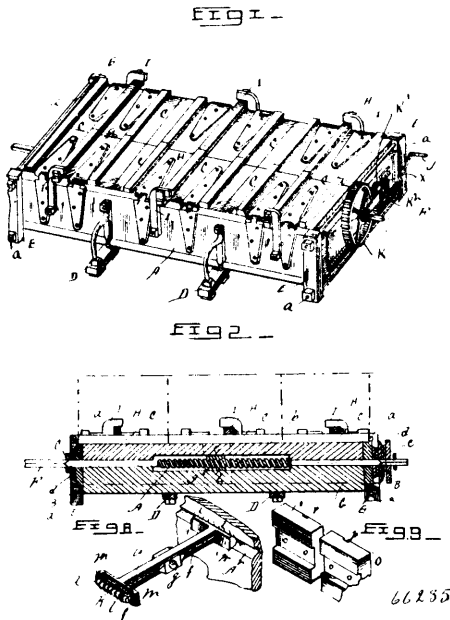


George L. Benson, St. Michaels, Maryland, U.S.A., 17th February, 1900; 6 years. (Filed 9th December, 1899.)

Claim.—1st. In a refrigerator case, the combination with a body and a covering adapted for threaded engagement therewith, of an inner receptacle within the body and reaching to the upper edge thereof, an ice receptacle in the corner and a lid for the ice recep-

tacle and adapted to be seated upon the inner receptacle when the cover is screwed into place, said lid having means for holding it upon the ice receptacle, during the screwing operation. 2nd. A refrigerator case comprising a body portion having an opening in its bottom, an inner receptacle having radial flanges extending below the under side thereof and adapted to rest upon the bottom of the body portion, a cover adapted for threaded engagement with the body, an ice receptacle in the cover, a lid for the ice receptacle having communicating openings leading from the ice receptacle between the body and inner receptacle, and means for holding the lid in position upon the ice receptacle, said lid being adapted for compression upon the inner receptacle when the cover is screwed into place. 3rd. A device of the class described, comprising a body portion and a cover adapted for threaded engagement, an ice box arranged within and forming a lining for the cover, a lid for the ice box having means for holding it in position, an inner vessel within the body portion and separated from the walls thereof by an interspace, openings in the lid leading to said interspace, and radial flanges adapted to hold the inner receptacle projecting to the top of the body portion to receive the lid of the ice box when the cover is screwed into place.

No. 66,285. Hay Press. (Presse à foin.)

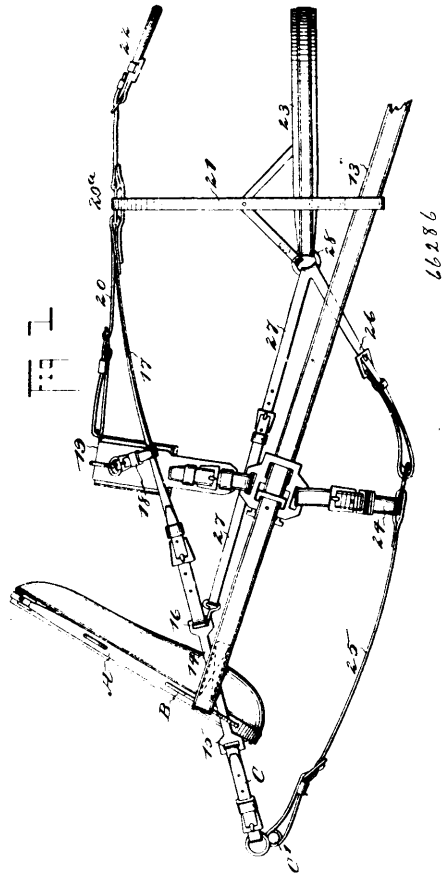


Joseph Ross, Vincennes, Indiana, U.S.A., 19th February, 1900; 6 years. (Filed 5th February, 1900.)

Claim.—1st. In a knock down baling press comprising the sides, ends and bottom, the central division wall running lengthwise of the press and forming a double chamber, the compressing screw shaft running lengthwise the press and provided with locking means for holding the parts together, the cross head carrying the followers which are secured to the cross head, and operating in said chambers, all combined and arranged to operate, substantially as described. 2nd. The combination in a baling press comprising the sides, ends and bottom, the slotted division wall running lengthwise of the press, the compressing screw shaft located in the division wall, the cross head adapted to slide in said slot, the followers on each side of said division wall, and mounted on said cross head, the retaining collars on the ends of said shaft, the journal bearings secured to the ends of the baling press, and means for operating said screw shaft, substantially as set forth. 3rd. The combination of a baling press having the slotted division wall running lengthwise thereof, the screw shaft centrally located in the press, a cross head having lateral arms, followers secured thereto, said arms bearing against the inner side of the press box, and adapted to stay the shaft when unequal pressure is exerted on one side of the cross head more than the other, clamping devices to prevent the spreading of the box, said clamping devices also holding down the doors while the bale is being compressed, substantially as described. 4th. The knock down baling press box comprising the sides, ends and bottom in combination with the yokes E, for transversely holding them together, the division wall running lengthwise of the press, the screw shaft and the collars on said shaft arranged to hold the box together longitudinally, the clamps H, and hooks I, for holding down the doors and also to prevent spreading of the box, substantially as set forth. 5th. The combination in a hay baling press of the central division wall running lengthwise of the press, the screw shaft running in said wall, the cross head carried by said shaft, said cross head having T-pieces extending laterally from said head, the T-pieces being concaved

to hold anti-friction rollers and flanges to retain said rollers in position, substantially as set forth. 6th. The combination in a baling press box of the screw shaft longitudinally and centrally located, the cross head and follower carried thereby, said cross head having a central female screw portion in which the screw shaft works, and T-shaped end pieces having ball bearings, said T-shaped pieces and rollers being adapted to work and travel in concave grooves in the sides of the box, substantially as set forth. 7th. The combination in a baling press of the screw shaft and cross head, said cross head adapted to carry the followers having T-pieces formed to carry anti-friction balls on rollers, substantially as set forth. 8th. As an article of manufacture, the cross head having T-shaped pieces at each end formed to carry anti-friction balls, and the followers adapted to be secured thereto, substantially as set forth.

No. 66,286. Harness. (Harnais.)



Carl B. Olson, Canby, Minnesota, U.S.A., 19th February, 1900; 6 years. (Filed 5th February, 1900.)

Claim.—1st. In a harness, guide devices carried by the hames, traces, means for attaching the traces to the guide devices, a breast strap, a tug strap, guide straps attached to the back strap and led to the front at each side of the animal, and sliding bars passed through the guide devices and connected with the guide straps and the breast strap. 2nd. In a harness, a back strap, guide straps attached to the back strap at a point near the crupper, each guide strap being provided with a bar capable of sliding upon the hames of the harness and adapted for attachment to the breast strap of the harness. 3rd. In a harness, the combination with hames having staples provided with three sections, the central section being adapted to receive the traces, a breast strap and a back strap, and guide straps secured to the back strap and extending forward from their point of attachment, each guide strap being provided with a bar at its forward end, which bars are arranged to slide through either the upper or the lower sections of the said hames staples, their forward ends being adapted for attachment to the breast strap of the harness. 4th. In a harness, the combination with a saddle, the hame staples secured to the hames and having several sections formed therein, traces attached to the intermediate sections of the said staples, guide loops carried by the saddle, a neck yoke, a breast strap connected with the neck yoke, a martingale, and under and upper breeching straps connected with each other and with the breeching, the lower breeching straps being connected with the martingale, of a back strap, guide straps attached to the back strap and also to the guide loops of the saddle, sliding bars attached to the guided straps, which bars

pass through the sections in the hame staples and are connected with the breast strap, the upper breeching straps being with the rear end portions of the said sliding bars, as described.

No. 66,287. Seed Drill Shoe. (*Sabat pour semoirs en ligne.*)

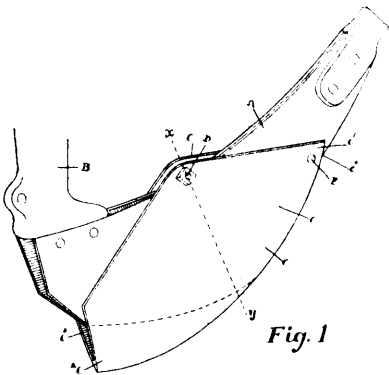


Fig. 1

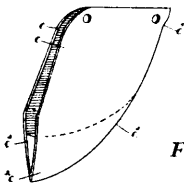


Fig. 2



Fig. 3

66287

Walter Coulthard, Oshawa, Ontario, Canada, 19th February, 1900
6 years. (Filed 6th February, 1900.)

Claim.—1st. A supplemental heel for seed drill shoes, comprising the foot or lower cutting edge having a solid wedge-shaped lower portion or foot, the top of which is designed to abut the bottom of the shoe, and the sides extending upwardly therefrom designed to extend above and embrace both sides of the shoe and means for binding together the upper projecting ends of the sides, as and for the purpose specified. 2nd. A supplemental heel for seed drill shoes, comprising the foot or lower cutting edge having a solid wedge-shaped lower portion or foot, the top of which is designed to abut the bottom of the shoe, and the sides extending upwardly therefrom designed to extend above and embrace both sides of the shoe and a bolt extending through and connecting the upper projecting ends of the sides above the top of the shoe, as and for the purpose specified. 3rd. A supplemental heel for seed drill shoes, comprising a substantially triangular double plate extending on both sides of the shoe and formed with a bottom wedge-shaped foot extending beneath the heel of the shoe, the said plates being welded or secured together up to a point near the front apexes of the supplemental heel, and the top apexes of the two sides being secured together by a bolt extending above the top of the shoe, as and for the purpose specified.

No. 66,288. Horse Collar. (*Collier à cheval.*)

Henry Lawrence Gulline, Granby, Quebec, Canada, 19th February, 1900; 6 years. (Filed 7th February, 1900.)

Claim.—1st. A crown piece for horse collar rims, comprising a main frame strip and branch strips carried thereby. 2nd. A detachable crown piece for horse collar rims. 3rd. A detachable resilient crown piece for horse collar rims. 4th. A detachable crown piece for horse collar rims, comprising a main frame strip carried thereby. 5th. A detachable resilient crown piece for horse collar rims, comprising a main frame strip and branch strips carried thereby. 6th. An attachment for horse collar rims, consisting of a crown piece comprising a resilient frame strip and means for detachably connecting said resilient frame piece to the rim, substantially as described. 7th. An attachment for horse collar rims, consisting of a crown piece comprising a resilient frame strip, branch strips carried thereby, and means for detachably connecting said resilient frame strip to the rim, substantially as described. 8th. An attachment for horse collar rims, consisting of a crown piece comprising a resilient frame strip *c*, in the form of an inverted V, adapted to be sprung upon the peak of the horse collar, and a

series of rigid dowel pins *e* on the inside faces of the lower ends, of the strip *c*, and branch strips carried thereby, substantially as

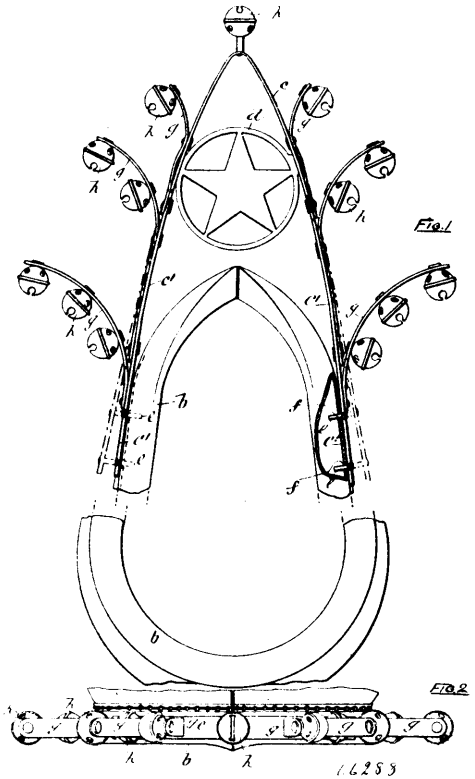


Fig. 1

Fig. 2

described and for the purpose set forth. 9th. An attachment for horse collar rims, consisting of a crown piece comprising a resilient frame strip *c*, in the form of an inverted V, adapted to be sprung upon the peak of the horse collar, the legs of said V being braced together near their upper ends, and a series of rigid dowel pins *e* on the inside faces of the lower ends of the strip *c*, and branch strips carried thereby, substantially as described and for the purpose set forth.

No. 66,289. Churn and Butter Worker.

(*Baratte et batte à beurre.*)

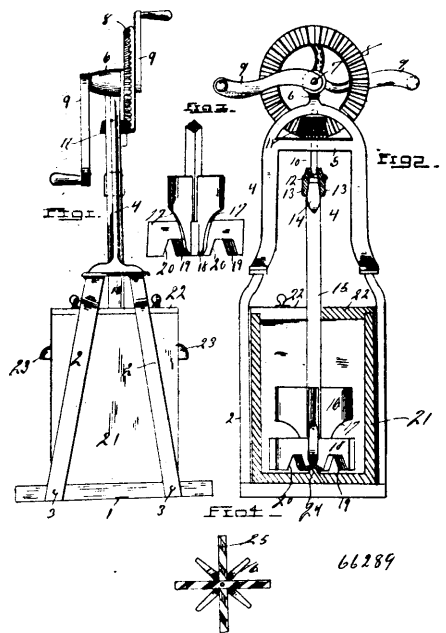


Fig. 2

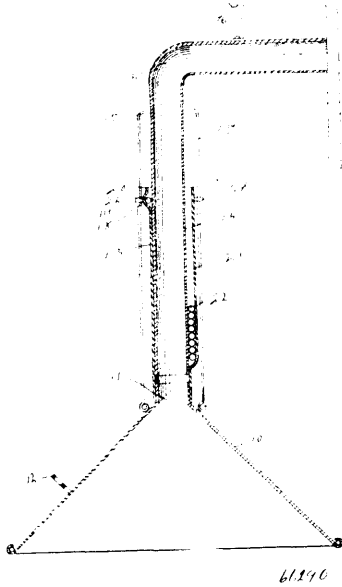
Fig. 1

66289

William G. Gould, Lawrence, Kansas, U.S.A., 19th February, 1900; 6 years. (Filed 7th February, 1900.)

Claim.—The herein described dasher for churns, butter workers and the like, consisting of a rotatable shaft provided upon its lower end with a series of upper and lower blades, the former being cut away upon their lower edges to provide the curved faces 17, while the latter are provided upon their upper edges with a series of oppositely disposed oblique notches having the faces 19 and 20, and means to rotate said shaft, as specified and for the purpose set forth.

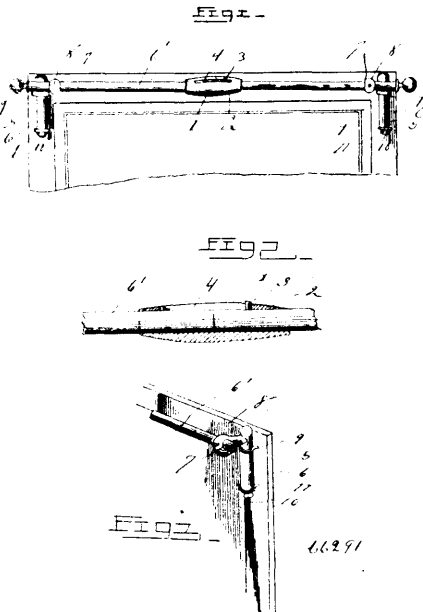
No. 66,290. Hood for Vapour Stoves.
(*Capuchon pour poêles.*)



Samuel A Wilson, Ocheydan, Iowa, U.S.A., 19th February, 1900; 6 years. (Filed 7th February, 1900.)

Claim.—An adjustable hood for vapour stoves, comprising in combination a hood proper 10, a handle 12 at its front edge, a pipe section 13 fixed to the top of the hood, a pipe section 15 telescopically connected with the pipe 13 and having a long vertical groove in its front surface at its top, said front groove being deeper at its lower end than at its upper end, said groove being formed by bending the metal of the pipe outwardly, a series of bearing balls in the said rear groove and a single bearing ball in the front groove, substantially as and for the purposes stated.

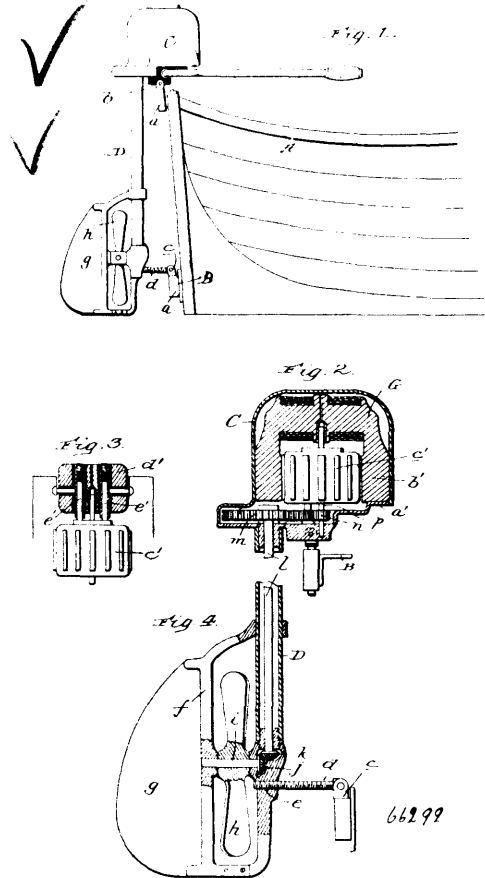
No. 66,291. Curtain Pole. (*Baton de rideau.*)



Isaac Paul, Stoyestown, Pennsylvania, U.S.A., 19th February, 1900; 6 years. (Filed 7th February, 1900.)

Claim.—The combination with a sectional pole, and means for coupling the adjacent ends thereof together, of a pair of substantially L-shaped brackets having openings to slidably and adjustably receive the pole sections and attaching eyes for the brackets, each of said brackets comprising a substantially vertical journal portion removably fitted in the eyes and having its lower end reduced to form a bearing shoulder for abutting against one of the eyes, substantially as and for the purpose specified.

No. 66,292. Boat Motor. (*Moteur pour bateaux.*)

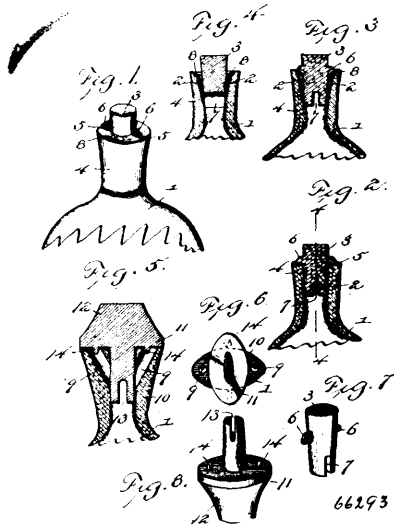


George F. Atwood, West Chazy, and William W. Wood, Wood Falls, all in New York, U.S.A., 19th February, 1900; 6 years. (Filed 19th January, 1900.)

Claim.—1st. The combination of a boat, a post connected with the boat so as to permit of it being swung to and fro and carrying a rudder, a propeller also carried by said post, an electro motor arranged in a casing on the post and connected with the propeller, an electric generator, a switch connected with the conductors leading to the electro motor and conductors leading to the end plus and minus poles of the generator and also with a conductor leading to an intermediate pole of the generator and adapted to be manipulated so as to utilize either the full power or a fraction of the power of the generator to actuate the motor, and a handle adapted for oscillatory and rocking movements, said handle being connected with the rudder post and also having a connection with the switch whereby, on being oscillated, it controls the steering of the boat and when rocked on its axis operates the motor controlling switch. 2nd. The combination of a boat, a post connected with the boat so as to permit it of being swung to and fro and carrying a rudder, a propeller also carried by said post, a casing arranged on the post, an electro motor arranged in said casing and connected by interposed gearing with the propeller, an electric generator, electric connections between the generator and motor, a device for controlling the motor, and a handle adapted for oscillatory and rocking movements, said handle being connected with the rudder post and also having a connection with the motor controlling device, whereby, on being oscillated it controls the steering of the boat and when rocked operates the motor controlling device, substantially as specified. 3rd. The combination of a boat, a propelling motor, a device for controlling the same, a rudder, and a handle adapted for oscillatory and rocking movements, said handle being connected with the rudder and also having a connection with the device controlling the motor, whereby, on being oscillated, it controls the steering of the boat when rocked operates the motor controlling device, substantially as specified. 4th. The combination of a boat, a rudder post

connected with the stern of the boat so as to permit of it being swung in the arc of a circle and carrying a rudder and a propeller, a motor casing fixed on said rudder post, an electro-motor arranged in said casing, an electric generator, a rotary switch for controlling the electro-motor, a tube connected to the motor casing, and a rotatable or partially rotatable handle mounted on the tube and connected with the rotatable switch, substantially as specified. 5th. The combination of a boat, a rudder post connected with the stern of the boat so as to permit of it being swung in the arc of a circle and carrying a rudder and a propeller, a motor casing fixed on said rudder post, an electro-motor arranged in said casing, a rotary switch for controlling the electro-motor, a tube connected to the motor in alignment with the rotary switch, a rotatable or partially rotatable handle journaled in the tube, and a wire coil connecting the handle and the rotary switch, substantially as specified.

No. 66,293. Bottle. (Bottle.)



A. C. Richardson and A. Everts, both of South Frankfort, Michigan, U.S.A., 19th February, 1900; 6 years. (Filed 2nd February, 1900.)

Claims.—1st. In a device of the class described, the combination with the neck of a receptacle provided with channels arranged to form passages for the air and for the contents of the receptacle, of a stopper having a slot or opening and adapted to be rotated to arrange the same in and out of register with the said channels, said stopper being provided with a lug or projection arranged to engage the receptacle to lock the stopper in either position, substantially as described. 2nd. In a device of the class described, the combination of a receptacle provided at its neck with longitudinal channels and a stopper having a slot or opening and adapted to be rotated to arrange the same in and out of register with the channels, said stopper being provided with lugs or projections arranged to engage the bottle at the channels to hold the slot or opening out of register and at points to maintain the said slot or opening in register, substantially as described. 3rd. In a device of the class described, the combination of a receptacle provided at its neck with longitudinal grooves forming channels, said receptacles being provided at points between the channels with notches, and a stopper provided at its lower end with a slot or opening and having projections or lugs located at opposite sides of it and adapted to engage either the channels or the notches, substantially as described.

No. 66,294. Incubator. (Incubateur.)

Edward Thomas Tolhurst and James Andrew Thomas, both of London, Ontario, Canada, 19th February, 1900; 6 years. (Filed 30th December, 1899.)

Claim.—1st. The combination, in an incubator of the thumb-screw J, with the lever I and damper H, for automatically regulating the temperature as shown as described. 2nd. In an incubator the pipes Z for conducting the heated air from the heated compartment P, along the top and sides and issuing therefrom at openings B¹, substantially as shown and described, and for the purpose specified. 3rd. In an incubator, the frame C¹, having wires a stretched lengthwise therein for containing the eggs during the process of incubation, in combination with frame D¹, canvas screen E¹, and lower screw of wire-gauze F¹, substantially as shown and specified. 4th. In an incubator, the movable sliding-board S, provided with air holes R¹ for admitting cool air to the nursery R, from an air compartment S¹, in combination with a lower stationary board T and bottom board V provided with holes U U, substan-

tially as shown and specified. 5th. In combination with the movable bottom board S of the nursery R, of an inhaler, the pipe X for

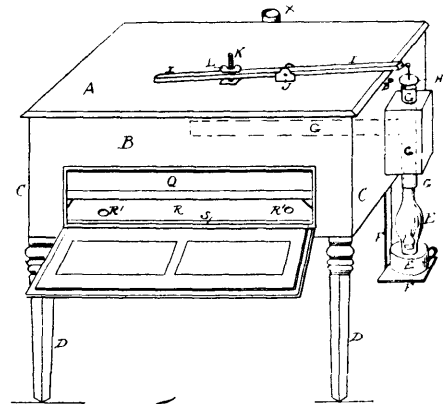


Fig. 1.

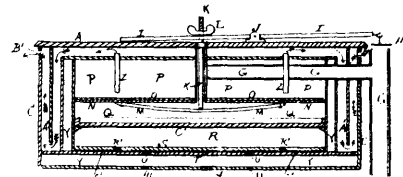
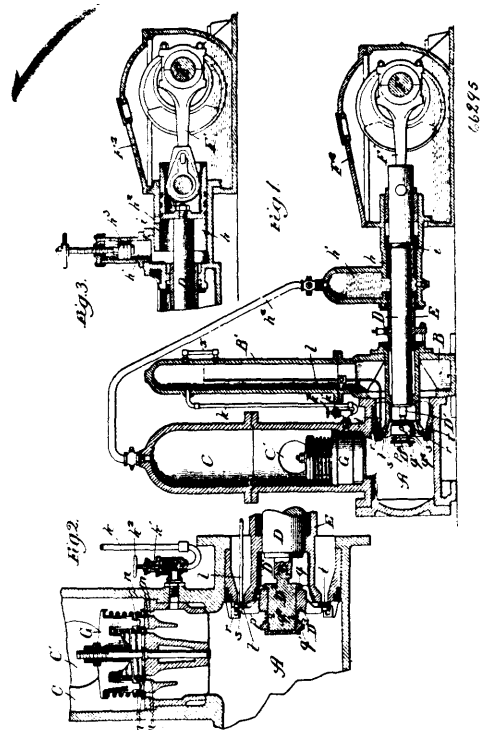


Fig. 2. 66294

drawing off and ejecting the foul air, substantially as shown and specified.

No. 66,295. Pump. (Pompe.)

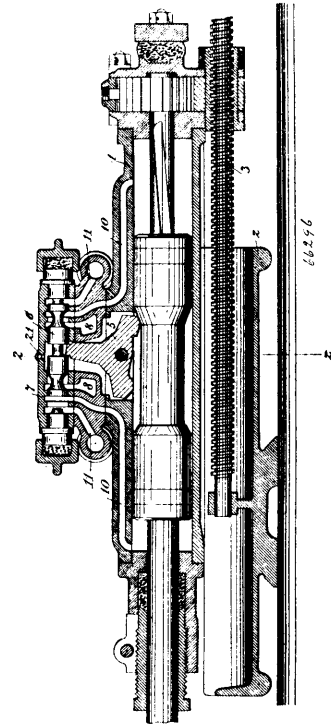


Fraser and Chalmers, Chicago, Illinois, U.S.A., assignee of John Stammof, Berlin, Germany, 19th February, 1900; 6 years. (Filed 31st October, 1899.)

Claim.—1st. In a pump, the combination with the force chamber and a suction lift valve, of a pump plunger separate from said valve, and means upon the plunger within said chamber for seating the suction valve in the movement of the plunger toward the end of its suction stroke, substantially as and for the purpose set forth. 2nd. In a pump, the combination with the force chamber and an annular

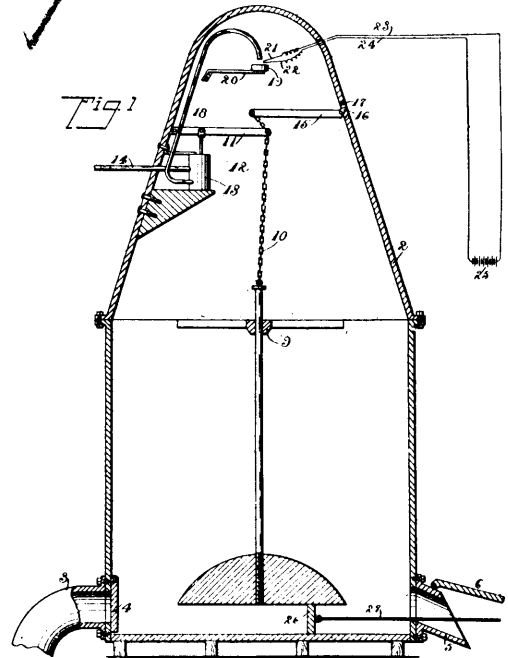
suction lift valve, of a pump plunger separate from said valve, and means upon the plunger within said chamber for seating the suction valve in the movement of the plunger toward the end of its suction stroke, substantially as and for the purpose set forth. 3rd. In a pump, the combination with the force chamber and a suction lift valve, of a pump plunger separate from the said valve and means for seating the suction valve in the movement of the plunger toward the end of its suction stroke, comprising a yielding head upon the plunger within said chamber having valve engaging projections, substantially as and for the purpose set forth. 4th. In a liquid pump, the combination with a reservoir communicating with the suction pipe and with the inlet of the pump force chamber, of an exhaust conduit leading at one end from the reservoir and exposed, for its discharge, at the opposite end to the suction action of the pump plunger, substantially as and for the purpose set forth. 5th. In a liquid pump, the combination with the force chamber, the suction and discharge valves, and the plunger working in said chamber, of a reservoir at the outer of the suction valve, means for maintaining a column of the liquid in said reservoir to a level materially exceeding the height of the said discharge valve, and air exhausting means comprising an ejector pipe extending from the upper end portion of said reservoir and terminating close to the inlet port of the said force chamber, substantially as and for the purpose set forth. 6th. In a liquid pump, the combination with the force chamber, the suction and discharge valves, and the plunger working in said chamber, of a reservoir at the outer side of the suction valve, means for maintaining a column of the liquid in said reservoir to a level materially exceeding the height of the said discharge valve, and air exhausting means comprising a pipe extending from the upper end portion of said reservoir to the said force chamber, and a check valve interposed in said pipe, substantially as and for the purpose set forth. 7th. In a liquid pump, the combination with the force chamber, the suction discharge valves, and the plunger working in said chamber, of an inlet chamber B, communicating with the force chamber through a suction port t at the said suction valve, a reservoir B', on the chamber B, extending to a height materially above the height of the said discharge valve, means for maintaining a column of the liquid in the reservoir B', to a level materially exceeding the height of the said discharge valve, and an air exhaust conduit leading at one end from the upper part of the reservoir B', and exposed, for its discharge, at the opposite end to the suction action of said plunger, substantially as and for the purpose set forth. 8th. In a liquid pump, the combination with the force chamber and the discharge valve, of a plunger cylinder extending to said chamber, an inlet port around said cylinder for the chamber, a ring valve seating upon said port, a plunger in the cylinder movable into and out of the force chamber through the said ring valve, and means upon the plunger for engaging and seating said ring valve in the movement of the plunger to the end of its suction stroke, substantially as and for the purpose set forth. 9th. In a liquid pump, the combination with the force chamber, and the discharge valve, of a plunger cylinder extending to said chamber, an inlet port around said cylinder for the chamber, a ring valve seating upon said port, a plunger in the cylinder movable into and out of the force chamber through the said ring valve, and means for closing the said ring valve in the movement of the plunger to the end of its suction stroke, comprising a yielding head upon the inner end of the plunger having ring engaging projections, substantially as and for the purpose set forth. 10th. In a liquid pump, the combination with the force chamber, the plunger working in said chamber and the plunger actuating mechanism, of an annular shoulder movable with the plunger and forming a piston, a cylinder in which the said piston moves, a fluid resistance medium in the path of said piston operating to resist the discharge stroke and assist the suction stroke of said plunger, and means for regulating said fluid resistance medium, substantially as and for the purpose set forth.

pivoted or swivelly mounted upon the side of said rock drill, said casing being provided with a filling hole at the top, a circular



channel arranged between said casing and said rock drill, a hollow plug rotatably mounted in said casing, said plug provided with an orifice adapted to register with said filling hole when said plug is turned in one direction, a channel connecting with said circular orifice and with the interior of said plug when said plug is turned in the opposite direction, and a channel leading from the said circular channel to the interior of the valve chamber, substantially as specified.

No. 66,297. Pump. (Pompe.)



No. 66,296. Oiling Device for Rock Drills.

(Appareil à huiler pour foret à roche.)

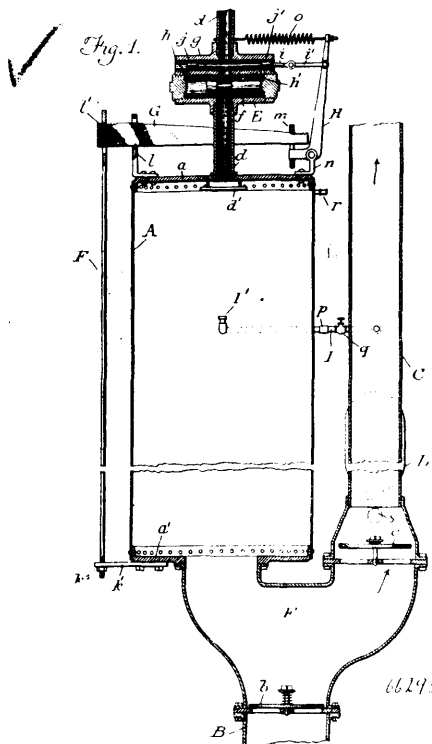
The Rand Drill Co., New York City, New York, assignee of Robert Luman Ambrose, North Tarrytown, New York, U.S.A., 19th February, 1900; 6 years. (Filed 13th October, 1899.)

Claim.—1st. In a rock drill, the combination with a cylinder, a piston, a valve chamber and a valve arranged to reciprocate therein and control the admission and exhaust of the motive fluid to and from the said cylinder, of an oiling device pivoted or swivelly mounted upon the side of said rock drill so that it may be set at any angle relatively thereto, and an oil channel leading to the interior of the valve chamber and communicating with the oiling device at any angle the said oiling device may be set relatively to the rock drill. 2nd. In a rock drill, the combination with a cylinder, a piston, a valve chamber and a valve arranged to reciprocate therein and control the admission and exhaust of the motive fluid to and from the said cylinder, of an oil reservoir pivoted or swivelly mounted upon the side of said rock drill, a circular channel between said oil reservoir and said rock drill, an oil channel leading from the said oil reservoir to the said circular channel, and another oil channel leading from the said circular channel to the interior of the valve chamber, substantially as specified. 3rd. The combination with a rock drill comprising a cylinder, a piston, a valve chamber and a valve arranged to reciprocate therein and control the admission and exhaust of the motive fluid to and from the said cylinder, of a casing

Alva L. Reynolds and Ray Basil Hoxie, both of Santa Ana, Orange County, California, U.S.A., 19th February, 1900; 6 years. (Filed 4th October, 1899.)

Claim.—1st. A pump, comprising a vacuum cylinder having a valve controlled inlet and a valve controlled outlet, a float arranged in the cylinder, an oil pump arranged in the cylinder and having operative connection with the float, an oil receiver in the cylinder, means for igniting the oil therein, and an air inlet controlling valve having connection with the float, substantially as specified. 2nd. A pump, comprising a vacuum cylinder, having a valve controlled inlet and a valve controlled outlet, a float movable vertically in the cylinder, a stem extended from the float, a spider in the cylinder and through which the stem is movable, an oil pump in the cylinder and having operative connection with the float stem, a firing pan in the cylinder and adapted to receive oil from the oil pump, electrodes arranged adjacent to the pan, a source of electricity with which the electrodes are connected, and an air inlet controlling valve adapted to be operated by the float, substantially as specified. 3rd. A vacuum pump, comprising a cylinder having a valve controlled inlet and a valve controlled outlet, a float in the cylinder, an oil pump in the cylinder, a firing pan in the cylinder, a pipe leading from the pump to the firing pan, electrodes arranged over the firing pan and having connection with a source of electricity, a lever to which the oil pump piston is connected, a flexible connection between said lever and the stem of a float, and another lever having a valve at its end for controlling an air inlet, the said other lever also having connection with the float stem, substantially as specified.

No. 66,298. Steam Vacuum Pump. (Pompe à vapeur.)

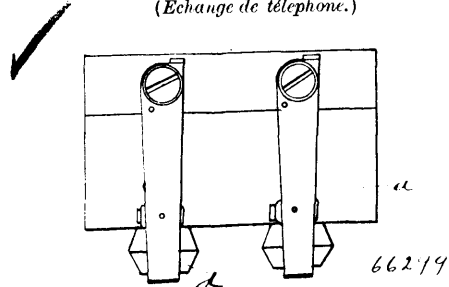


The Columbia Hydraulic and Engineering Company, Washington, D.C., assignee of William Regester Emerson of Baltimore, Maryland, both in the U.S.A., 19th February, 1900; 6 years. (Filed 4th August. 1899.)

Claim.—1st. The combination of a chamber having suitable inlets and outlets for steam and water, a rod parallel with said chamber, a main valve which controls the passage of steam to said chamber, a supplemental valve or valves to govern the application of steam for controlling the movement of said main valve and operated by the expansion or contraction of one of said elements, and a connection between said chamber, the rod or the supplemental valve or valves, substantially as set forth. 2nd. The combination of an expansible chamber having suitable inlets and outlets for steam and water, a main valve which controls the passage of steam to said chamber, a supplemental valve or valves to govern the application of steam to said main valve, and a mechanical connection between the shell of said chamber and said supplemental valves, whereby expansion or contraction of the chamber will operate the said supplemental valves. 3rd. The combination of an expansible chamber having suitable inlets and outlets for steam and water and whose expansion or contraction is utilized as the motive force for operating a valve, a steam supply pipe connecting with said chamber, valves governing the steam through said pipe, means connecting between the chamber and said valves whereby the expansion or contraction of the chamber operates the valves, a pipe for the discharge of water from the chamber, and a condensing water pipe leading into said chamber. 4th. The combination with an expansible chamber having suitable

inlets and outlets for steam and water and whose expansion or contraction is utilized as the motive force for operating a valve, a steam supply pipe connecting with said chamber, valves governing the steam through said pipe, means connecting between the chamber and said valves, whereby the expansion or contraction of the chamber operates the valves, a condensing water pipe leading into said chamber and within said chamber provided with a spray nozzle, and a check valve in said condensing water pipe. 5th. The combination of an expansible chamber having suitable inlets and outlets for steam and water and whose expansion or contraction is utilized as the motive force for operating a valve, a steam supply pipe connecting with said chamber, valves governing the steam through said pipe, a rod parallel with the chamber and having its lower end secured to the bottom of said chamber, a bell crank lever, one arm of which is connected with one of the valves, and a lever fulcrumed on said chamber and having its short end connected with the upper end of said rod, and its long end connected with the other arm of said bell crank lever. 6th. The combination of an expansible chamber having suitable inlets and outlets for steam and water, and whose expansion or contraction is utilized as the motive force for operating a valve, a steam supply pipe connecting with said chamber, valves governing the steam through said pipe, a rod parallel with the chamber and having its lower end secured to the bottom of said chamber, a bell crank lever, one arm of which is connected with one of the valves, a lever fulcrumed on the said chamber and having knife edge bearings connecting it with the said rod and said bell crank lever, and a spring or equivalent device which acts on the bell crank lever to force it one way. 7th. The combination of an expansible chamber having suitable inlets and outlets for steam and water and whose expansion or contraction is utilized as the motive force for operating a valve, a steam supply pipe connecting with said chamber, valves governing the steam through said pipe, means connecting between the chamber and said valves, whereby the expansion or contraction of the chamber operates the valves, and an air inlet valve attached to the upper part of said chamber and which closes to prevent escape of steam. 8th. In a steam vacuum pump, the combination of a steam supply pipe, a main valve governing the steam through said pipe, a supplemental steam valve controlling the movement of the main valve, and an expansible chamber having suitable inlets and outlets for steam and water, and whose expansion or contraction due to the alternating changes of temperature in the operation of the machine is utilized as the motive force for operating said supplemental valves. 9th. The combination of an expansible chamber having suitable inlets and outlets for steam and water, a main valve which controls the passage of steam to said chamber, a supplemental valve or valves to govern the application of steam to said main valve, a rod parallel with the chamber and practically unaffected by the alternating changes of temperature due to the operation of the apparatus, and a mechanical connection between the shell of said chamber, the supplemental valves and said rod, whereby the expansion or contraction of said chamber will operate the supplemental valves. 10th. The combination of an expansible chamber having suitable inlets and outlets for steam and water, and whose expansion or contraction due to the alternating changes of temperature in the operation of the machine, is utilized as the motive force for operating a valve, valves governing the passage of steam to said chamber, a rod parallel with the chamber and having its lower end secured by a vertical adjustment at the bottom of said chamber, levers connecting the said valves and the rod and provided with notches, and a movable link engaging the notches on the levers whereby the parts may be adjusted for timing the movement of the valves.

No. 66,299. Telephone Switchboard. (Echange de telephone.)



The Bell Telephone Company of Canada, Montreal, Quebec, Canada, assignee of James Lawrence McQuarrie of Chicago, Illinois, U.S.A., 19th February, 1900; 6 years. (Filed 23rd April, 1897.)

Claim.—1st. The combination with a base having a vertical perforation formed in it, of a tube in the perforation longitudinally movable, a conical collar on the tube, switch springs having free extremities bearing on the inclined faces of the collar and contact anvils for the switch springs, a connecting plug resting on the upper extremity of the tube, and a cord thereof passing through the tube, as described. 2nd. The combination with a base having a vertical perforation and a countersunk upper portion constituting the plug

socket, of a tube longitudinally movable in the perforation, switch contacts actuated by the tube in its longitudinal movement, the tube having flattened longitudinal faces formed on it to permit the escape of dust from the socket, as described. 3rd. The combination with a base having a vertical socket therein, of a tube longitudinally within said socket, said tube being cut away to form dust passages between it and the inner wall of the socket, and switch contacts adapted to be actuated by the movement of the tube, substantially as described.

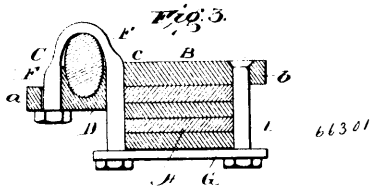
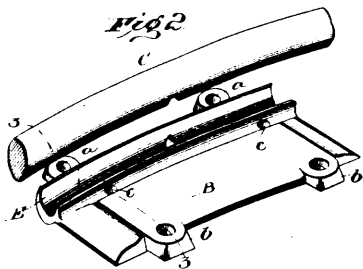
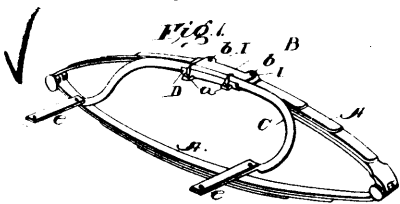
No. 66,300. Packing Material. (*Garniture.*)

The Marsden Company, Philadelphia, Pennsylvania, U.S.A., assignee of Mark Worsnop Marsden, of the same place, 20th February, 1900; 6 years. (Filed 23rd March, 1899.)

Claim.—1st. The within described new material adapted for use for packings and other purposes, the same consisting of the comminuted cellular portion of corn pith freed from sappy deleterious and adherent matters and having the characteristics, substantially as set forth. 2nd. The method of preparing a material from vegetable pith, consisting in separating it from the woody and fibrous portions of the shell, and then comminuting the pith and subjecting it to heat and air blasts, substantially as set forth. 3rd. As a new article of manufacture, a mass of vegetable pith comminuted and uniformly charged with a limited proportion of liquid, substantially as described. 4th. The mode of charging pith uniformly with limited proportions of liquid, consisting in first fully saturating the pith and then removing a part of the liquid, substantially as described.

No. 66,301. Vehicle Body Hanger.

(*Maniere de suspendre les boîtes de voitures.*)



The Herbrand Company, Fremont, assignee of James J. Fetzer, Columbiana, both of Ohio, U.S.A., 20th February, 1900; 6 years. (Filed 9th December, 1899.)

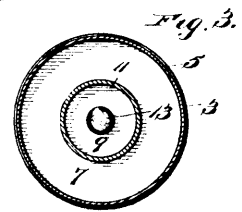
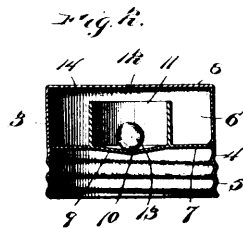
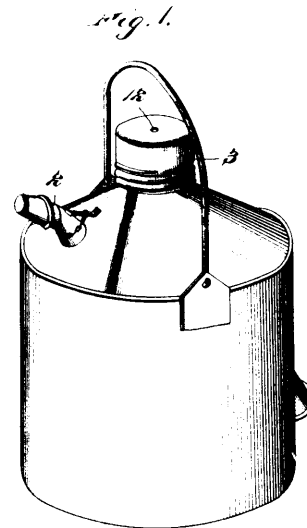
Claim.—1st. The combination with a carriage spring and an attaching plate secured thereto, of a depressed seat in the surface of said plate, and a body hanger secured in said seat, substantially as described. 2nd. The combination with a carriage spring, and an attaching plate secured thereto, of a depressed seat in the surface of said plate, a raised lug within said seat, and a body hanger indented by a transverse groove for engaging the lug aforesaid, substantially as described.

No. 66,302. Valve. (*Soupape.*)

Joseph E. Ewing and Robert F. Wallace, both of McDonald, Pennsylvania, U.S.A., 20th February, 1900; 6 years. (Filed 18th December, 1899.)

Claim.—In a device of the character set forth, the combination of an air chamber, comprising a lower portion in the form of a partition or bottom, having a depression with an opening therethrough, the said chamber being completely enclosed above the partition or bottom and provided with an opening in the upper portion of the enclosure, a guard flange surrounding the said seat and free of con-

tact with the surrounding wall of the air chamber, and a ball valve movably bearing upon the seat, the distance between the upper

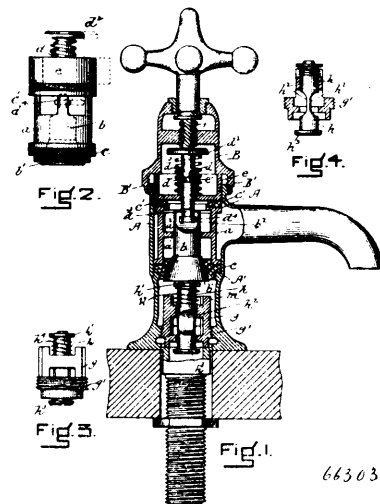


66302

edge of the guard flange and the adjacent top portion of the enclosure being less than the diameter of the ball valve to prevent the ball from being inoperatively dislodged from the seat.

No. 66,303. Fluid Discharging Apparatus.

(*Appareil de decharge de liquide.*)



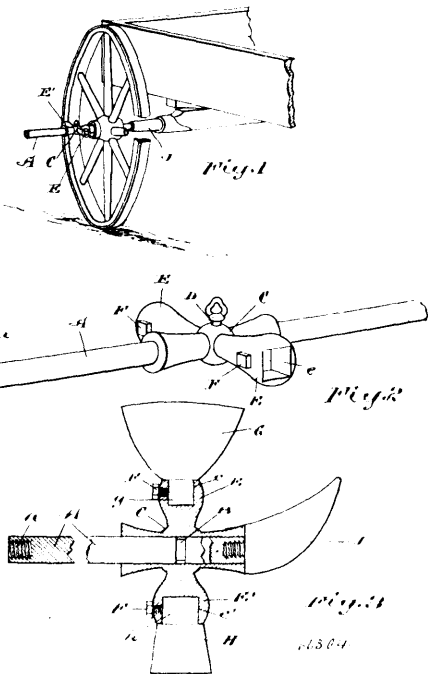
66303

Edward Haskill Lounsbury, Woburn, assignee of William Thompson Messenger, Boston, both in Massachusetts, U.S.A., 20th February, 1900; 6 years. (Filed 11th January, 1900.)

Claim.—1st. The within described discharging apparatus, consisting of the main shell A, the auxiliary shell B, the frame a, the main valve and stem b¹, supported and moving in said frame a, and said frame also provided with the annulus valve and packing attachment c, and the annulus at its upper end e¹, the cup-shaped packing and supporting disc e, having the projecting part e¹, the piston or actuating stem d, provided with the packing disc d¹ midway of the length of the projection e¹ of the disc e, and having the cap piece d² and the spring d³, suitable means for actuating the

said piston or stem *d* vertically and through it the valve *b*¹, the auxiliary valve *h*², provided with its stem *h*, and having the depressions *h*² *h*², the frame *g* secured to the lower end of the shell *A*, and supporting the valve *h*² and its stem *h*, the spring *h*³, the said auxiliary valve adapted to be operated by the movements of the main valve, and all arranged and combined substantially as and for the purpose set forth. 2nd. In a device for discharging fluids, the combination with the shell, of the frame *a*, the annulus *c* and *c*¹, and the disc *e*, substantially as and for the purposes set forth. 3rd. In a device for discharging fluids, the combination of the cup disc *e* provided with the projecting part *e*¹, and the actuating stem or piston *d* provided with the packing disc *d*¹, substantially as and for the purposes set forth. 4th. In a device for discharging fluids, the combination of the frame *a* provided with the annulus and valve packing *c* and the annulus packing *c*¹, the valve *b*¹ supported and seated in the said frame *a*, the cup-shaped packing and supporting disc *e*, the actuating piston *d* provided with the packing disc *d*¹, the said piston *d* removably secured to the valve stem *b*, all substantially as and for the purposes set forth. 5th. In a device for discharging fluids, the combination with the shell, of a frame *a*, the annulus *c*¹, the cup disc *e*, the actuating piston *d*, the packing disc *d*¹ arranged and adapted to prevent the flow of the fluid into the upper part of the shell, all substantially as and for the purposes set forth. 6th. In a device for discharging fluids, the combination with the shell, of the frame *a*, the valve *h*² provided with the valve stem *h*, the said stem formed with the depressions *h*² *h*², and adapted to move and be supported by the said frame *a*, and having the cap *h*¹ and the spring *h*³, all substantially as and for the purposes set forth. 7th. In a device for discharging fluids, the combination of a main valve, consisting of the valve parts *b*¹, the stem *b*, and the frame *a* provided with the packing devices *c* and *c*¹, the said valve adapted to be actuated by the piston *d*, having a suitable packing disc *d*¹, and moving in and supported by the cup disc *e*, with the auxiliary valve *h*², having the stem *h* and the supporting frame *g*, and arranged in connection with the said main valve so that when in position the auxiliary valve will be slightly opened, but will automatically close when the main valve and its connecting parts are removed from the shell, all substantially as and for the purposes set forth.

No. 66,304. Tool and Jack. (*Outil et chevre.*)

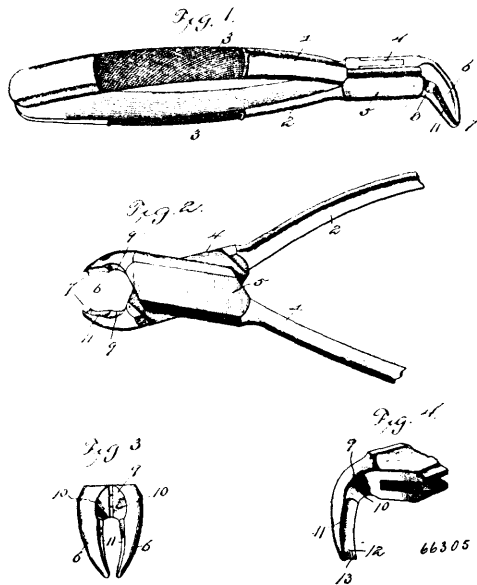


Charles Wilmott, Toronto, Ontario, Canada, 20th February, 1900
6 years. (Filed 28th August, 1899.)

Claims.—1st. A combined carriage tool and jack consisting of a tubular stem, the bore of which corresponds to the end of the axle arm, and a head fitted on the stem provided with oppositely opposed shanks having in their side faces multi-lateral recesses corresponding in shape and size with the nuts of the vehicle, substantially as specified. 2nd. A combined carriage tool and jack consisting of a tubular stem, the bore of which corresponds to the end of the axle arm, and a moveable head fitted on the stem provided with oppositely opposed shanks having in their side faces multi-lateral recesses corresponding in shape and size with the nuts of the vehicle, a circular groove formed medially in the stem, a set screw passing through the moveable head and entering the groove, substantially

as specified. 3rd. A combined carriage tool and jack consisting of a tubular stem, the bore of which corresponds to the end of the axle arm, and a moveable head fitted on the stem provided with oppositely opposed shanks having in their side faces multi-lateral recesses corresponding in shape and size with the nuts of the vehicle, a circular groove formed medially in the stem, a set screw passing through the moveable head and entering the groove, and interchangeable parts adapted to be fitted into the recesses of the shanks and nuts of the bore of the stem, substantially as specified.

No. 66,305. Dental Forcep. (*Pince dentaire.*)



Benjamin B. Mories, Markeson, Wisconsin, U.S.A., 20th February, 1900; 6 years. (Filed 24th November, 1899.)

Claims.—1st. A forcep of the character set forth, comprising a pair of handles pivotally connected by interlocking male and female members and each having a beak arranged in a plane at right angles thereto, both beaks being exteriorly rounded in convex form and tapered towards reduced inwardly directed nibs, the inner faces of the said beaks being longitudinally concaved completely in a transverse direction from edge downward to the nibs, the latter having their inner faces provided with short longitudinal teeth or corrugations, both nibs adjacent their pivotal connection having a clearing therethrough of concaved tapered form. 2nd. A forcep of the character set forth having a pair of similarly formed right angularly deflected beaks with inwardly extended nibs, the inner faces of the beaks being longitudinally concaved and terminating at lower teeth or corrugations on the inner faces of the nibs, said teeth or corrugations extending a short distance longitudinally of the nibs. 3rd. A forcep having a pair of similarly formed right angularly deflected beaks with inwardly extended nibs, the inner faces of the beaks being longitudinally concaved down through the nibs and the latter having formed in their similar faces short longitudinally disposed teeth or corrugations. 4th. A forcep of the character set forth having a pair of similarly formed, right angularly deflected beaks with inwardly extended nibs, the inner faces of the nibs being provided with short longitudinally extending teeth or corrugations.

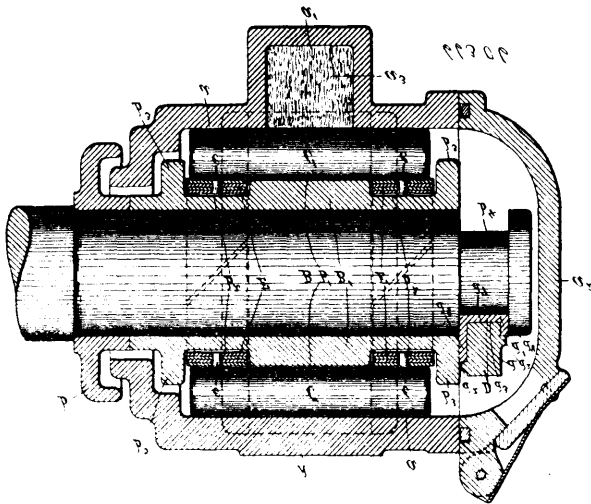
No. 66,306. Roller Bearing. (*Coussinet à roureau.*)

Benjamin S. Dawson, Red Bank, New Jersey, U.S.A., 20th February, 1900; 6 years. (Filed 19th July, 1899.)

Claim.—1st. In a roller bearing, a casing formed with an internal annular bearing face, an annular series of cylindrical rollers, and a concentric sleeve encompassed by said series of rollers and having a roller bearing surface of a less length than the roller bearing face of said casing, substantially as and for the purpose set forth. 2nd. In a roller bearing, a casing formed with an internal annular bearing face, an annular series of cylindrical rollers, a concentric sleeve, and spring rings interposed between said sleeve and rollers, substantially as and for the purpose set forth. 3rd. In a roller bearing, a casing formed with an internal annular bearing face, a concentric sleeve having a spring ring seated in said grooved sleeve, and a series of bearing rollers interposed between said spring ring and sleeve and the bearing face of said casing, substantially as and for the purpose set forth. 4th. In a roller bearing, a casing formed with an internal annular bearing face, a sleeve having an external

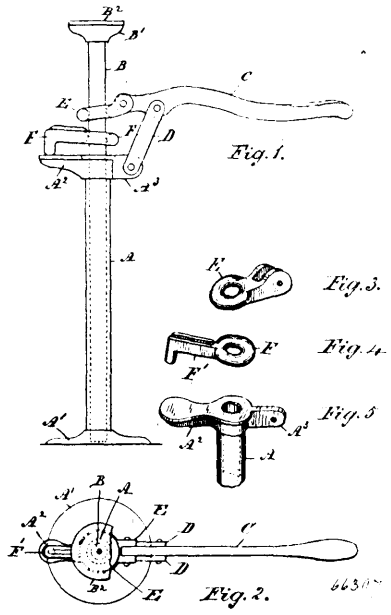
bearing face of a less area than the bearing face of said casing, and formed with annular parallel collars, and a series of bearing rollers

a pipe connecting the main tank and small tank and supplying the latter with gasoline by gravity or natural flow, an air meter, a gaso-



confined between said collars and sleeve, and said casing, substantially as and for the purpose set forth.

No. 66,307. Waggon Jack (*Chêne de wagons*)



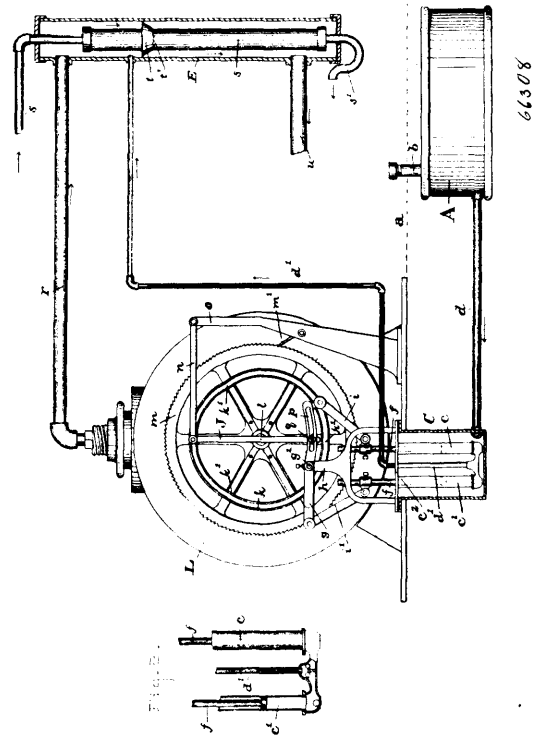
Charles J. Shirreff, Brockville, Ontario, Canada, 20th February, 1900; 6 years. (Filed 24th July, 1899.)

Claim.—The combination with the pipe standard A having a bracket support A² and fulcrum bearing A³, lift bar B, telescoping in said pipe standard and a hand lever C, connected to said lug by links D, of the lift eye or ring E, hinged to said lever, and the check ring or eye F, having an elbow extension F¹, adapted to bear or stand on said bracket, said eyes having a rounded interior face to grip the lift rod alternately while raising the load, and be released by partly removing said elbow extension from the bracket, as set forth.

No. 66,308. Gas Generator. (*Générateur à gaz.*)

Clarence M. Kemp, Baltimore, Maryland, U.S.A., 20th February, 1900; 6 years. (Filed 8th March, 1899.)

Claim.—1st. The combination of a gasoline main supply tank placed underground where its contents will be kept uniformly cool, a small tank C, also underground and on a level with the main tank,



line pump attached to the small tank and having the stroke of its piston governed by the said air meter, a mixture or carburetter, a pipe leading from the air meter to said mixer, and a pipe leading from the gasoline pump to the said mixer. 2nd. The combination of a gasoline supply tank placed underground where its contents will be kept uniformly cool, a carburetter, an air meter having a revolvable shaft, an endless grooved track carried by said shaft, a small tank C, also underground and placed intermediate between the main tank and carburetter, a gasoline pump submerged in said small tank, a pivoted arm connected with the piston of said pump, and a rod connecting from said endless cam track on the meter shaft to the said pivoted arm. 3rd. The combination of a gasoline supply tank placed underground where its contents will be kept uniformly cool, an air meter having a revolvable shaft, a double cylindered gasoline pump also underground and connected with the said underground supply tank, a rocking arm having a longitudinal slot and two links, one at each end connected with a different one of the pump pistons, and a connection from the said slot in the rocking arm to the revolvable shaft of the air meter. 4th. The combination of a gasoline main supply tank placed underground where its contents will be kept uniformly cool, a carburetter, an air meter, a small tank C, also underground and placed intermediate between the main tank and carburetter, a detachable cap plate covering the top of the small tank, a pump cylinder secured to the said cap plate and projecting down into the small tank, and a piston in the pump cylinder operated by the said air motor. 5th. In a carburetter, the combination with a main supply tank, of a mixing or carburetting chamber, a second tank intermediate said main tank and carburetting chamber and in communication therewith, a pump in said intermediate chamber an air meter in communication with said carburetting chamber, and connections between said air meter and said pump to operate the latter. 6th. In a carburetter, the combination with a main supply tank, of a mixing or carburetting chamber, a second tank intermediate said main tank and carburetting chamber and in communication therewith, a double cylindered pump in said intermediate tank adapted to deliver a determined amount of gasoline to the carburetting chamber, an air meter in communication with said carburetting chamber, and adjustable connections between said meter and pump whereby the latter may be operated and its throw varied as desired. 7th. In a carburetter, the combination with a main supply tank, of a mixing or carburetting chamber, a second tank intermediate said main tank and said carburetting chamber and communicating therewith, a pump in said second tank, a rotary air meter in communication with said carburetting chamber, connections between said air meter shaft and said pump to operate the latter, and means for locking said air meter and pump operating mechanism against backward movement. 8th. In a carburetter, the combination with a main supply tank, of a mixing or carburetting

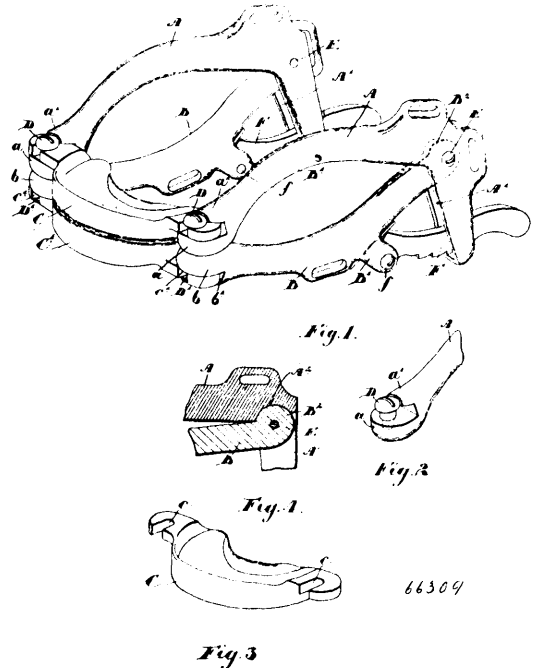
chamber, a second tank intermediate said main tank and said carburettng chamber, a double cylindrical pump in said intermediate tank, a rocking arm to drive the pump pistons, a rotary air meter in communication with said carburettng chamber, a cam carried by the shaft of said meter, an adjustable connection between said cam and rocking arm, by means of which the latter is actuated and the pump is driven, and means to lock said meter shaft and pump operating mechanism against backward movement. 9th. In a carbureter, the combination with a main supply tank, of a mixing or carburettng chamber, a second tank intermediate said main tank and said carburettng chamber, a double cylindrical pump in said intermediate tank, a rocking arm to drive the pump pistons, a rotary air meter in communication with said carburettng chamber, a cam carried by the shaft of said meter, an adjustable connection between said cam and rocking arm by means of which the latter is actuated and the pump is driven, a ratchet wheel on said meter shaft, and a locking pawl engaging said ratchet wheel so as to lock said meter shaft and pump operating mechanism against backward movement. 10th. In a carbureter, the combination with a main supply tank, of a mixing or carburettng chamber, a second tank intermediate said main tank and carburettng chamber and in communication therewith, a pump in said intermediate tank adapted to deliver a determined quantity of gasoline to the mixing chamber, means for operating said pump, and means for supplying air to said mixing chamber. 11th. In a carbureter, the combination with a main supply tank, of a mixing or carburettng chamber, a second tank intermediate said main tank and carburettng chamber and in communication therewith, a pump in said intermediate tank an air meter in communication with said carburettng chamber, means for operating said air meter, and connections between said air meter and pump to actuate the latter whereby determinate and proportionate quantities of air and gasoline will be delivered to the carburettng chamber. 12th. In a carbureter, the combination with a main supply tank, of a mixing or carburettng chamber, a second tank intermediate said main tank and carburettng chamber and in communication therewith, a pump in said intermediate tank, a rotary air meter in communication with said carburettng chamber, means for operating said air meter, and adjustable connections between said air meter and pump to actuate the latter, whereby determinate and proportionate quantities of air and gasoline will be delivered to the carburettng chamber. 13th. In a carbureter, the combination with a closed supply tank, of a pump submerged within said tank, a piston rod for said pump extending outside of said closed supply tank, a carburettng chamber in communication with said supply tank, an air meter to supply air to said carburettng chamber, means for driving said air meter, and connections between the air meter and the said piston rod to operate the pump. 14th. In a carbureter, the combination with a closed supply tank, a pump submerged within said tank, a carburettng chamber, connections between said supply tank and carburettng chamber, and an air meter to supply air to said carburettng chamber. 15th. In a carbureter, the combination with a supply tank, of a pump submerged within said tank, a carburettng chamber, communication between said supply tank and carburettng chamber, and air meter to supply air to said carburettng chamber, and connections between said air meter and pump to operate the latter. 16th. In a carbureter, the combination with a carburettng or mixing chamber, of means for supplying oil and air to said chamber, a steam pipe passing through said chamber, a drip cup or spraying saucer on said steam pipe to scatter the oil and thoroughly mix the oil and air. 17th. In a carbureter, the combination with a carburettng or mixing chamber, of means for supplying oil and air to said chamber, a steam pipe passing through said carburettng or mixing chamber, and a drip cup or spraying saucer carried by said steam pipe, said drip cup being of such diameter as to fill the carburettng chamber and being located below the entrance ports of the oil and air inlets. 18th. In a carbureter, the combination with a carburettng or mixing chamber, of means for supplying oil and air to said chamber, a steam pipe passing through said mixing chamber, said steam pipe having an enlarged portion within said chamber to increase the heating area of the pipe and a spraying saucer or drip cup carried by said enlarged portion. 20th. In a carbureter, the combination with a carburettng or mixing chamber, of means for supplying oil and air to said mixing chamber, and a steam pipe passing through said mixing chamber, said steam pipe having an enlarged portion within said chamber to increase the heating area.

No. 66,309. Speculum. (Speculum.)

J. Gordon McPherson, Toronto, Ontario, Canada, 20th February, 1900; 6 years. (Filed 27th December, 1899.)

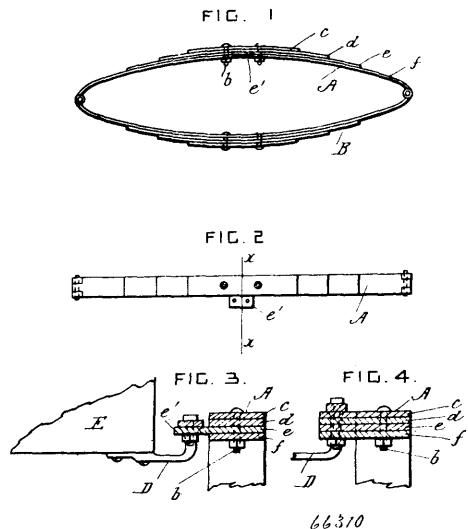
Claim.--1st. In a speculum, the combination with the incisor plates having the end notches, of the side pieces provided with the off-sets upon which the ends of the plate rest, the screw pins extending through the notches into the off-sets, and the overhanging lips extending over the ends of the plate and designed to hold them in place, as and for the purpose specified. 2nd. The combination with the upper side pieces on each side having the depending slot-

ted rear ends, of the concentric sockets formed in the upper ends of the slots of the upper side pieces, and the cam-shaped ends having



the concentric portion fitting into the corresponding sockets, and the pins extending through the upper side pieces, and the ends of the lower side pieces, as and for the purpose specified.

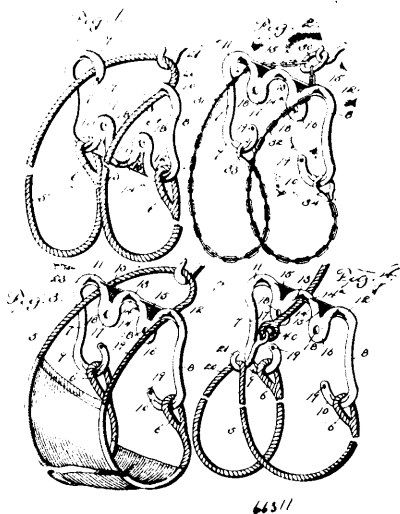
No. 66,310. Vehicle Spring. (Resort de voiture.)



Herbert C. Martell, Columbus, Ohio, U.S.A., 20th February, 1900; 6 years. (Filed 9th August, 1899.)

Claim.--1st. A vehicle spring provided with a lug which projects laterally from the middle part of the plane of the leaf and affords an attachment for the body hanger, substantially as set forth. 2nd. A vehicle leaf spring comprising a series of superposed leaves operatively connected together, each said leaf being provided with a lug which projects laterally from its middle part, said lugs forming an attachment for the body hanger, substantially as set forth. 3rd. A vehicle leaf spring comprising a series of superposed leaves operatively connected together, one of the inner leaves of the series being provided with a lug which projects laterally from its middle part and from between the two next adjacent leaves, said lug forming an attachment for the body hanger, substantially as set forth. 4th. The combination, with a vehicle leaf spring provided with a lug which projects laterally from its middle part in the plane of the leaf, of a body hanger secured to the said lug and arranged between the spring and the vehicle body, substantially as set forth.

No. 66,311. Cargo Sling. (*Elingue de chargement.*)



66311

Michael Enright, Norfolk, Virginia, U.S.A., 20th February, 1900; 6 years. (Filed 9th February, 1900.)

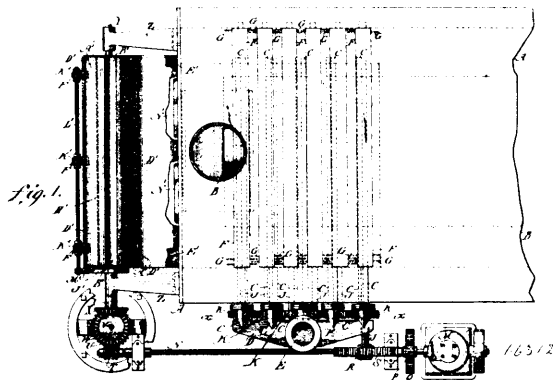
Claim.—1st. A cargo sling comprising a flexible member having eyes in its ends and a hook member comprising two hooks adapted for engagement with the eyes, said hooks lying mutually adjacent and having a mutual connection having bearing surfaces to receive the flexible member. 2nd. A cargo sling comprising a flexible member and a hook member adapted for engagement with the flexible member and comprising two hooks lying mutually adjacent and having a mutual fixed connection having a bearing surface to receive the flexible member in a direction transversely of the plane of the hooks. 3rd. A cargo sling comprising a hook member including two inwardly directed hooks adapted to receive the eyes of a flexible member and having a mutual connection provided with a bearing surface adapted to receive the sides of the flexible member in a direction transversely of the common plane of the hooks, to form a loop. 4th. A cargo sling comprising a hook member including two double hooks having a mutual connection attached thereto exteriorly of the inclosure of the hooks, whereby said hooks may interchangeably receive a flexible member. 5th. A cargo sling comprising a hook member including two double hooks connected at one end exteriorly of the inclosure of the hooks, whereby said hooks may interchangeably receive a flexible member. 6th. A cargo sling comprising a hook member including two hooks arranged mutually adjacent in a common plane and having a connection provided with a transverse bearing surface adapted to receive a sling when the latter is engaged with the hooks. 7th. A cargo sling comprising two double hooks arranged mutually adjacent and having a mutual connection provided with bearing surfaces, said connection being attached to the hooks exteriorly of the inclosures thereof, whereby they may interchangeably receive a flexible member. 8th. A cargo sling comprising a hook member including two hooks having a mutual connection, and a recessed bearing surface in one face of said connection adapted to receive a sling when the latter is engaged with the hooks. 9th. A cargo sling comprising a hook member including two hooks arranged mutually adjacent and having a mutual connection, said hooks being adapted to receive the eyes at the ends of the flexible member, and a bearing surface upon the connection adapted to receive the side said flexible connection passed transversely of the common plane of the hooks to form a loop, said bearing surface being accessible from between the hooks. 10th. A cargo sling comprising two double hooks arranged mutually adjacent and having a mutual connection, said hooks being adapted to receive interchangeably at their opposite ends, the eyes of a flexible member, and a bearing recess in the connection between the hooks adapted to receive the sides of the flexible member in a direction transversely of the common plane of the hooks, said connection being fixed to the hook members exteriorly of the inclosures thereof. 11th. A cargo sling comprising a hook member including two double inwardly directed hooks and having a fixed connection attached thereto exteriorly of the inclosures of the hooks, said hooks being adapted to interchangeably receive the eyes of the flexible member, and a bearing recess in the connection adapted to receive the flexible member when passed in a direction transversely of the plane of the hooks.

No. 66,312. Stoker Apparatus. (*Appareil de chauffeur.*)

Thomas Morgan Eynon, Philadelphia, Pennsylvania, U.S.A., 20th February, 1900; 6 years. (Filed 9th February, 1900.)

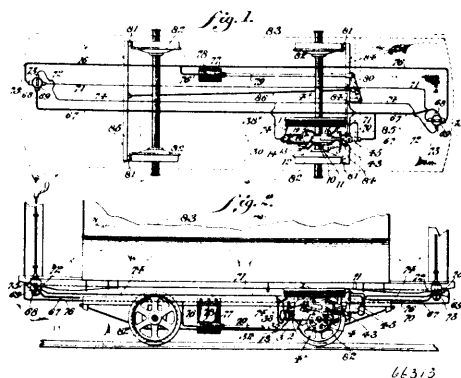
Claim.—1st. In a furnace, the combination of an ash bed adapted to support fuel, air tubes or passages therethrough and slightly

below the surface thereof, and means for maintaining a uniform height of said ash bed or fuel bed. 2nd. In a furnace, a bed of



ashes adapted to serve as a fuel bed, a series of air passages in the latter located slightly below the surface of said bed, and ash removers located below said passages. 3rd. A furnace provided with a bed of ashes adapted to serve as a fuel bed, an ash removing device consisting of a plurality of rotatable fingered members situated below the surface of the fuel bed, whereby a substantially uniform height of said bed is maintained, air supplying devices located slightly below the surface of said bed, means for supplying fuel to said bed, and means for operating said ash removing device and said means for supplying fuel. 4th. In a furnace, a fuel bed consisting of ashes, air supplying devices located slightly below the surface of said bed, and an ash removing device situated below said fuel bed and consisting of a plurality of rotatable fingered members. 5th. In a furnace, a fuel bed consisting of ashes, air supplying devices located slightly below the surface thereof, an ash removing device situated below the surface of the fuel bed and consisting of a plurality of fingered members geared together so as to cause adjacent bars to rotate in opposite directions. 6th. In a furnace, a fuel bed consisting of ashes, air supplying devices located slightly below the surface thereof, an ash removing device situated below the surface of the fuel bed and consisting of a plurality of rotatable fingered members, the fingers of adjacent members overlapping each other and situated out of alignment. 7th. In a furnace, a fuel bed consisting of ashes, a plurality of air tubes located slightly below the surface of said bed and embedded therein, said tubes communicating at one end with a chamber, means for supplying a fluid to said chamber, and an ash removing device situated below said grate bars and consisting of a plurality of rotatable fingered members. 8th. In a furnace, a bed of ashes adapted to serve as a fuel bed, a series of air passages located therein and slightly below the surface of said bed, an ash removing device located below the surface of said bed and consisting of a plurality of fingered members, and means for actuating said members. 9th. In a furnace, the combination of a bed of ashes adapted to support fuel, air supplying devices located slightly below the surface of said bed and adapted to furnish air to support combustion, devices for maintaining a substantially constant height of said ash bed, and means for operating said device.

No. 66,313. Brake. (*Frein.*)



66313

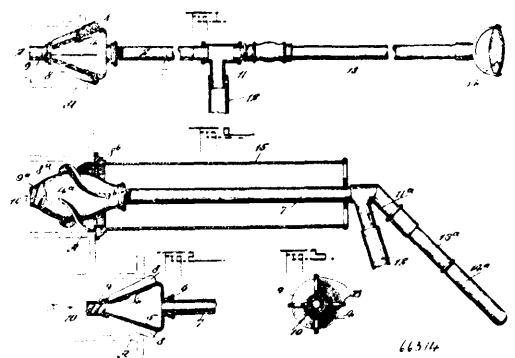
Harry Oscar Müller, Philadelphia, Pennsylvania, U.S.A., 20th February, 1900; 6 years. (Filed 9th February, 1900.)

Claim.—1st. In a fluid pressure brake, a compressor geared to the running gear of a car, said gearing comprising a clutch, a reservoir communicating with said compressor, means for moving a member

of said clutch into operative position by fluid pressure derived from said reservoir, and means for moving said clutch into inoperative position by means of fluid pressure derived direct from said compressor. 2nd. In a fluid pressure brake, a compressor geared to the running gear of a car, said gearing comprising a clutch, a reservoir communicating with said compressor, means for moving a member of said clutch into operative position by pressure derived from said reservoir, and means for moving said clutch into inoperative position by pressure derived direct from said compressor, the operation of said means being controlled by reason of variations and pressure in said reservoir. 3rd. In a fluid pressure brake the combination with a reservoir, of a friction wheel geared to the running gear of the car, a friction wheel movable toward and away from the same, connections common to said reservoir and said movable friction wheel for positively moving the latter toward and away from the first mentioned friction wheel by means of pressure derived from said reservoir and according to the variations of pressure therein. 4th. In a fluid pressure brake, an air compressor and regulator therefor, a reservoir communicating with said air compressor and with said regulator, a valve casing having a port communicating with said air compressor and with said reservoir, a port communicating with the train pipe, a port communicating with the regulator, and a valve for controlling said ports and for establishing communication between the train pipe port and the regulator port and the atmosphere. 5th. In a fluid pressure brake, the combination of a grooved wheel mounted on a car axle, a friction wheel adapted to contact therewith, a crankshaft upon which said last mentioned wheel is mounted, movable bearings for said crank shaft, the cranks at the extremity of the latter being at an angle to each other, a plurality of pistons suitably supported, a reservoir, connections from the cylinders of said pistons to said reservoir and other connections common to the latter and to said movable bearings, whereby any variation of the pressure in said reservoir will cause a variation of the frictional contact between said wheels. 6th. The combination of a reservoir, a cylinder having ports on either extremity thereof, valves controlling said ports, one of said valves being actuated by an increase of pressure in said reservoir, and the other of said valves communicating with and being actuated by reason of the pressure derived from the air compressor, a piston in said cylinder, a piston rod attached to said piston, levers suitably fulcrumed, links common to said levers and piston rod, a friction wheel mounted upon a crank shaft, the latter having movable bearings, said bearings being actuated by said levers, a second wheel mounted upon a car axle, and connections from said first mentioned or friction wheel to the cylinders of an air compressor. 7th. In a fluid pressure brake, the combination of an air compressor, a train pipe, a reservoir and a valve casing, the latter having therein a chamber 44 into which air is forced from said port 47 leading from said chamber, a second chamber 45^x with which said port communicates, a valve 49 controlling said port, a stem 52 for said valve, a head 53 attached to said stem, a spring bearing upon said head, a chamber 46 located in proximity to said chamber 44, a valve 51 for said chamber, said stem 52 controlling the movement of said valve, a spring actuated piston located below said valve 51, a chamber 60, in proximity to said chamber 45^z and valves seating in opposite directions and controlling ports common to the said chambers 45^x and 60, and valve 87 having ports communicating with the chamber 45^x and 46, with the train pipe, with means for regulating the operation of the compressor, and with the atmosphere. 8th. In a fluid pressure brake, the combination of a reservoir, a valve casing located at either end of the car for controlling the pressure in a brake cylinder, a valve plug 87 having ports and passages therein substantially as shown and described, a plurality of air compressors operated by frictional contact with a wheel mounted on the car axle, a valve casing located in proximity to said air compressor, and receiving compressed air therefrom, a plurality of chambers in said last mentioned valve casing, and valves in said chambers adapted to seat in opposite directions, the said chambers in the last mentioned valve casing communicating with the air compressor, the ports of the casing or valve plug 87, the means for regulating the air compressor and the atmosphere. 9th. In a fluid pressure brake, a casing, containing the chambers 44, 46, 45^x and 60, a pipe leading from an air pump to the inlet chamber 44, pipes leading from the chambers 46 and 45^x to a brake valve 69, a reservoir, a pipe leading from the latter to said chamber 60, valves common to the chambers 45^x and 60, but seating in opposite directions, a check valve located in said chamber 44 and controlling the passage to said chamber 46, a valve controlling the part between the chambers 44 and 45^x, means for seating said valve casing by an increase of pressure in the latter chamber, and means for throwing said pump into operation upon a decrease of pressure in said reservoir. 10th. In a fluid pressure brake, a reservoir, an air pump, connections common to said pump and reservoir, whereby any decrease of pressure in the latter causes said pump to be operated, an inlet chamber receiving compressed air from said pump, a valved chamber communicating with said inlet chamber and leading to a brake valve, a pipe leading from another chamber communicating with said valved chamber to said reservoir and connections common to said brake, valve and the brakes for actuating the latter. 11th. In a fluid pressure brake, a reservoir, an air pump, means common to said pump and reservoir, for enabling any decrease of pressure in said reservoir to operate said pump, an inlet chamber receiving compressed air from said pump, a valved chamber communicating with said inlet chamber,

and leading to a brake valve, the latter consisting of a suitable casing having a plurality of ports therein, two of said ports communicating with said valved chambers and a chamber adjacent to said inlet chamber, another port communicating with means for regulating the operation of said air pump, a plug in said valve casing constructed substantially as described and having a port communicating with the atmosphere, and a pipe leading from said valve casing to a brake cylinder. 12th. A valve casing for a fluid pressure brake, having a chamber communicating with an air compressor, a valved chamber in communication therewith and with the brake valve, a second valved chamber communicating with the first mentioned chamber and with the brake valve and with a valved chamber in communication with the reservoir, and valves between the first mentioned chamber and the two valved chambers communicating therewith, and controlled by the pressure within the second mentioned valved chamber. 13th. A valved casing for a fluid pressure brake having a chamber communicating with an air compressor, a valved chamber communicating therewith and with the brake valve, a second valve chamber communicating with the first mentioned chamber and with the brake valve and with a valved chamber communicating with the reservoir, two ports between said second valved chamber and the valved chamber communicating with the reservoir, said ports being controlled by oppositely opening valves and the said valve opening into the second valved chamber being under the control of and closed by a resilient cushion and valves between the first mentioned chamber and the two valved chambers communicating therewith, controlled by the pressure within the second mentioned valved chamber. 14th. A valve casing for a fluid pressure brake, having a chamber communicating with an air compressor, a valved chamber communicating therewith and with the brake valve, a second valved chamber communicating with the first mentioned chamber and with the brake valve and with a valved chamber communicating with the compressed air reservoir, and valves between the first mentioned chamber and the two valved chambers communicating therewith, the valve of the second valved chamber being closed by fluid pressure therein and opened by spring pressure and controlling the opening and closing of the valve of the first mentioned valve chamber. 15th. In a fluid pressure brake, a friction wheel mounted on the running gear of the car, a friction wheel 3 adapted to contact therewith, a crank shaft upon which the latter wheel is mounted, shifting bearings for said crank shaft, a piston cylinder and piston, a reservoir, a connecting pipe and valve mechanism intermediate of said reservoir and a piston cylinder, means for moving said wheel 3 into contact with the adjacent wheel by fluid pressure derived from said reservoir, means for moving said wheel 3 away from the adjacent wheel by pressure derived direct from said compressor, and a connection between said piston and said shifting bearings.

No. 66,314. Steam Jet Flue and Tube Cleaner.
(*Tuyau de jet de vapeur et nettoyeur de tube.*)



Worthington Hooker, Ingersoll, Hamburg, New Jersey, U.S.A.,
20th February, 1900; 6 years. (Filed 9th February, 1900.)

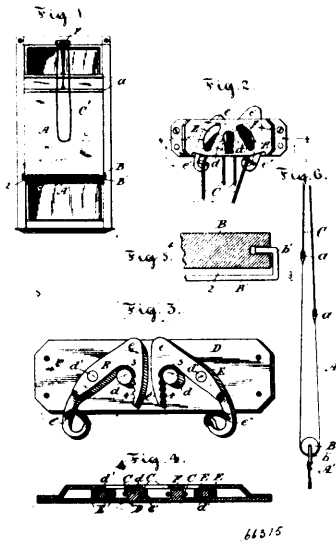
Claim.—1st. A tube or flue cleaner, provided with a hollow head having spiral ribs in its interior, substantially as set forth. 2nd. A tube or flue cleaner, provided with a hollow head having spiral ribs in its interior, and longitudinal flanges upon its outside, substantially as described. 3rd. A tube or flue cleaner, provided with a hollow head having spirally disposed longitudinal flanges upon its outer surface, substantially as described.

No. 66,315. Shade and Curtain Fixtures.
(*Appareil de store et rideau.*)

Ora Starbuck, Toronto, Ontario, Canada, 20th February, 1900; 6 years. (Filed 9th February, 1900.)

Claim.—1st. The combination in a curtain or blind of a stiffener at each end, a cord secured to each stiffener and passing through a suitable holding device and holding each stiffener suspended so as

to form a loop at the lower end of the suspended fabric, a roller within said loop, a rod having its ends bent and pintled in the ends



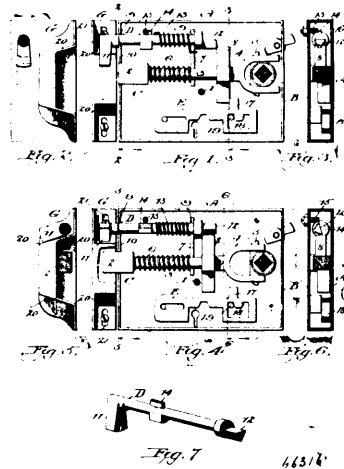
of said roller and a fringe or other appendage secured to said rod, substantially as set forth. 2nd. The combination with a curtain blind, of a stiffener at each end, a cord having one end secured to one of the stiffeners and passing up and through a holding device, then down and up forming a loop and passing again through a holding device and having its other end secured to the other stiffener, and forming a loop in the curtain, a roller supported within said loop, a rod having its ends bent and pintled in the ends of said roller, and a fringe or other appendage secured to said rod, substantially as set forth. 3rd. In a curtain fixture or holding device, the combination of a plate adapted to be secured to the lintel of an opening, two studs projecting from said plate adjacent to the centre, two levers pivoted on said plate, one between each stud and plate-end, each lever having a hooked and weighted head and an eyed tail, said hook engaging one of said studs and said tail-eye adapted to pass a cord by which said lever may be operated, substantially as set forth. 4th. In a curtain fixture or holding device, the combination of a pin or stud over which the suspending cord passes, a lever pivoted at the side of said stud and normally inclining downwardly and away from said stud, a weighted and hooked head on said lever having a throat engaging the top of said stud and an eyed tail through which the cord may pass and by which the said lever may be operated, substantially as set forth. 5th. In a curtain fixture or holding device, the combination of a back plate, a pair of pins or studs projecting from said plate adjacent to the centre, a lever for each of said studs pivoted to said plate in an inclined position with its weighted and hooked head resting on said stud and its eyed tail projecting downwards and to the other side of the pivot support, a cord passing through said tail-eye and over said pin or stud, and a cover plate secured to said back plate and holding said levers and cords in their places, substantially as set forth. 6th. In a curtain fixture or holding device, the combination with a back plate having a pair of pins or studs adjacent to the centre of a pair of levers pivoted to the said plate in a normally inclined position, each having a weighted hooked head with its throat engaging the upper part of one of said pins or studs and having the inner edge of its nose serrated and its tail projecting to the other side of and below its pivot support, and provided with an eye through which a cord may pass and by which said lever may be operated, substantially as set forth.

No. 66,316. Lock and Latch. (*Serrure et loquet.*)

Charles Closs, Marietta, Ohio, U.S.A., 20th February, 1900; 6 years. (Filed 9th February, 1900.)

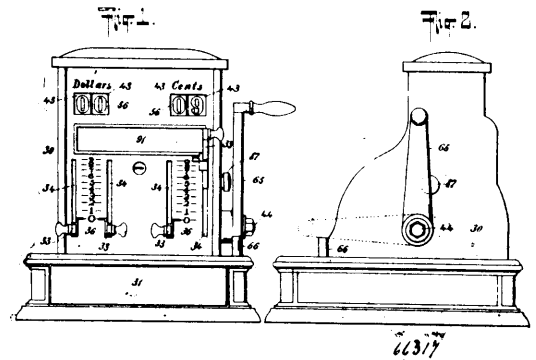
Claim.—1st. The combination with a lock and latch casing, of a spring actuated slide bolt having a cross bar 8 thereon, a spring actuated rocking trip provided at one end with a laterally projecting arm or lever adapted to be struck by the keeper to work said trip, the rocking trip also provided with a lug 14, on its side and an angular lug 12 eccentrically placed on its inner end in position to engage the cross bar and a removable set screw 15, capable of being inserted from either side of the locking casing. 2nd. The combination with a lock and a latch casing, of a spring actuated slide bolt having a cross bar 8 thereon, a spring actuated rocking trip provided at one end with a laterally projecting arm or lever adapted to be struck by the keeper to work said trip, the rocking trip also provided with a lug 14 on its side and an angular lug 12 eccentrically placed on

its inner end in position to engage the cross bar, a removable set screw 15 capable of being inserted from either side of the lock casing



and a tumbler adapted to be controlled by a key for engaging said cross bar to hold the bolt securely in place. 3rd. The combination with a lock and latch casing, of a spring actuated slide bolt having a cross bar 8 thereon, a spring actuated rocking trip provided at one end with a laterally projecting arm or lever said rocking trip also provided with a lug 14 on its side and an angular lug 12, eccentrically placed on its inner end in position to engage the cross bar, a removable set screw 15, capable of being inserted from either side of the lock casing and a reversible keeper having two external inclines 20 thereon, one of which is always in position to engage the arm 11, of the rocking trip when the door is closed, said keeper also having an opening or recess to receive the lock released by said trip when struck by the incline.

No. 66,317. Cash Register. (*Registre a monnaie.*)



Eljah Frank Spaulding, New Bound Brook, New Jersey, U.S.A., 21st February, 1900; 6 years. (Filed 7th December, 1899.)

Claim.—1st. In a cash register, the actuating hand levers, the front plate having the series of numerals along which said levers may be moved in accordance with the values to be indicated, the movable segments substantially independent of but adapted to automatically follow said levers and to have their position controlled thereby, the registering wheels, and the gear connected therewith, combined with means for bringing said gearing into engagement with said segments after the latter have reached their predetermined operative position, the exposed crank or handle for thereafter moving said segments against said gearing to rotate said registering wheels and return said segments to their normal position, and means for thereafter returning said registering wheels and their gear to their normal position free of said segments, substantially as set forth. 2nd. In a cash register, the actuating hand levers, the plate having the series of numerals along which said levers may be moved in accordance with the values to be indicated, the movable segments substantially independent of but adapted to automatically follow said levers and to have their position controlled by said levers, the registering wheels, and the gear connected therewith, combined with the exposed operating crank or handle, means intermediate said crank or handle and the shaft of said registering wheels for bringing said gearing into engagement

with said segments after the latter have reached their predetermined operative position, means intermediate said crank or handle and said segments for thereafter moving said segments against said gearing to rotate said registering wheels and return said segments to their normal position, and means for thereafter elevating said registering wheels and their gears from engagement with said segments, substantially as set forth. 3rd. In a cash register, the hand levers, the plate having the series of numerals along which said levers may be moved in accordance with the values to be indicated, the movable segments substantially independent of but adapted to automatically follow said levers and to have their position controlled thereby, the registering wheels, the gear connected therewith, and the springs acting against said segments to compel them to follow said actuating levers, combined with the exposed crank or handle, means intermediate said crank or handle and the shaft of said registering wheels for bringing said gearing into engagement with said segments after the latter have reached their predetermined operative position, and means intermediate said crank or handle and said segments for thereafter moving said segments against said gearing to turn said registering wheels and return said segments to their normal position, substantially as set forth. 4th. In a cash register, the actuating hand levers, the plate having the series of numerals along which said levers may be moved in accordance with the values to be indicated, the movable segments substantially independent of but adapted to automatically follow said levers and to have their position controlled thereby, the registering wheels, the gear connected therewith, movable stops for controlling the extent of motion toward their normal position of said segments, and means connected with the registering wheels for effecting the movement of said stops so that after each revolution of a registering wheel the stop for the next adjacent segment may be moved to permit of a more extended movement of said segment for carrying from one registering wheel to another, combined with means for bringing said gearing into engagement with said segments after the latter have reached their predetermined operative position, and means for thereafter moving said segments against said gearing for turning said registering wheels and restoring said segments to their downward position against said stops, substantially as set forth. 5th. In a cash register, the actuating hand levers, the plate having the series of numerals along which said levers may be moved in accordance with the values to be indicated, the movable segments substantially independent of but adapted to automatically follow said levers and to have their position controlled thereby, the registering wheels, the gear connected therewith, movable stops for controlling the extent of motion toward their normal position of said segments, and means connected with the registering wheels for effecting the movement of said stops so that after each revolution of a registering wheel the stop for the next adjacent segment may be moved to permit of a more extended movement of said segment for carrying from one registering wheel to another, combined with the exposed crank or handle, means intermediate said crank or handle and the shaft of said registering wheels for bringing said gearing into engagement with said segments after the latter have reached their predetermined operative position, and means intermediate said crank or handle and said segments for moving said segments against said gearing to rotate said registering wheels and return said segments to their downward position against said stops, substantially as set forth. 6th. In a cash register, the hand lever, the plate having the series of numerals along which said lever may be moved in accordance with the value to be indicated, the movable segment substantially independent of but adapted to automatically follow said lever and to have its position controlled by said lever, the registering wheel and the gear connected therewith, combined with the exposed crank or handle for bringing said gear into engagement with said segment after the latter has reached its predetermined operative position, and moving said segment against said gear for rotating said registering wheel, and returning said segment to its normal position, substantially as set forth. 7th. In a cash register, the hand lever, the plate having the series of numerals along which said lever may be moved in accordance with the value to be indicated, the rocking segment substantially independent of but adapted to automatically follow said lever on the upward movement of the latter, the spring connected with said segment for causing said segment to follow said lever, the registering wheel and the gear connected therewith, combined with means for moving said segment against said gear during the return movement of said segment to its normal position without affecting the said hand lever, whereby said segment is given its predetermined operative position by the upward movement of said hand lever, and is then returned to its normal position independently of said hand lever, and is at such time caused to operate said registering wheel, substantially as set forth. 8th. In a cash register, the hand lever, the plate having the series of numerals along which said lever may be moved in accordance with the value to be indicated, the movable segment substantially independent of but adapted to automatically follow said lever and to have its position controlled by said lever, the registering wheel and the gear connected therewith, combined with the exposed crank or handle for bringing said gear into engagement with said segment after the latter has reached its predetermined operative position, and moving said segment against said gear to rotate said registering wheel and return said segment to its normal position, and means for preventing any return motion of said exposed crank or handle toward its

normal position until it has made a complete motion from said position, substantially as set forth. 9th. In a cash register, the hand lever, the plate having the series of numerals along which said lever may be moved in accordance with the value to be indicated, the movable segment substantially independent of but adapted to automatically follow said lever and to have its position controlled by said lever, the registering wheel and the gear connected therewith, combined with the exposed crank or handle for bringing said gear into engagement with said segment after the latter has reached its predetermined operative position, and moving said segment against said gear to rotate said registering wheel and return said segment to its normal position, and means for preventing any return motion of said exposed crank or handle toward its normal position until it has made a complete movement in the operation of said segment, and also for preventing said exposed crank or handle from making any return motion after once having been started towards its normal position, substantially as set forth. 10th. In a cash register, the actuating hand levers, the plate having the series of numerals along which said levers may be moved in accordance with the values to be indicated, the movable segments substantially independent of but adapted to automatically follow said levers to have their positions controlled thereby, the registering wheels, and the gear connected therewith, combined with the exposed crank or handle for bringing said gearing into engagement with said segments after the latter have reached their predetermined operative position and moving said segments against said gearing to rotate said registering wheels and return said segments to their normal position, and means for locking said actuating hand levers in rigid position until registration has been effected, substantially as set forth. 11th. In a cash register, the actuating hand levers, the plate having the series of numerals along which said levers may be moved in accordance with the values to be indicated, the movable segments substantially independent of, but adapted to automatically follow said levers and to have their position controlled by said levers, the registering wheels, and the gear connected therewith, combined with the operating crank or handle for bringing said gearing into engagement with said segments after the latter have reached their predetermined operative position and moving said segments against said gearing to rotate said registering wheels and return said segments to their normal position, means for thereafter returning said registering wheels and their gear to their normal position free of said segments, and means for locking said hand levers in rigid position until said segments have been returned to their normal position and said registering wheels and their gear have moved to their normal position free of said segments, substantially as set forth. 12th. In a cash register, the actuating hand levers, the plate having the series of numerals along which said levers may be moved in accordance with the values to be indicated, the movable segments substantially independent of but adapted to automatically follow said levers and to have their position controlled by said levers, the registering wheels, and the gear connected therewith, combined with the crank or handle for bringing said gearing into engagement with said segments after the latter have reached their predetermined operative position and moving said segments against said gearing to rotate said registering wheels and return said segments to their normal position, means for thereafter returning said registering wheels and their gear to their upper position free of said segments, and means actuated by said crank or handle for locking said hand levers in their respective positions during the movement of said crank or handle from its normal position to operate said segments and then back to its normal position, substantially as set forth. 13th. In a cash register, the actuating hand levers, the plate having the series of numerals along which said levers may be moved in accordance with the values to be indicated, the movable segments substantially independent of but adapted to automatically follow said levers and to have their position controlled by said levers, the registering wheels, and the gear connected therewith, combined with the exposed crank or handle, the shaft upon which said crank or handle is mounted, means connected with said shaft for engaging said segments, means intermediate said shaft and the shaft of said registering wheels for bringing said gearing into engagement with said segments after the latter have reached their predetermined operative position preparatory to being operated by said segments during the return of the latter to their normal position under the operation of said exposed crank or handle, a series of movable stops controlling the extent of return motion of said segments, means intermediate said registering wheels and said stops whereby upon the rotation of a registering wheel the next adjacent segment is permitted to have a more extended return motion so as to effect the carrying from one registering wheel to another, and means for locking said actuating hand levers in their several positions until the said crank or handle has completed its operation and said registering wheels and their gear have been freed from said segments, substantially as set forth. 14th. In a cash register, the actuating hand levers, the plate having the series of numerals along which said levers may be moved in accordance with the values to be indicated, the movable segments substantially independent of but adapted to automatically follow said levers and to have their position controlled by said levers, the registering wheels, and the gear connected therewith, combined with the exposed crank or handle for bringing said gearing into engagement with said segments after the latter have reached their predetermined operative position and thereafter moving said

segments against said gearing to rotate said registering wheels and return segments to their normal position, means for thereafter returning said registering wheels and their gear to their normal position free of said segments, the shaft upon which said exposed crank or handle is mounted, the plate 151 on said shaft, the toothed racks 144 carried by said actuating hand levers, the plate 145 having the lips 147 to engage said racks 144 during the return motion of said segments but normally free of said racks, the cam 150 on said plate 145, and the spring 148 normally retaining said lips 147 free of said racks 144, said cam 150 being in operative relation to said plate 151 so as to be engaged by the same during the operation of said exposed crank or handle and during such period to maintain the lips 147 in locking engagement with said racks 144, substantially as set forth. 15th. In a cash register, the actuating hand levers, the plate having the series of numerals along which said levers may be moved in accordance with the values to be indicated, the movable segments substantially independent of but adapted to automatically follow such levers and to have their position controlled by said levers, the registering wheels, the gear connected therewith, the shaft upon which said segments are mounted, the springs carried by said segments, and the pins on said shaft for engaging said springs during the rotation of said shaft and thereby returning said segments to their normal position, said springs being yielding so as to allow said pins to have a slight further movement after said segments have reached their usual normal position, combined with the variable stops to limit the return motion of said segments so as to permit, when carrying from one registering wheel to another is to be performed, a slight further motion beyond the ordinary normal position to said segments under the said continued motion of said pins, and the exposed crank or handle for bringing said gearing into engagement with said segments after the latter have reached their predetermined operative position and moving said segments against said gearing to rotate said registering wheels and return said segments to their normal position, substantially as set forth. 16th. In a cash register, the actuating hand levers, the movable segments substantially independent of but adapted to automatically follow said levers and to have their position controlled by said levers, the registering wheels, and the gear connected therewith, combined with means for bringing said gearing into engagement with said segments after the latter have reached their predetermined operative position, the variable stops operable from the registering wheels for limiting the return motion of said segments, the shaft upon which said segments are mounted, and the crank on the said shaft for moving said segments against said gearing to rotate said registering wheels and return said segments to their normal position, the said segments corresponding with one another and being of sufficient length for all of them to be engaged by the gear wheels connected with said registering wheels, whether said segments are in their normal position or in an elevated position, whereby proper registering may be effected by some of the segments and the carrying from one registering wheel to another may be effected by other of the segments during the operation of the said crank, substantially as set forth. 17th. In a cash register, the actuating hand levers, the movable segments substantially independent of but adapted to automatically follow said levers and to have their position controlled by said levers, the registering wheels, the gear connected therewith and the movable stops for controlling the extent of return motion to be imparted to said segments and operable from said registering wheels combined with means for bringing said gearing into engagement with said segments after the latter or some of them have reached their predetermined operative position, the yielding springs carried by said segments, the shaft upon which said segments are mounted and which is provided with pins for engaging said springs carried by said segments, and means for rotating said shaft to move said pins against said springs and thereby return said segments to a position against said stops, said segments being of sufficient length for all of them to be engaged by the gear wheels connected with the registering wheels whether all or only a portion of said segments are in elevated position, substantially as set forth. 18th. In a cash register, the actuating hand levers, the movable segments, substantially independent of but adapted to automatically follow said levers and to have their position controlled by said levers, the registering wheels, the gear connected therewith, and the movable stops operable from the registering wheels for controlling the extent of return motion that shall be imparted to said segments, combined with means for bringing said gearing into engagement with said segments after said segments have reached their predetermined operative position, the shaft upon which said segments are mounted, a yielding contact between said shaft and said segments, whereby, during the rotation of said shaft, said segments while returning to their normal position, may have a variable extent of motion, and means for rotating said shaft for moving said segments against said gearing to rotate said registering wheels and return said segments to their normal position, substantially as set forth. 19th. In a cash register, the actuating hand levers, the movable segments adapted to automatically follow said levers and to have their position controlled by said levers, the shaft on which said segments are mounted, the registering wheels, and the gear connected therewith, combined with the operating crank or handle connected with said shaft, mechanism intermediate said shaft and said registering wheels for bringing said registering wheels into engagement with said segments after the latter have reached their predetermined operative

position and operable during the first portion of the movement of said operating crank or handle from its normal position, and means for compelling the operator to move said operating crank or handle its full throw from its normal position and then back to its normal position, substantially as set forth. 20th. In a cash register, the actuating hand levers, the movable segments adapted to automatically follow said levers and to have their position controlled by said levers, the driving shaft upon which said segments are mounted, the operating crank or handle connected with said driving shaft for operating the same, the movable shaft carrying the registering wheels and their gearing, and the rock shaft supporting said movable shaft and adapted to impart motion to the same, combined with mechanism intermediate said driving shaft and said rock shaft for turning said rock shaft and thereby bringing said gearing into engagement with said segments during the first part of the motion of said operating crank or handle, and means intermediate said driving shaft and said segments for moving said segments against said gearing to rotate said registering wheels and return said segments to their normal position during the continued operation of said operating crank or handle, substantially as set forth. 21st. In a cash register, the actuating hand levers, the movable segments adapted to automatically follow said levers and to have their position controlled by said levers, the driving shaft upon which said segments are mounted, the operating crank or handle on said driving shaft for operating the same, the movable shaft carrying the registering wheels and their gearing, and the rock shaft from which said movable shaft is supported and which is adapted to impart motion to said movable shaft, combined with mechanism intermediate said rock shaft and said driving shaft for actuating said rock shaft to lower said gearing into engagement with said segments during the first part of the motion of said operating crank or handle, means intermediate said driving shaft and said segments for moving said segments against said gearing to rotate said registering wheels and return said segments to their normal position during the continued motion of said operating crank or handle, and means for compelling the operator to impart to said operating crank or handle the full throw from its normal position and then back to its normal position, substantially as set forth. 22nd. In a cash register, the actuating hand levers, the movable segments adapted to automatically follow said levers and to have their position controlled by said levers, the driving shaft upon which said segments are mounted, the operating crank or handle connected with said driving shaft for operating the same, the movable shaft carrying the registering wheels and their gearing, and the rock shaft supporting said movable shaft adapted to communicate motion to the same, combined with means intermediate said driving shaft and said rock shaft for turning the latter, during the first part of the movement of said operating crank or handle, to lower said gearing into engagement with said segments, means intermediate said driving shaft and said segments for moving said segments during the continued motion of said crank or handle against said gearing to rotate said registering wheels and return said segments to their normal position, the ratchet plate upon said driving shaft and having at its opposite sides the oppositely inclined teeth, the pawls for alternately engaging said ratchet plate, and means for moving said pawls into alternate engage with said ratchet plate in order to compel the full movement of said operating crank or handle from its normal position, and then back to its normal position, substantially as set forth. 23rd. In a cash register, the actuating hand levers, the movable segments adapted to automatically follow said levers and to have their position controlled by said levers, the driving shaft upon which said segments are mounted, the movable shaft carrying the registering wheels and their gearing, and the rock shaft supporting said movable shaft and adapted to impart motion to the same, combined with means intermediate said driving shaft and said rock shaft for turning the latter and thereby lowering said gearing into engagement with said segments, means intermediate said driving shaft and said segments for moving said segments against said gearing to rotate the registering wheels and return said segments to their normal position, the ratchet plate upon said driving shaft and having at its opposite sides the oppositely inclined teeth, the pawl arms mounted upon said rock shaft and subject to the motion thereof, and the pawls carried by said arms and adapted to alternately engage said ratchet plate under the action of said rock shaft in order to prevent the reverse motion in said operating crank or handle after the same has been started from its normal position or back to its normal position, substantially as set forth. 25th. In a cash register, the actuating hand levers, the segments whose position is controlled by said levers, the movable shaft carrying the registering wheels and their gears, and means for moving said gears into engagement with said segments, combined with the operating crank or handle for manually moving said segments against said gears for rotating said registering wheels, means for holding said hand levers stationary during the operation of said crank or handle, and spring actuated means for moving said gears from said segments after said crank or handle has completed its operation, substantially as set forth. 25th. In a cash register, the actuating hand levers, the indicating cylinders, mechanism connecting said cylinders with said levers for effecting the rotation of said cylinders when said levers are moved, the shutter normally concealing said cylinders, the segments whose position is controlled by the movement of said levers, the registering wheels, the gears connected therewith, and means for moving said gears into engagement with said segments, con-

combined with the crank or handle for moving said segments against said gears for rotating said registering wheels and returning said segments to their normal position, and means intermediate said crank or handle, and said shutter for moving the latter during and by the operation of said crank or handle to expose said cylinders, substantially as set forth. 26th. In a cash register, the actuating hand levers, the indicating cylinders, mechanism connecting said cylinders with said levers for effecting the rotation of said cylinders when said levers are moved, the shutter normally concealing said cylinders, the segments whose position is controlled by the movement of said levers, the registering wheels, the gears connected therewith, and means for moving said gears into engagement with said segments, combined with the crank or handle for moving said segments against said gears for rotating said registering wheels and returning said segments to their normal position, means intermediate said crank or handle and said shutter for moving the latter during and by the operation of said crank or handle to expose said cylinders, and means for locking said hand levers in stationary position until after registration and indication have been effected and said segments and said gears have become disengaged from one another, substantially as set forth. 27th. In a cash register, the hand levers, the indicating cylinders 43 having the gear wheels 52, and the rack bars 42 engaging said gear wheels and connected with said hand levers for operating said indicating cylinders from and simultaneously with the operation of said hand levers, combined with the springs 55 flexed against said rack bars 42 to maintain the engagement of said bars with said gear wheels, and the rigid guiding bars 54 engaging said rack bars 42 to prevent any unduly sudden action of said hand levers from causing said rack bars to overcome the force of said springs and thereby lose their proper engagement with said gear wheels 52, substantially as set forth. 28th. In a cash register, the hand levers, the indicating cylinders 43 having the gear wheels 52, the rack bars 42 engaging said gear wheels and connected with said hand levers for imparting motion to said cylinders from and simultaneously with the operation of said hand levers, and the shutter 57 for said indicating cylinders, combined with the rod for opening said shutter at the time of registration, the plate for supporting said shutter in its open position after said rod has elevated said shutter, and means intermediate said indicating cylinders and said plate for removing the latter and permitting said shutter to descend when the operative parts of the register are placed in position for registering and indicating the amount of a subsequent sale, substantially as set forth. 29th. In a cash register, the hand levers, the indicating cylinders or drums 43 having the gear wheels 52, the rack bars 42 engaging said gear wheels and connected with said hand levers for imparting motion to said cylinders from and simultaneously with the operation of said hand levers, and the shutter for said indicating cylinders, combined with the rod for elevating said shutter during the registration, the plate for supporting said shutter in its exposure position, the fingers upon said cylinders and adapted upon any subsequent movement of said cylinders to contact with the said fingers upon said supporting plate and withdraw the support of the latter from said shutter, substantially as set forth. 30th. In a cash register, the hand levers, the indicating cylinders having the gear wheels 52, the rack bars 42 engaging said gear wheels and connected with said hand levers for rotating said cylinders from and simultaneously with the operation of said hand levers, and the shutter normally concealing said indicating cylinders until registration has been effected, combined with the segments whose position is controlled by the said hand levers, the movable shaft carrying the registering wheels and their gears, means for moving said gears into engagement with said segments, the driving shaft upon which said segments are mounted, the operating crank or handle on said shaft for manually moving said segments to rotate said registering wheels, and means intermediate said shaft and said shutter for elevating the latter to its exposure position during the operation of said shaft to effect registration, substantially as set forth. 31st. In a cash register, the hand levers, the indicating cylinders 43 having the gear wheels 52 and freely mounted upon their shaft 53, the rack bars 42 engaging said gear wheels and connected with said hand levers for rotating said cylinders from and simultaneously with the operation of said hand levers, and the shutter for said indicating cylinders and comprising the arms 58 flexibly swung from said shaft and connected by the rod 59, combined with the rod 60 connected with said rod 59 for opening said shutter to its exposure position at the time of registration, the plate 70 having the lip 72 for automatically passing below said rod 59 to maintain said shutter in its open position after said rod 60 has elevated said shutter, the fingers 74 on said plate 70, and the pins 73 on said cylinders for contacting with said fingers 74 and removing said plate to permit said shutter to close upon any subsequent movement of said indicating cylinders, substantially as set forth. 32nd. In a cash register, the hand levers, the driving shaft upon which said hand levers are mounted, the indicating cylinders or drums operable from said hand levers, the shutter normally concealing said indicating cylinders, the rod 60 connected with said shutter for moving the same to its exposure position, the arm 61 connected with said rod 60 and mounted upon said driving shaft, and the loop or contact plate 67 secured upon said shaft for moving said arm 61 with the rod 60 and said shutter to their elevated position during the rotation of said shaft to effect registration, combined with the segments whose position is controlled by said hand levers and which are mounted upon said shaft to be driven from the same, the registering wheels and their gears, and the operating crank or

handle for manually moving said segments to rotate said registering wheels and effect through said driving shaft the elevation of said shutter to its exposure position, substantially as set forth. 33rd. In a cash register, the hand levers, the indicating cylinders operable therefrom and simultaneously therewith, the driving shaft upon which said hand levers are mounted, the shutter normally concealing said indicating cylinders until registration, means intermediate said shutter and said driving shaft for moving said shutter to its exposure position upon the rotation of said shaft to effect registration, the cash drawer, and means intermediate said drawer and said driving shaft for locking said drawer in its closed position, and releasing said drawer to open upon the rotation of said driving shaft to effect registration, combined with the segments loosely mounted upon said driving shaft and whose position is controlled by said hand levers, the registering wheels and their gears, and the operating crank or handle connected with said driving shaft for rotating the latter and thereby elevating said shutter to its exposure position, releasing said cash drawer to open, and moving said segments to rotate said registering wheels and return to their normal position, substantially as set forth. 34th. In a cash register, the hand levers, the segments whose position is controlled by said hand levers, the driving shaft upon which said segments are loosely mounted and which is adapted upon rotation to return said segments to their normal position free of said hand levers, the registering wheels and their gears, and means for moving said gears into engagement with said segments, combined with the lever arm 76 also mounted upon said driving shaft, the contact plate or loop 67 for elevating said lever arm 76 during rotation of said driving shaft to effect registration, the cash drawer having the shoulder 77 to be engaged by the lower end of said arm 76 and the operating crank or handle connected with said driving shaft for rotating the latter to manually move said segments against said gears for rotating said registering wheels and also to elevate said arm 76 from said shoulder 77 and permit the cash drawer to open, substantially as set forth. 35th. In a cash register, the hand levers, the movable segments whose position is controlled thereby, the registering wheels and their gears, means for moving said gears into engagement with said segments and moving said segments against said gears to rotate said registering wheels, the dog arm 116 carried by said wheels, and the spring catches 117 to be engaged by said arms 116 and tripped at each revolution of the registering wheels, the movable frames carrying the stops for said segments to limit the operative throw of the latter and normally engaged and held by said catches 117, springs for moving said frames when released by said catches to carry said stops from their normal position to permit a more extended movement of said segments whereby the carrying from one registering wheel to another is effected, and means for thereafter restoring said frames to their normal position where they are again engaged by said spring catches, substantially as set forth. 36th. In a cash register, the hand levers, the movable segments whose position is controlled thereby, the registering wheels and their gears, means for moving said gears into engagement with said segments and moving said segments against said gears to rotate said registering wheels, the dog arm 116, carried by the units registering wheel, and the spring catch 117, to be tripped by said arm 116, at each revolution of said units registering wheel, the lever 118, normally held by said spring catch 117, and carrying the stop 123, for the tens of units segment for limiting the operative throw of the latter, the spring 122, acting against said levers 118 and 121 to when said catch is tripped, move said stop 123, from its normal position to permit a more extended throw of said tens of units segment, thereby to carry from the units registering wheel to the tens of units registering wheel, and means for thereafter restoring said levers 118, and 121, to their normal position to be again engaged by said catch, substantially as set forth. 37th. In a cash register, the hand levers, the movable segments whose position is controlled by said levers, the driving shaft upon which said segments are freely mounted and which carries the pins 113 and 114, the registering wheels and their gears to be rotated by said segments, and the operating crank or handle connected with said shaft for rotating the same and causing said pins 113, to engage and move said segments to effect registration, combined with the dog arm 116, carried by the units registering wheel, the spring catch 117, to be tripped by said arm 116, at each revolution of said wheel, the lever 118, normally held by said spring catch 117, the lever 121, connected with said lever 118, and having the lower arm 124, and also the stop 123, for the tens of units segment for limiting the operative throw of the latter, and the spring 122, acting against said levers 118 and 121, to when said catch is tripped, move said stop 123, from its normal position to permit a more extended throw of said tens of units segment thereby to carry from the units registering wheel to the tens of units registering wheel, the said lower arm 124, being in such relation to said pin 114, that the latter may contact with it on the reverse motion of said driving shaft and restore said levers 118 and 121, to their normal position to be again engaged by said catch, substantially as set forth. 38th. In a cash register, the hand levers, the movable segments whose position is controlled thereby, the registering wheels and their gears freely mounted upon a movable shaft, means for moving said gears into engagement with said segments after the latter has been set, and means for moving said segments against said gears to rotate said wheels, combined with the enclosing casing 30, having the door 91, and the interior transverse frame 89, above said registering

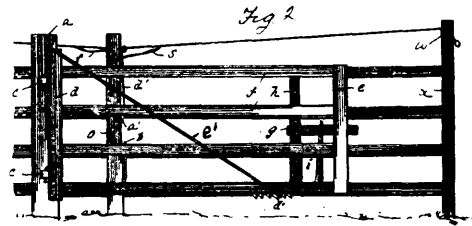
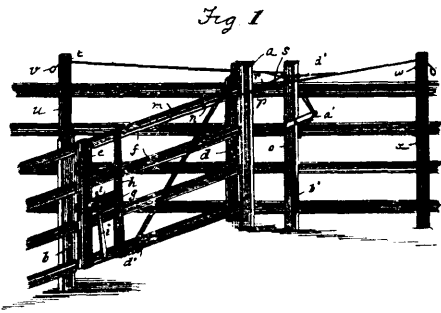
wheels are provided with the elongated slot 90, in line with one row of numerals on said registering wheels, substantially as set forth. 39th. In a cash register, the hand levers, the segments whose position is controlled by said levers, the driving shaft on which said segments are freely mounted, and the crank or handle on said shaft for manually operating said shaft and moving said segments back to their normal position free of said hand levers, combined with the movable shaft carrying the registering wheels and their gears, the rock shaft supporting said movable shaft and adapted to lower and elevate the same, the spring acting to normally hold said movable shaft in its elevated position, means intermediate said driving shaft and said rock shaft, and operable from said driving shaft for turning said rock shaft to lower said movable shaft and place said gears into engagement with said segments, means connected with said driving shaft for maintaining the engagement of said gears with said segments during the return motion of the latter to rotate said registering wheels, and means also connected with said driving shaft for thereafter releasing said rock shaft and placing the same under the influence of said spring for elevating said movable shaft, substantially as set forth. 40th. In a cash register, the hand levers, the segments whose position is controlled by said levers, the driving shaft on which said segments are freely mounted, and the crank or handle on said shaft for manually operating said shaft and moving said segments back to their normal position free of said hand levers, combined with the movable shaft carrying the registering wheels and their gears, the rock shaft supporting said movable shaft and adapted to lower and elevate the same, the spring acting normally hold said movable shaft in its elevated position, the plate hung from said rock shaft and carrying the roller 101 and dog 98, the plate also on said rock shaft and engaged by said dog and subject to the pressure of said spring, and the segment plate 102 on said driving shaft and having the pin 103, said plate 102 being adapted to move against said roller during the rotation of the driving shaft to lower and maintain in their lower position said registering wheels and their gears, and said pin 103 being adapted at the desired time to trip said dog and permit said spring to again elevate said registering wheel shaft, substantially as set forth. 41st. In a cash register, the hand levers, the segments whose position is controlled by said levers, the driving shaft on which said segments are freely mounted, and the crank or handle on said shaft for manually operating said shaft and moving said segments back to their normal position free of said hand levers, combined with the movable shaft carrying the registering wheels and their gears, the rock shaft supporting said movable shaft and adapted to lower and elevate the same, the spring acting to normally hold said movable shaft in its elevated position, the plate 100 hung from said rock shaft and carrying the roller 101 and dog 98, the plate 97 also hung from said rock shaft and adapted to be engaged by said dog, the arm 94 on said rock shaft and engaging said plate 97 and subject to the action of said spring, and the segment plate 102 on said driving shaft and having the pin 103, said plate 102 being adapted to move against said roller during the rotation of the driving shaft to lower and maintain in their lower position said registering wheels and their gears, and said pin 103 being adapted at the desired time to trip said dog and permit said spring to again elevate said registering wheel shaft, substantially as set forth. 42nd. The combination of the registering wheels, the movable racks adapted to operate said wheels, the movable stops normally limiting the movement of said racks, and means for moving said stops so as to permit the additional movement of the registering wheels necessary for carrying from one denomination to the next higher, substantially as set forth. 43rd. In a cash register, the indicating numerals at the upper part of the casing and the hand levers to set said numerals to indicate the amount of a sale and at the same time set the racks for the registering wheels, combined with the shutter to automatically pass in front of and conceal said numerals during the setting of the latter, and a connection between said shutter and the registering devices, whereby, when registration is effected said shutter will be moved from in front of and expose said numerals, substantially as set forth. 44th. In a cash register, the series of independent rocking segments, the actuating hand levers whose position controls the position of said segments, and the registering wheels having the gear wheels to be moved into engagement with said segments after the latter have been set in position by said levers, combined with means for moving said segments against said gear wheels to rotate said registering wheels and effect the proper registration and at the same time restore said segments in their normal position, substantially as set forth.

No. 66,318. Gate. (Barrier)

Samuel A. Wine, Quicksburg, Virginia, U.S.A., 21st February, 1900; 6 years. (Filed 7th February, 1900.)

Claims.—The combination of a hinge post and a latch post, a gate hinged to the hinge post and having a latch adapted to engage the latch post, a guide post adjacent to the hinge post, a cord connected with the latch to release it and passed through a guide upon the gate adjacent the hinge post, said cord being bifurcated beyond said guide to form two sections, guides upon the guide post having said sections passed therethrough in opposite directions, a spring latch upon the guide post adapted to engage the gate when it is in an open position and hold it, a connection between each of said cord

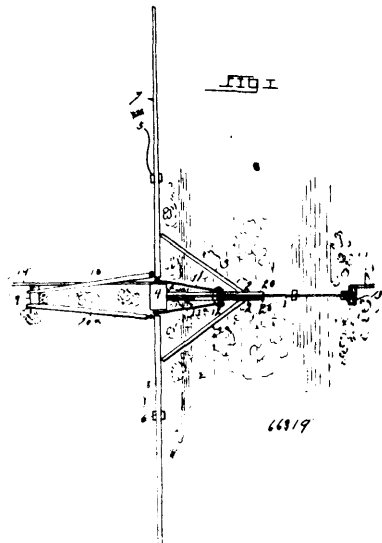
sections and the latch upon the guide post for releasing the latch, the cord connections between the guide post and gate being slack



66318

with respect to the connections between said post and its latch, and a spring upon the guide post.

No. 66,319. Gate. (Barrier.)



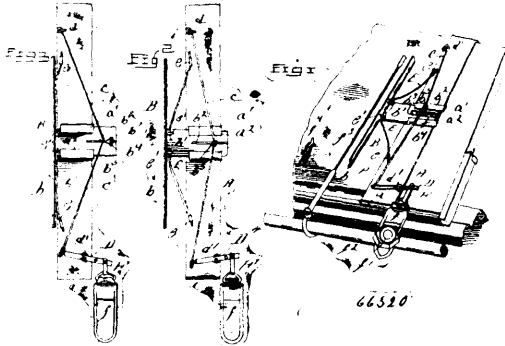
66319

John L. Stoutenborough, Maroa, Illinois, U.S.A., 21st February, 1900; 6 years. (Filed 7th February, 1900.)

Claims.—1st. A gate swung on a horizontal pivot at one end of its lower corners, such gate being composed of rails and stiles with an A-shaped brace structure adjacent to the pivot stile, a weight for counterbalancing the gate, vertically swinging levers in line with the pivot post, stays to hold the swinging ends of the levers against side motion, and links connecting the swinging ends of the levers with the apex of the A-formed base structure, substantially as described. 2nd. A gate swung on a horizontal pivot at one of its lower corners, such gate being composed of rails and stiles with an A-shaped brace structure adjacent to the pivot stile, a weight to counterbalance the gate, braces fastened to the A-shaped structure and pivoted to the side of and in line with the pivot of the gate, and lift levers connected through links with the apex of the A-formed brace structure, substantially as described. 3rd. A gate swung on a horizontal pivot at one of its lower corners, such gate being composed of rails and stiles with an A-shaped brace structure,

adjacent to the pivot stile, a weight to counter-balance the gate, a crank shaft journalled in the apex of the A-shaped structure between the rails of the gate, a crank arm on the crank shaft between the ends thereof, a catch to hold the gate closed, a rod connecting the arm of the crank shaft with the catch, and lift levers connecting with the crank shaft, substantially as described.

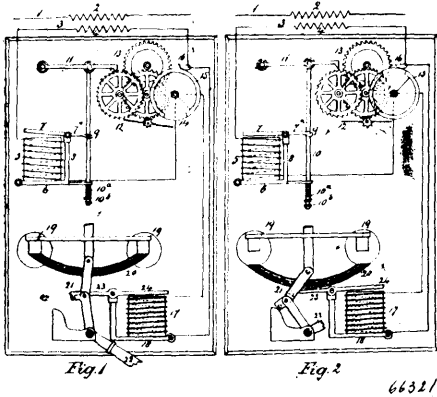
No. 66,320. Tympan Gauge. (*Jauge de tympan.*)



Olof Johnson, Hibbing, Minnesota, U.S.A., 21st February, 1900; 6 years. (Filed 7th February, 1900.)

Claim.—1st. The tympan gauge herein described, comprising a plate, a bar paralleling one edge of said plate, a flexible connection between the bar and plate, and means for forcing said bar away from said plate, substantially as set forth. 2nd. The tympan gauge herein described, comprising a plate having a guideway, a bar paralleling one edge of said plate having a portion movable in said guideway, a spring connected to said bar and plate, and means for moving said bar away from said plate, substantially as set forth. 3rd. The tympan gauge herein described, comprising a plate having a guideway, a spring held bar paralleling one edge of said plate and having an angular portion movable in said guideway, a wire, or the like, held at one end to said plate and engaging said angular portion, a lever fulcrumed on said plate and to which the other end of said wire is secured, and means for shifting said lever, substantially as set forth. 4th. The tympan gauge herein described comprising a plate, a bar paralleling one edge of said plate, springs secured to said plate having a sliding connection with said bar, a lever, means for operating the latter, and a connection between said lever and said bar, substantially as set forth. 5th. The combination with the plate having a guideway, of the bar having a right angular portion movable in said guideway, an adjustably mounted post carried by said angular portion, springs secured to said bar and plate, a wire fast to said plate at one end and engaging said post, a lever to which the ether end of said wire is secured, substantially as set forth.

No. 66,321. Electrical Distribution System. (*Système de distribution électrique.*)

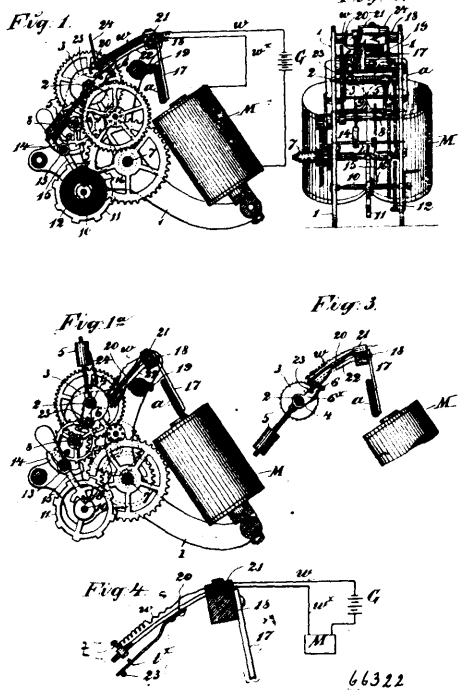


Lewis B. Stillwell, Niagara Falls, New York, U.S.A., 21st February, 1900; 6 years. (Filed 13th January, 1900.)

Claim.—1st. In a system of electrical distribution, consisting of a main supply circuit and two or more subordinate or distributing

circuits which receive energy from the main circuit, an automatic circuit opening device controlling the main supply circuit, and an automatic circuit opening device controlling one or more of the subordinate distributing supply circuits, these circuit breakers being severally provided with time measuring mechanism so adjusted with reference to each other that in case of a short circuit upon a subordinate circuit the circuit breaker controlling the subordinate distributing circuit must operate before the circuit breaker controlling the main circuit operates. 2nd. In a system of electrical distribution, a main supply circuit and a plurality of subordinate distributing circuits, in combination with a circuit breaker for each circuit and a time measuring controlling device for each circuit breaker, each of said devices corresponding to a subordinate circuit being set to insure the opening of its breaker before the breaker of any dominating circuit can be automatically opened. 3rd. In a system of electrical distribution, a main supply circuit and one or more subordinate distributing circuits supplied thereby, in combination with a circuit breaker in each of said circuits and time measuring mechanism for each circuit breaker, provided with means for insuring the opening of the breaker a predetermined interval of time after the beginning of an excessive flow of current in its circuit.

No. 66,322. Electric Clock. (*Horloge électrique.*)



Joseph Butcher, Jersey City, New Jersey, U.S.A., 21st February, 1900; 6 years. (Filed 10th January, 1900.)

Claim.—1st. In an electric clock, the combination with the balance wheel, hair spring, lever, escapement wheel, driving arbor and intermediate train, of the weighted arm, and the pawl and ratchet mechanism through which said weighted arm rotates the driving arbor, the electric circuit including a generator, the electro-magnet having its coils in said circuit, a rocking arbor, the armature lever and armature suspended from said rocking arbor in such position that said armature may swing across the poles of the magnet, an arm on said rocking arbor carrying the circuit terminals, and means substantially as described for bringing the circuit terminals together when the weighted arm descends, substantially as set forth. 2nd. In an electric clock of the character described, the combination with the inclined electro-magnet M, of a rocking arbor 16 above the poles of the magnet, the armature lever 17 suspended from said arbor, the armature a on said lever, the arm 20 fixed to said arbor and extending therefrom at an angle with the lever 17, an open electric circuit including a generator and the coils of said magnet, one of the terminals of said circuit being set in said arm 20, and the other a spring carried by said arm, substantially as set forth. 3rd. In an electric clock, the combination with the balance wheel, hair spring, lever, escapement, escapement wheel, driving arbor and intermediate train, of the ratchet wheel on said arbor, the sleeve 4 on said arbor, the pawl carried by said sleeve, the weighted arm carried by said sleeve, the electric circuit, including a generator, the terminals t and t' of said circuit, the arbor 18, the arm 20 on said arbor and carrying said terminals, the operating arm 22 carried by said arbor the pin 23 carried by the sleeve 4 and adapted to complete the

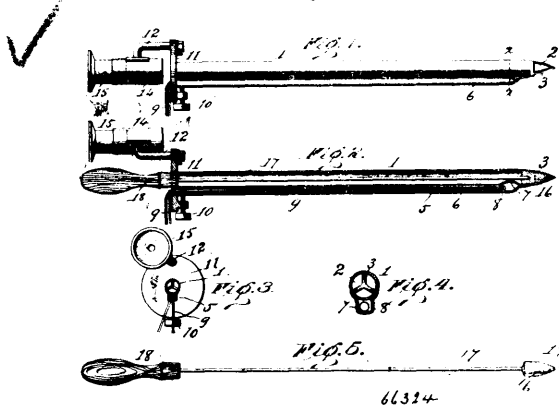
circuit, the inclined electro-magnet M in said circuit, and the armature a suspended from the arbor 18, substantially as set forth.

No. 66,323. Compound for Removing Taints of Onions or Weeds from Butter. (*Composé pour purifier le beurre.*)

Stephen S. Batey, Mitchell, South Dakota, 21st February, 1900; 6 years. (Filed 15th November, 1899.)

Claim.—The herein described composition of matter for purifying butter, which consists of nitrate of potash, bicarbonate of soda, borax, and powdered slacked lime, combined in the proportions and in the manner specified.

No. 66 324. Speculum. (*Speculum.*)



William Charles Preston, Rochester, New York, U.S.A., 21st January, 1900; 6 years. (Filed 4th October, 1899.)

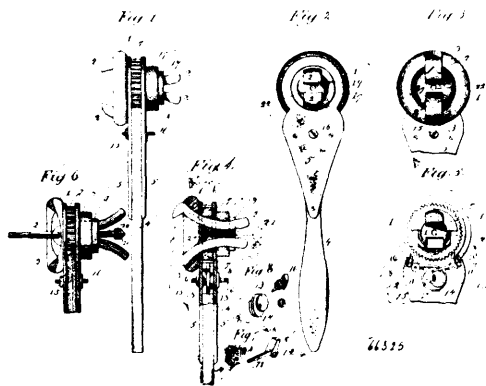
Claim.—1st. In a speculum, the combination with the hollow body, of a chamber extending upon the side of the latter, and connected thereto by an aperture arranged near their forward ends, and a lamp adapted to be introduced into the chamber and in proximity to the aperture. 2nd. In a speculum, the combination with a hollow body open upon its rear end, having a perforated point upon its opposite extremity, of a plug adapted to close the apertures in the point and form a smooth joint with the edges thereof, and a chamber arranged upon the underside of the body and connected thereto, and a lamp located in the chamber beneath the aperture. 3rd. In a speculum, the combination with a hollow body open upon its rear end and having a perforated point upon its opposite extremity, of a plug having raised portions upon its surface corresponding to the apertures in the point and adapted to fill the same to conform with the contour of the latter, and a chamber upon the underside of the body, and an aperture in the side thereof communicating with the chamber, and the lamp in the chamber beneath the aperture. 4th. In a speculum, the combination with a hollow body open upon its rear end, and having a plate or disc mounted thereon, and a perforated point upon its opposite extremity, of a plug mounted upon a handle and adapted to close the apertures in the point, and capable of removal through the body of the instrument, and a chamber formed upon the underside of the body, the aperture between the body and chamber, and a lamp adapted to be inserted within the latter and arranged below the aperture. 5th. In a speculum, the combination with a hollow body, having a plate or disc mounted upon its rear end, of a pivotally connected magnifying attachment arranged in line with the centre of the body and capable of being turned to the side, said body having a perforated pointed end, of a plug closing the apertures in the point, the chamber formed upon the underside of the body, the aperture connecting the former with the latter, and the lamp located in the chamber.

No. 66,325. Drill Mechanism. (*Mécanisme de forêt.*)

John Runnery, Cleveland, Ohio, U.S.A., 21st February, 1900; 6 years. (Filed 6th May, 1899.)

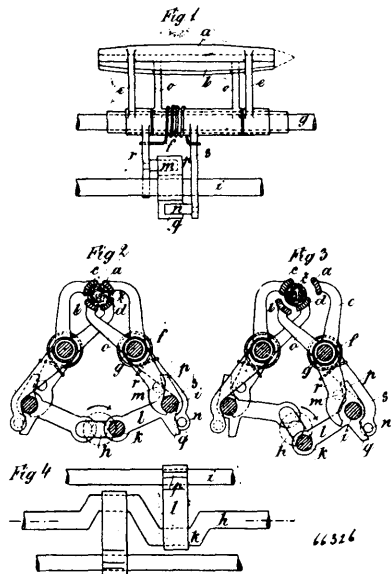
Claim.—1st. The head having a conical opening made there-through, the plates sleeved over the head, the handle secured in the plates, the two curved jaws provided with teeth, the toothed ring for engaging with the jaws, and the ratchet ring, combined with the two pivoted pawls provided with arms, a spring for operating each pawl, and two cams for operating the springs so as to cause the pawls to alternately engage with the ratchet ring, and a handle for causing the cams to revolve, substantially as shown. 2nd. In a wrench, the circular head having a conical recess in its outer face and provided with slotted openings, the curved jaws which pass through the slotted openings, and have their outer ends to bear against the sides of the conical recess in the head, a toothed ring which engages with the outer toothed edges of the jaws, and a ratchet ring which is placed upon the head, combined with plates which are sleeved over the head upon opposite sides of

the ratchet ring, the two pawls provided with arms, the springs for operating the pawls, and the two slotted cams and an operating



handle upon which they are pivoted, the central portion of the head being provided with an opening to receive a screw, substantially as set forth.

No. 66,326. Cigar Rolling Machine. (*Machine à rouler les cigares.*)

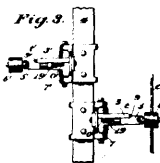
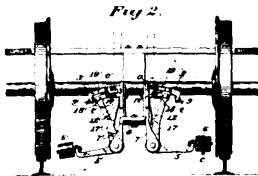
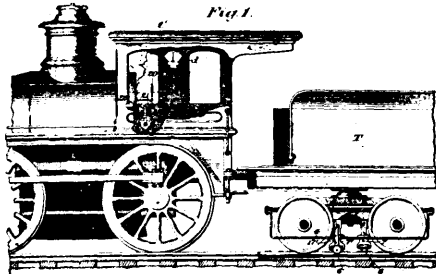


Clarence Benjamin Schultz, Charlottenburg, Prussia, 21st February, 1900; 6 years. (Filed 4th April, 1899.)

Claim.—1st. In a cigar rolling machine, the co-acting pairs of swinging wrapping shapers, springs for closing said shapers, rods swinging with said shapers and situated between the end portion thereof, a double crank shaft, connecting rods connected with said crank shaft and with the swinging rods of said shapers, levers upon said connecting rods, and projection upon said shapers situated in the path of said levers. 2nd. In a cigar rolling machine, the separable wrapping shapers mounted to swing about their axis of closure, a spring for closing the same against suitable stops, a vibratory member pivotally connected with the frame supporting said shapers and having projections engaging the said shapers, and means for swinging said member on its pivot. 3rd. In a cigar rolling machine, the separable wrapping shapers mounted to swing about their axis of closure, a spring for closing the same, rods connected with a rotary driving device and having a pivotal connection with the frame supporting said shapers and having projections or levers engaging the said shapers. 4th. In a cigar rolling machine, the separable wrapping shapers mounted to swing about their axis of closure, a spring for closing the same, a vibratory member for swinging said shapers, and provided with vibratory parts for opening said shapers. 5th. In a cigar rolling machine, the separable wrapping shapers mounted to swing about their axis of closure, a spring for closing said shapers, and vibratory members engaging and separating said shapers. 6th. In a cigar rolling machine, the co-acting pairs of wrapping shapers, the shapers in each pair being

held in a closed position under spring tension, means for separating said shapers, and means for swinging the same about their axis of closure. 7th. In a cigar rolling machine, a pair of separable wrapping shapers, means for opening the same, stops for limiting the closing thereof, springs for closing said wrapping shapers, and means for swinging the same about their axis of closure. 8th. In a cigar rolling machine, a pair of separable wrapping shapers, means for opening the same, a spring for closing the same, and means for swinging said shapers about their axis of closure.

No. 66,327. Electric Signal. (Signal électrique.)



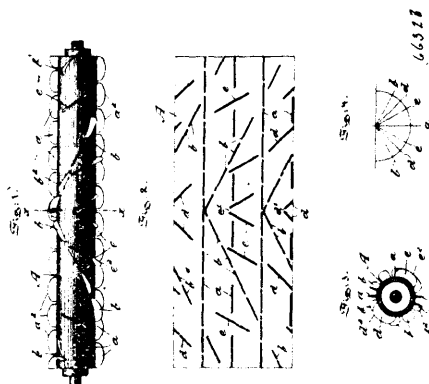
66327

Louis Charles Werner, Louisville, Kentucky, U.S.A., 21st February, 1900; 6 years. (Filed 4th April, 1899.)

Claim.—1st. In an electric signal system, the combination, with a track of a line of way, of a conductor extending along the line of way and insulated from said track, a vehicle movable along said track, a source of electric energy, an electrical pole changing switch connected to send current in either direction through the indicator on said vehicle, current controlling means between the source of energy and the two sides of the indicator, a travelling current collector carried by said vehicle and adapted to make contact with said conductor, means for closing the circuit between the conductor and the track at a point distant from the vehicle, and a visual electrical indicator carried by said vehicle and in circuit with said current collector and responsive to every variation in the length, and hence the resistance, of the conductor between said vehicle and such distant point, within the range of the indicator, and having an indicator hand movable at either side of a normal, idle, central position, in accordance with the direction of movement of the vehicle, and adapted to indicate every variation in the distance between the vehicle and such distant point, as the former approaches the latter, and also to show changes in the direction of the movement of the vehicle. 2nd. In an electric signal system, the combination, with a track of a line of way, of a conductor extending along the line of way and insulated from said track, vehicles movable along said track, travelling current collectors carried by said vehicles and adapted to make contact with said conductor, a source of electric energy for each vehicle, electrical pole changing switches connected to send current in either direction through the indicators on said respective vehicles, circuit controlling means between the source of energy and the two sides of the indicator on each vehicle, and visual electrical indicators carried by said vehicles and in circuit, respectively, with said current collectors and responsive to every variation in the length, and hence the resistance, of the conductor between said vehicles, within the range of such indicators, and each having an indicator hand movable at either side of a normal, idle, central position, in accordance with the direction of movement of the vehicle and adapted to indicate every variation in the distance between said vehicles and also to show changes in the direction of movement of each vehicle. 3rd. In an electro-signal system, the combination, with a track of a line way, of a conductor extending along the line of way and insulated from said track, a source of electric energy, a train movable along such track, a current collector carried by said train and adapted to make travelling contact with said conductor, means for closing the circuit between the conductor and the track at a point distant from the train, a visual electrical indicator carried by said train and in circuit with said current

collector and responsive to every variation in the length, and hence in the resistance, of the conductor between said vehicle and such distant point within the range of the indicator, and having an indicator hand movable at either side of a normal, idle, central position in accordance with the direction of movement of the train, and adapted to indicate every variation in the distance between the train and such point, a reversing lever carried by the locomotive and the train, and an electrical pole changing switch controlled by said reversing lever and adapted to send a current in either direction through the indicator. 4th. In an electro signal system, the combination, with a track of a line of way, of a conductor extending along the line of way, and indicated from said track, a source of electric energy, a train movable along such track, a current collector carried by said train and adapted to make travelling contact with said conductor, means for closing the circuit between the conductor and the track at a point distant from the train, a visual electrical indicator carried by said train and in circuit with said current collector and responsive to every variation in the length, and hence in the resistance of the conductor between said train and such distant point within the range of the indicator, and having an indicator hand movable at either side of a normal, idle, central position in accordance with the direction of movement of the train, and adapted to indicate every variation in the distance between the train and such point, a reversing lever carried by the locomotive of the train, and an electrical pole changing switch connected with, and controlled by, the operation of said reversing lever and adapted to send current in either direction through the indicator. 5th. In an electric signal system, the combination, with a track of a line way, of a conductor extending along the line of way and insulated from said track, a source of electric energy, a train movable along such track, means for closing the circuit between the conductor and the track at a point distant from the train, a visual electrical indicator carried by said train and responsive to every variation in the length, and hence in the resistance, of the conductor between said train and such distant point within the range of the indicator, and having an indicator hand movable at either side of a normal, idle, central position in accordance with the direction of movement of the train and adapted to indicate every variation in the distance between the train and such point, a travelling current collector carried by said train and adapted to make contact with said conductor, a reversing lever carried by the locomotive of the train, an electrical pole changing switch controlled by said reversing lever and adapted to send current in either direction through the indicator, and an automatic spring released circuit breaker controlled by the current collector and controlling the circuit to the indicator. 6th. In an electric signal system, the combination, with track rails and switch rails of a line of way, of a conductor extending along the line of way and insulated from said rails and having a relatively long section in advance of the switch disconnected from the main portion of the conductor, a source of electric energy, switch operating means, circuit closing means controlled by the opening of the switch and operative for closing the circuit between the rails at the switch and such disconnected section, a vehicle movable along the track, a travelling current collector carried by said vehicle and adapted to make contact with said conductor, a visual electrical indicator carried by said vehicle and in circuit with said current collector and responsive to every variation in the length, and hence in the resistance, of the conductor between said vehicle and such circuit closing means within the range of the indicator, and having an indicator hand movable at either side of a normal, idle, central position and adapted to indicate every variation in the distance between the vehicle and switch on the approach of the former toward the latter, a reversing lever carried by the vehicle, and an electrical pole changing switch controlled by said reversing lever and adapted to send current in either direction through the indicator.

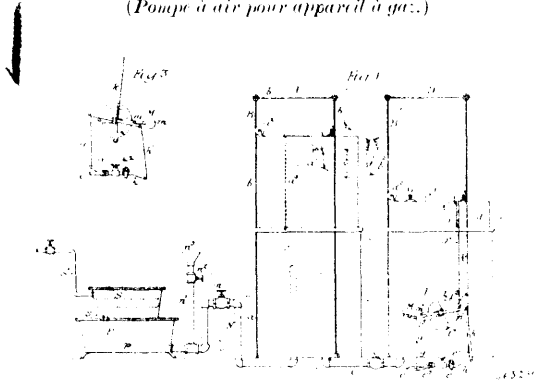
No. 66,328. Finishing Roll for Hide, Skin and Leather Machinery. (Rouleau pour machines à finir le cuir les peaux, etc.)



Joseph Hall, Leeds, England, 21st February, 1900; 6 years. (Filed 1st March, 1899.)

Claim.—1st. In a finishing roll or cylinder, two series of oppositely and helically arranged disconnected main blades, abutting at a central point longitudinally of the cylinder, a series of longitudinally arranged, disconnected, main blades arranged in alternate series with the helically arranged blades, and one or more series of short blades or vanes arranged at varying angles to both series of main blades and intermediate of both series, substantially as and for the purposes described. 2nd. In a finishing roll or cylinder, two series of oppositely and helically arranged disconnected main blades, abutting at a central point longitudinally of the cylinder, a series of rows of longitudinally arranged, disconnected, main blades arranged in alternate series with the helically arranged blades, and one or more series of short blades or vanes arranged at varying angles to both series of main blades and intermediate of both series, the projecting edges of the main and short blades being rounded, substantially as and for the purposes described.

No. 66,329. Air Pump for Gas Apparatus.
(*Pompe à air pour appareil à gaz.*)

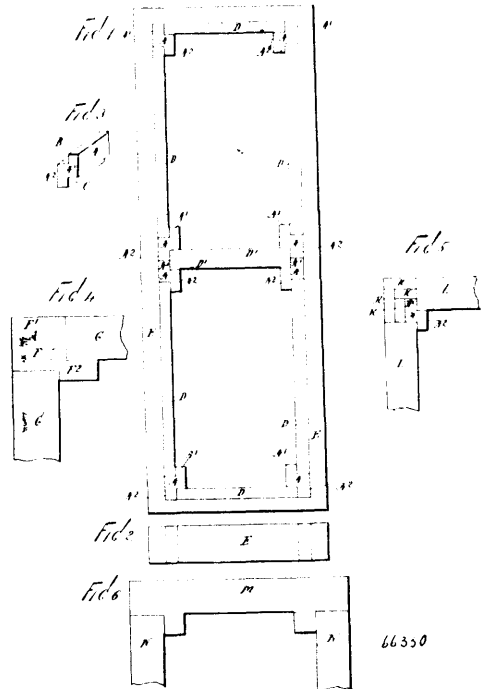


Ferdinand Logan, Phoenixville, Pennsylvania, U.S.A., 21st February, 1900; 6 years. (Filed 22nd March, 1899.)

Claim.—1st. The combination in an air pump, of a container having fixed and movable sections, a cylinder, a piston, one of said parts being on the fixed section and the other adapted to the movable section, water inlet and outlet pipes communicating with the cylinder, and valve mechanism controlling the flow of water to and from the cylinder, said mechanism being actuated by the moving section of the container, substantially as described. 2nd. The combination in an air pump for supplying air to an air gas apparatus, consisting of a container having a fixed and a movable section, a valved air inlet, a cylinder secured to the fixed section, a piston mounted in the cylinder, and having a rod adapted to the movable section, water inlet and outlet pipes communicating with the cylinder, valve mechanism controlling the admission to, and exhaust from the cylinder, said mechanism being adapted to the movable section of the container, substantially as described. 3rd. The combination in an air pump for supplying air to an air gas apparatus, consisting of a container having a fixed and a movable section, a cylinder secured to the fixed section, a piston adapted to the cylinder and secured to the movable section, air inlet valve in the container, water inlet and outlet pipes communicating with the cylinder, valves for controlling the flow of water to or from the cylinder, trip mechanism controlling said valves, stops on the moving section, adapted to engage the trip mechanism so as to cut off the supply of water and open the exhaust when a certain height is reached, and to cut off the exhaust and open the supply when the section is lowered to a certain point, substantially as described. 4th. The combination in an air pump for supplying air to an air gas apparatus, consisting of a fixed section, a movable section, an air inlet valve, a cylinder, a piston adapted to the cylinder and connected to the movable section, an inlet and an outlet valve communicating with the cylinder, and means for shifting said valves so that when the movable section is lowered the water inlet valve will be opened and the outlet valve closed and when the movable section is elevated the inlet valve will be closed and the outlet valve opened, and an air holder, an air passage communicating with the upper portion of the pump and the upper portion of the holder, a check valve in said passage, substantially as described. 5th. The combination in an air pump for supplying air to an air gas apparatus, consisting of a fixed section and a movable section, an air inlet valve, a cylinder, a piston adapted to the cylinder and connected to the movable section of the pump, an inlet and an outlet valve communicating with the cylinder, means for shifting said valve so that when the movable section is lowered the water inlet valve will be opened and the outlet valve closed and when the movable section is elevated the inlet valve will be closed and the outlet valve opened, and an air holder, an air passage communicating with the upper portion of the pump and the upper portion of the holder, a check valve in said passage, substantially as described. 6th. The combination of an air pump having a fixed and movable section, an air inlet valve adapted to admit air when the movable section is raised, a cylinder, a piston in said cylinder connected to the movable section of the pump, a water inlet and outlet pipes, communicating with the cylinder, valves in said pipes, a two armed lever connected to the valves, a weighted

arm adapted to trip said lever, and means for shifting the said arm from one position to another as the movable section of the pump is raised or lowered, substantially as described. 7th. The combination of an air holder, an air pump consisting of a fixed and movable section, an air inlet valve, a cylinder, a piston in said cylinder connected to the movable section of the pump, water inlet and outlet passages communicating with the cylinder, valves in said passages, means for tripping the valves, a passage communicating with the upper portion of the pump and the upper portion of the holder, the movable portion of the pump being heavier than the movable portion of the holder so that when the air is admitted to the pump and the water allowed to escape from the cylinder the weighted movable section will cause the air to pass into the holder, substantially as described.

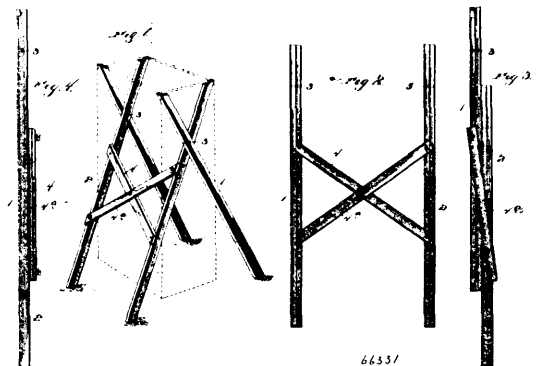
No. 66,530. Printer's Furniture.
(*Mobilier pour imprimeurs.*)



Alexander Paterson, London, Middlesex, England, 22nd February, 1900; 6 years. (Filed 5th February, 1900.)

Claims.—1st. In printers' furniture, an angular corner piece consisting of body portion provided with oppositely extending angular projections, projecting therefrom adjacent the diagonally opposite corners of said body portion, substantially as shown and described. 2nd. In printers' furniture, an angular locket or corner piece consisting of a block provided with parallel and oppositely extending angular projections whereby grooves are formed adapted to fit the end portion of clamps or blocks in connection with which they are used, substantially as shown and described.

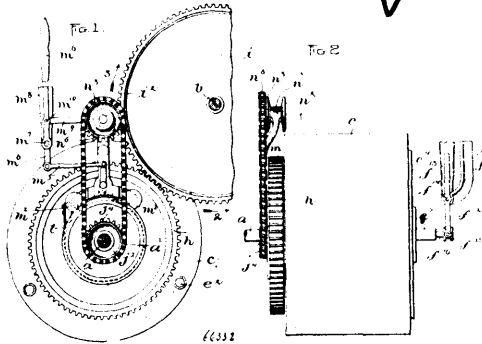
No. 66,331. Sack Holder. (*Porte-sac.*)



Amos Rippon and Ira Phillips, both of Wakeman, Ohio, U.S.A., 22nd February, 1900; 6 years. (Filed 9th February, 1900.)

Claims.—1st. In a bag holder, a supporting frame comprising two pairs of legs, the legs of each pair being crossed and pivoted and having their upper ends adapted to receive and hold a bag, and a cross piece connecting the pairs of legs, whereby the weight within the bag will spread the upper ends of the legs and hold the bag in engagement therewith. 2nd. In a bag holder, a supporting frame comprising two pairs of legs, the legs of each pair being crossed and pivoted together near their upper ends, and having the upper ends cut to form holding points for the bag, and a cross piece pivoted at each end to one leg of each pair, whereby the legs of each pair may be folded together in line, and one pair may be folded to lie against the other pair in line, and whereby when in use the legs will be held from spreading and the bag will be held open.

No. 66,332. Power Transmitting Mechanism.
(*Mécanisme à transmetteur de la force.*)



George John Altham, Fall River, Massachusetts, U.S.A., 22nd February, 1900; 6 years. (Filed 20th February, 1899.)

Claim.—1st. A power transmitter, comprising a constantly rotating power shaft, a reversible driven shaft, means for imparting power from the power shaft to the driven shaft, and means including devices for regulating the speed of the driven shaft, and devices for reversing the direction of rotation of the driven shaft. 2nd. A power transmitter, comprising a constantly rotating power shaft, a reversible driven shaft, means driven by the power shaft for rotating the driven shaft, means for varying the speed of the driven shaft from zero to maximum, and means for reversing the direction of rotation of the driven shaft. 3rd. A power transmitter, comprising a constantly rotating power shaft, a driven shaft, means driven by the power shaft for rotating the driven shaft, said means including clutches and a screw shaft for varying their throw for gradually varying the speed of the driven shaft from substantially zero to maximum, and devices for disconnecting the driven shaft from the power shaft. 4th. A power transmitter comprising a shaft, reciprocating clutches on the shaft, means operated by the driving shaft for actuating said clutches, and a controllable screw shaft having connections for varying the degree of movement of the clutches. 5th. A power transmitter comprising a shaft and a sleeve thereon, clutches on the sleeve and having diverging arms, reciprocating means actuated from the driving shaft, and rods connecting said diverging arms with said means, for the purpose set forth. 6th. A power transmitter comprising a driven shaft and a sleeve thereon, clutches on the sleeve and having diverging arms, reciprocating means actuated from the driving shaft, rods connecting said diverging arms with said means, and means for varying the movements of the said diverging arms. 7th. A power transmitter comprising a shaft, a sleeve on the shaft, oscillatory clutch members on the sleeve, means for oscillating said clutch members simultaneously in opposite directions, and means operated by the driving shaft for actuating said means. 8th. A power transmitter comprising a driven shaft, clutch members on said shaft and having diverging arms, toggle levers connecting said arms, means for reciprocating the connecting pivot to the two toggle levers, means for reversing the operations of the clutch members, and means for varying the position or location in which said pivot reciprocates without varying the extent of movement. 9th. A power transmitter comprising a shaft, oppositely actuated clutch members thereon, a crank connected to said clutch members, and means for adjusting the pivot of the crank towards and from the driven shaft, whereby the crank is bodily adjusted to regulate the degree of movement of the clutch members. 10th. A power transmitter, comprising a shaft, independent clutch members for actuating said shaft, toggle levers for operating said clutch members, means for reciprocating the pivot of the toggle levers to actuate the clutch members, and adjusting devices for varying the position of the said means to regulate the movement of the clutch members. 11th. A power transmitter comprising a shaft, a clutch member thereon, and having an arm, a crank, two pivoted

levers connecting said crank with the arm, a guide for the pivot of the said levers, and means for varying the position of the axis of rotation of said crank. 12th. A power transmitter comprising a power shaft having a gear wheel rigid therewith, a pinion meshing with the gear wheel, means for adjusting the pinion while so meshes, a driven shaft, an oscillatory clutch on the driven shaft, pivoted levers connecting the clutch with a pinion, and a guide for the pivot of said levers. 13th. A power transmitter comprising a shaft, a sleeve on said shaft, opposing stops or abutments carried by said shaft and sleeve, springs interposed between said stops or abutments to act in opposite directions, clutches on the sleeve, and means for actuating said clutches to alternately engage and move said sleeve. 14th. A power transmitter comprising driven clutch members, driving clutch members, means for causing said driving clutch members to alternately engage and operate said driven clutch members, a shaft, a plurality of oppositely acting springs connecting the driven clutch members with the shaft. 15th. A power transmitter comprising a shaft, driven clutch members thereon, oppositely actuated driving clutch members, clutch rolls inserted between the clutch members, means for shifting said clutch rolls into and out of their operative positions, and means for adjusting the extent of movement of the clutch. 16th. A power transmitter comprising a shaft, driven clutch members thereon, oppositely actuated driving clutch members, clutch rolls inserted between the clutch members, a spider having means controlling said clutch rollers, and means for adjusting said spider to simultaneously vary the positions of the rolls of both of the oppositely actuated clutches to start, stop, or reverse the shaft. 17th. A power transmitting mechanism comprising a shaft, driven clutch members thereon, oscillatory alternately acting driving clutch members, there being double wedge-shaped cavities between the said driving and the said driven clutch members, two independent sets of clutch rolls in said cavities, and yielding means for simultaneously shifting both of said sets of clutch rolls in said cavities. 18th. A power transmitter comprising a continuously rotating driving shaft, a driven shaft rotatable in opposite directions with varying speed, oppositely reciprocating clutches for imparting power to said driven shaft, means for varying the movement of said clutches, and means for reversing the direction of rotation of said driven shaft.

No. 66,333. Bench Plane. (*Lebot à planer.*)

Fig. 1.

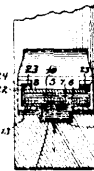


Fig. 3.

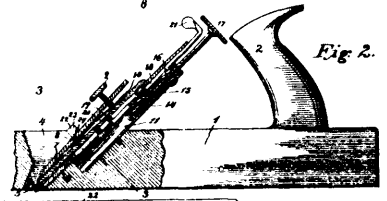


Fig. 2.

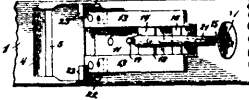


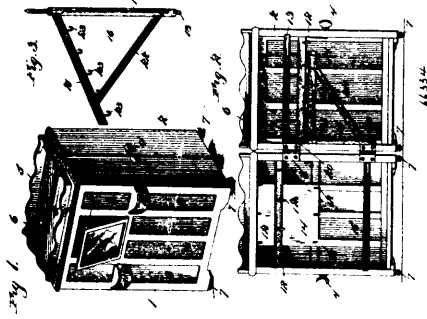
Fig. 4.

66333

Henry Miller, Mexico, Pennsylvania, U.S.A., 22nd February, 1900; 6 years. (Filed 27th January, 1900.)

Claim.—1st. In a plane, the combination with the stock and the bit or knife of a channeled guide boxing fitted to the stock, a longitudinally adjustable slide block completely housed and concealed within the channel of the boxing, and a laterally swinging adjusting lever pivoted between its ends to the block, and provided at its lower end with an upturned stub loosely engaging with the bit or knife, substantially as set forth. 2nd. In a plane, the combination with the stock and the bit or knife of a channeled guide boxing fitted to the stock, a fixed nut housed within the boxing at or near its upper end, a slide block registering and concealed within the channel of the boxing, an adjusting screw mounted in said nut and having a connection with the slide block, and a laterally swinging adjusting lever pivoted between its ends to the block, and provided with an upturned stud loosely engaging with the bit or knife, substantially as set forth. 3rd. In a plane, the combination with the stock, the bit or knife and the clamping plate of a guide boxing fitted to the stock, adjusting devices for the bit or knife arranged within the guide boxing, and a pair of holding arms fitted to the guide boxing at opposite sides thereof within the plane mouth, and provided at their upper ends with inwardly projecting gripping lugs overhanging and engaging the side edges of the clamping plate, substantially as set forth.

No. 66,334. Wardrobe. (*Armoire-robe.*)

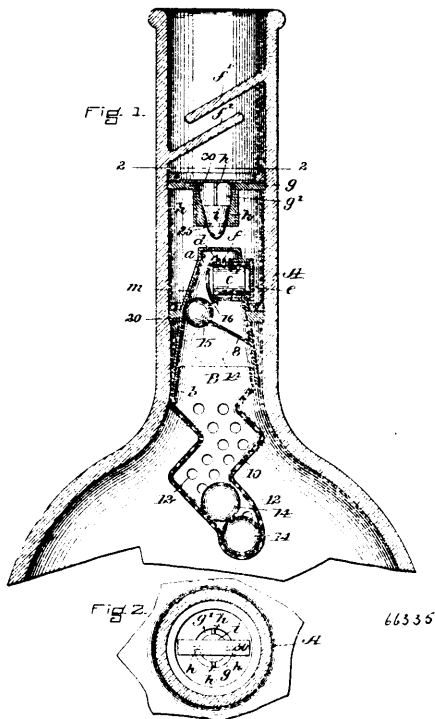


Clayton E. Cox, Sheridan, Indiana, U.S.A., 22nd February, 1900; 6 years. (Filed 9th February, 1900.)

Claim.—A wardrobe, comprising two hollow hinged containing sections of approximately equal dimension connected by hinging devices at the inner contiguous edges of adjacent ends and free for opening and closing at the opposite ends, a movable suspending attachment applied close to the inner edge of one of the ends of the sections connected to the adjacent end of the other section and movable over the inner open side of the latter, said attachment comprising a vertically disposed rounded or cylindrical support, held in close bearing and rolling on the end of the section and having reduced extremities, the upper reduced extremity being elongated, and a horizontal arm attached to the support below the said upper reduced extremity, said arm being strengthened by a diagonal brace extending from the outer part of the same to a lower portion of the support, and having suspending devices thereon, and upper and lower eyes in which the reduced extremities of the support are pivotally and removably fitted, the upper elongated reduced extremity being vertically shiftable in its eye to permit the attachment to be readily attached and disconnected, and the rounded or cylindrical support reducing friction and wear on the end of the section to which it is applied.

No. 66,335. Non-refillable Bottle.

(*Bouteille non réemplissable.*)



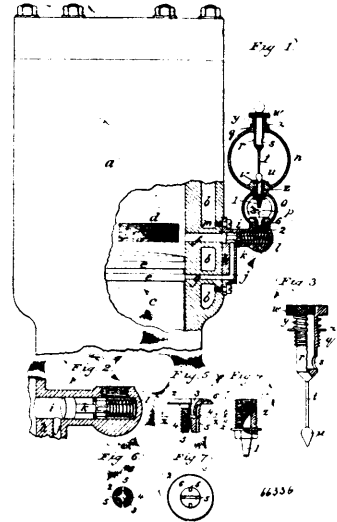
Etta Whitney Phinney, Cambridge, Massachusetts, U.S.A., 22nd February, 1900; 6 years. (Filed 9th February, 1900.)

Claim.—1st. In a device for preventing the refilling of bottles, the combination of a hollow casing apertured at its lower end and adapted to contain suitable weights free to move therein, a spring

pressed valve projecting through the side of said casing and adapted to be opened by the weights when the bottle is inverted, and an auxiliary floatative valve located above the spring pressed valve, substantially as described. 2nd. In a device for preventing the refilling of bottles, the combination of a guard disc having an apertured chamber, a floatative valve adapted to close said aperture, an internal casing a portion thereof lying directly beneath the aperture in the guard disc to prevent the valve from being forced through said aperture, said internal casing being provided with an automatically opening and closing valve, substantially as described. 3rd. In a device for preventing the refilling of bottles, the combination of a hollow casing apertured at its lower end, the latter being of angular or zigzag form and adapted to contain suitable weights free to move therein, said casing having an inclined side *m* and a spring pressed valve projecting through the side of said casing opposite to the inclined side *m*, and adapted when the bottle is inverted to be opened by a weight acting between the bevelled edged cap of the valve and the inclined side *m*, and the auxiliary floatative valve located above the spring pressed valve, substantially as described. 4th. In a device for preventing the refilling of bottles, a hollow casing adapted to be inserted in the neck of a bottle and being constructed to permit the passage of the liquid at its lower end, a spring pressed cylindrical valve apertured at its side, said valve being normally held inside the valve casing to keep its aperture closed, a lip or flange 8 on the inside of the casing near the valve, a ball or weight 15 supported by said flange near to said valve, and loose weights adapted to open said valve by contact with said ball 15, substantially as described.

No. 66,336. Lubricator for Engine Cylinders.

(*Graisseur de cylindre de machine à vapeur.*)



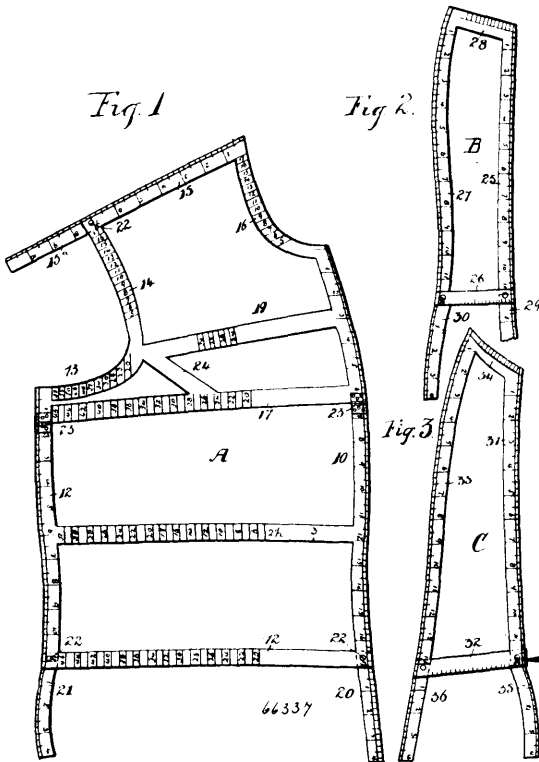
George Albert Burwell, Toledo, Ohio, U.S.A., 22nd February, 1900; 6 years. (Filed 23rd October, 1899.)

Claims.—1st. In a lubricator the combination of a chamber with an inlet opening, and outlet opening leading from the chamber, means for delivering a regulated supply of oil to the chamber and movable means in the chamber reciprocating across the mouth of the outlet channel alternately connecting said channel directly to the inlet opening and to the oil supply, substantially as set forth. 2nd. The combination with a cylinder and its piston, of a lubricator provided with a pressure channel communicating with said cylinder and alternately covered and uncovered by said piston, and an outlet channel communicating with said cylinder, means for delivering a regulated supply of oil to said outlet channel, and means for closing said oil supply and establishing direct communication between said channels when the pressure channel is uncovered, so as to exert pressure through said outlet channel, substantially as described. 3rd. The combination of a cylinder and its moving piston, two apertures through the sides of the cylinder, a lubricating device attached to the cylinder, a chamber in said device opening into one of said apertures and a channel leading from the chamber to the other aperture, a piston adapted to reciprocate in said chamber and a spring to press the piston to a position between the channel mouth and the aperture leading into the cylinder, with means for delivering a regulated supply of oil into the chamber behind the piston. 4th. The combination of a cylinder and its moving piston, an exhaust port near the end of the cylinder, two apertures through the side of the cylinder the inner one located at or near the plane of the outer edge of the exhaust port and the other nearer to the end of the cylinder, a lubricating device attached to the cylinder, a chamber in said device opening into the inner aper-

ture of the cylinder and a channel leading from the chamber to the other aperture of the cylinder, a piston adapted to reciprocate in said chamber and a spring to press the piston to a position between the mouth of the channel and the aperture leading into the cylinder, with means for delivering a regulated supply of oil into the chamber behind the piston. 5th. In a lubricating device the combination of the chamber, a piston rod provided with a piston and a guide fitting the bore of the chamber, the said guide having a series of grooves or notches across its periphery, a spring between said guide and the end of the chamber and a channel communicating with the chamber at a point between the piston and the guide when in their normal position with means for delivering a regulated supply of oil into the chamber behind the guide. 6th. The combination of a cylinder with two apertures, a lubricating device having a chamber communicating with one of said apertures, a channel leading from the chamber to the other aperture, a spring pressed piston adapted to reciprocate in said chamber across the mouth of the channel with a drip cup fitting in an aperture leading into the chamber and having a closed recess under its head or top, vertical side grooves in the shank of the cup leading into said recess, a central cavity in the upper end of the cup and horizontal passages leading from the bottom of this cavity to the side grooves, substantially as set forth. 7th. In a lubricator the combination of the chamber, a channel leading therefrom, a piston adapted to reciprocate in said chamber, a drip cup screwed into the top of said chamber behind the piston, the head or flange of the cup being under cut and fitting at its edge against the surface of the part into which the cup is screwed forming a closed recess, vertical side grooves in the screwed shank of the cup leading into said closed recess, a central cavity having a flaring mouth at the top of the cup and horizontal passages leading from the bottom of the cavity to the vertical side grooves, substantially as set forth. 8th. In a lubricator the combination of a reservoir and the sight chamber below the reservoir with the feed passage connecting them, the drip cup with central flaring cavity located below the feed passage and provided with transverse passages and vertical side grooves as described, with means for regulating the size of the opening leading from the reservoir, substantially as described.

and extensions thereto, scales for the waist measure and the eye of the arm, third, a small back piece having scales up each side, extensions below the waist line, and scales for the waist and arm eye, fourth, the main back piece having scales down each side and extensions below the waist line, scales for the eye of the arm, shoulder, neck, waist, and a scale on a line a little below the shoulder line, and, fifth, a sleeve having the sides, top and waist adjustable as to different length, width and shape, all substantially as described herein and shown, and for the purpose set forth. 2nd. In a dress chart, the combination with the pieces A, B, C and D, of the pivoted extensions 20, 21, 29, 30, 35, 36, 43 and 44, substantially as set forth. 3rd. In a dress chart, the hinge 23 in the pattern A and the hinges 40 in the portion or pattern D, enabling the chart to be folded in small compass, substantially as set forth and described. 4th. An adjustable sleeve chart, consisting of separate pieces adjustably secured together by means of slots and fastenings so as to give the complete outline of the sleeve as it is to be cut, substantially as set forth. 5th. An adjustable sleeve chart, the inner and outer edges each consisting of three separate pieces adapted to be adjustably secured together, so that the distance from shoulder to elbow and elbow to wrist may be varied, adjustable connecting pieces at the shoulder and wrist, perforations for marking at the elbow, and a crescent shaped extension at the top, substantially as set forth and for the purposes described.

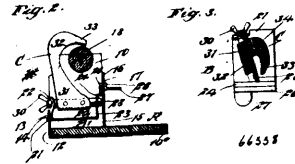
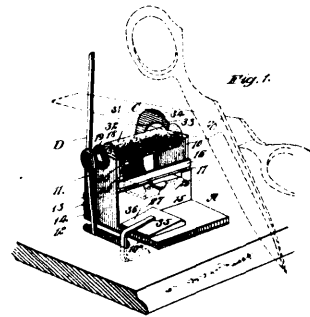
No. 66,337. Dress Chart. (Patron pour robes.)



Josephine Ethier, Montreal, Quebec, Canada, 22nd February, 1900; 6 years. (Filed 20th October, 1899.)

Claim.—1st. A dress chart, consisting of, first, the front portion of the waist having scales for adjustment from the neck to the belt, end extensions below, a scale at the waist line, a vertical scale from under the arm eye to the waist line, an extension below, a curved scale for the eye of the arm, a shoulder scale, and a neck scale, a scale on the bust line, a scale about midway between the waist line and bust line, and a scale above the bust line for children's measures, second, the under arm piece having scales up each side

No. 66,338. Device for Sharpening Scissors or Other Tools. (Appareil à aiguiser des ciseaux, etc.)

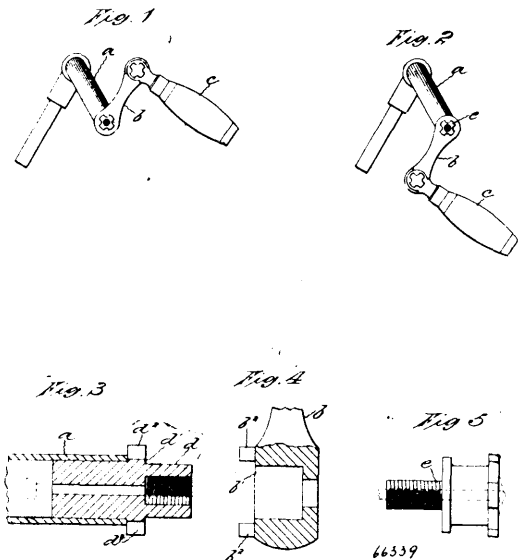


Charles A. Dow, Sioux City, Iowa, U.S.A., 22nd February, 1900; 6 years. (Filed 29th January, 1900.)

Claim.—1st. A device for sharpening tools, consisting of a revoluble sharpening roll, supports therefor, a carriage mounted to slide longitudinally of the roll, and a guide for the tool supported by the carriage and arranged to hold the tool in engagement with the roll in proper position to be sharpened, for the purpose specified. 2nd. A device for sharpening tools, consisting of a support, a sharpening roll held to revolve in the support beneath the roll, and a guide for the tool to be sharpened adjustably supported in the carriage, a portion of the guide extending over the said roll, for the purpose set forth. 3rd. In a device for sharpening scissors and other tools, a support, a grinding roll mounted to revolve in the said support, means for turning the said roll, a carriage having sliding movement in the support beneath the roll, a guide for the tool to be sharpened located upon the carriage, the said guide being carried upward at one side of the grinding roll, extending over the same at the top, the guide being further provided with spring jaws, and means, substantially as described, for adjusting the said guide relative to the said grinding roll, for the purpose set forth. 4th. In a device for sharpening scissors and other tools, the combination with a base, a frame supported by the base, a grinding roll mounted to revolve upon the said supports, and means for revolving the said grinding roll, of a carriage mounted below the grinding roll, guides for the carriage formed in the said frame, the carriage being adapted for horizontal movement lengthwise of the said grinding roll, a shaft located in the said carriage, means for locking the said shaft, and a guide consisting of two plates, one of the said plates being of a spring material, the two plates being held close together but being free at their upper ends, both plates being made to extend upward at one side of the said roll and over the said roll, the edges of the

plates forming the guides adjacent to the roll being concaved and their upper ends hook-shaped, for the purpose set forth.

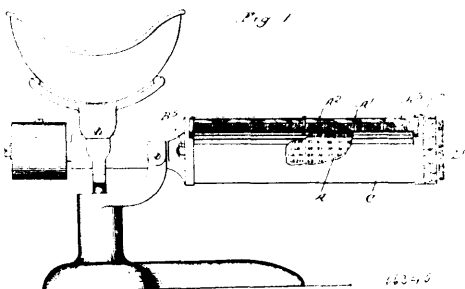
No. 66,339. Bicycle Handle Bar.
(*Poignée de manche de bicyclet.*)



Richard T. Barton, New Haven, Connecticut, U.S.A., 22nd February, 1900; 6 years. (Filed 16th September, 1899.)

Claim.—In combination, the handle bar, the links rotarily adjustable around said handle bars, and the handles attached to and rotarily adjustable on said links in planes of direction similar to those in which the links are rotarily adjustable, all substantially as described and for the purposes set forth.

No. 66,340. Computing Scales. (*Balancé à computation.*)

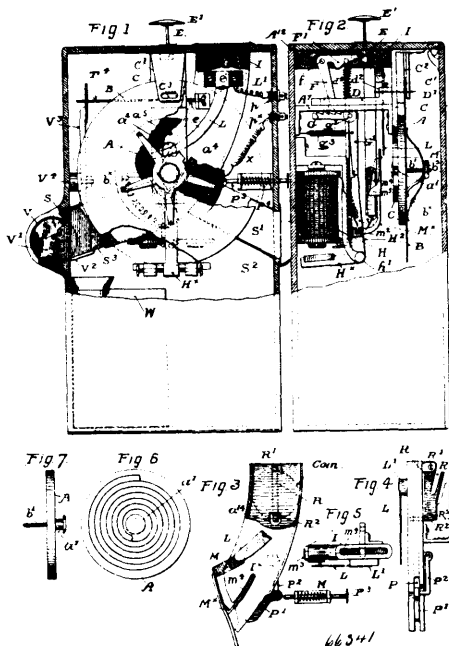


Lewis P. Halladay, Marion, Indiana, U.S.A., 22nd February, 1900; 6 years. (Filed 12th August, 1899.)

Claim.—1st. A scale, comprising a scale beam, provided with a spiral groove, a poise mounted on said beam and having an engaging part which engages said groove, a computing mechanism surrounding said poise, and a connection between the poise and the computing mechanism, whereby when the computing mechanism is moved the poise will travel along the beam. 2nd. A scale, comprising a scale beam, provided with a spiral groove, a poise mounted on said beam and having an engaging part which engages said groove, the pitch of said groove being such as to produce one revolution of the poise in its travel from its initial position to its extreme outer position, a computing mechanism surrounding said poise, and a connection between the poise and the computing mechanism, whereby when the computing mechanism is moved the poise will travel along the beam. 3rd. A scale, comprising a scale beam provided with a spiral groove, a poise mounted on said beam and carrying an engaging part which engages the groove in the beam, a movable part surrounding said poise and the grooved portion of said movable part carrying computing date, a connection between said movable part and said poise, whereby the poise is moved along the beam when the movable part is rotated, and a movable projecting part at the end of the beam by which the poise is controlled. 4th.

A scale, comprising a scale beam, a poise mounted on said beam and adapted to be moved therealong, an engagement between said poise and said beam, whereby the poise is moved in a plane at an angle to the beam at the same time it is moved along the beam, said engagement provided with an automatic adjusting device to adjust for wear. 5th. A scale, comprising a scale beam provided with a spiral groove, a poise mounted on said beam, an adjustable piece on said poise provided with an engaging part which projects into said groove, and a spring associated with said adjustable piece adapted to keep it in a position where the projecting part engages both sides of the grooves. 6th. A scale, comprising a scale beam free from graduations, a poise rotatable mounted on said beam and adapted to be moved therealong, a computing mechanism surrounding said poise and a portion of said beam, and a connection between said computing mechanism and said poise, said poise being connected with the beam so that a single rotation of the computing mechanism moves the poise from one limit of its movement to the other. 7th. A scale, comprising a scale beam, a poise mounted thereon, a computing mechanism surrounding said beam and operatively connected with said poise, so that when rotated the poise is simultaneously rotated and reciprocated, two adjustable pieces removably connected with said poise, one adapted to connect the poise with the beam and the other with the computing mechanism. 8th. A scale, comprising a scale beam provided with a spiral groove, a poise mounted on said beam and adapted to be moved therealong, an engaging device on said poise adapted to engage the groove in the beam, so that when the poise is moved along the beam it is simultaneously rotated, a hollow movable part open at the end and surrounding said poise and the grooved portion of said beam, a washer on said beam engaged by the open end of said movable part, a connection between said movable part and the poise, whereby the poise is moved along the beam when the movable part is rotated, computing data mounted upon said movable part, a casing surrounding said movable part and beam, and a projecting part extending through said casing, by which the poise is controlled. 9th. A scale, comprising a scale beam provided with a spiral groove, a poise mounted on said beam and engaging said groove, an adjustable piece mounted on said poise and provided with two projecting parts separated by a space, a movable part surrounding the poise and carrying the computing mechanism, and a guide on said movable part adapted to be received between the projecting parts on the poise.

No. 66,341. Coin Controlled Call Recording Device for Telephone Systems. (*Système d'enregistrement d'appel de téléphone actionné par une pièce de monnaie.*)

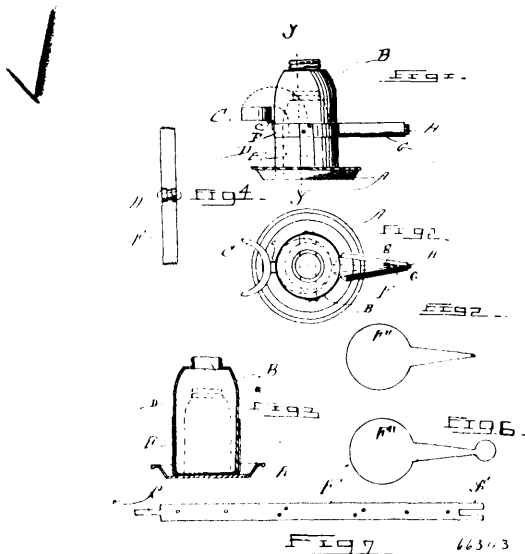


James Benjamin Gill, San Francisco, California, U.S.A., 22nd February, 1900; 6 years. (Filed 19th May, 1899.)

Claim.—1st. A recording mechanism including a record card, a marking device, means projecting said marking device against the face of the card, means for moving the card to space the markings, means for setting and locking the marking device for action, and means for releasing the marking device at will to impinge against the card. 2nd. A recording mechanism including a rotatable record card, a marking device movable in a plane perpendicular to the face

directed extension a^{11} , a fan wheel in the member b , mounted upon an inclined shaft entering the extension a^{11} , and having a worm thereon, a vertical arbor mounted in said extension and provided with a worm wheel engaging the worm, a hand or indicator upon said arbor, and a dial plate beneath said hand, said faucet being provided with a stop cock rearward of the registering mechanism, substantially as set forth. 3rd. A measuring faucet comprising a body portion having angled members b and c , and extension a^{11} , a fan wheel revolubly mounted in the member b , registering mechanism and a dial plate located in the extension a^{11} , and actuated by said fan wheel, a stop cock rearward of said mechanism, a movable and adjustable strip 26 arranged in front of said stop cock to regulate the flow of liquid, and an adjusting screw in the side of the faucet to manipulate said strip, substantially as set forth. 4th. A measuring faucet, provided with a tubular portion having a fan wheel longitudinally pivoted therein, a bearing ring inserted in a recess formed in the interior surface of said tubular body portion, said bearing ring consisting of an elastic strip of metal bent to conform to the walls of the passage in said tubular body and having a loop or fold projecting radially inward from the circumference with an eye or socket at the end of said loop or fold for said fan wheel, substantially as set forth. 5th. The measuring faucet herein described, having a body portion having an upper chamber, a lower flow passage and a perforated integral partition between said chamber and passage, a fan wheel arranged in said passage and having its shaft projecting through the perforation in partition into said chamber, a bearing ring for said shaft arranged in said passage, and an arm projecting from the inner surface of said chamber and providing bearings for the upper end of the said shaft, substantially as set forth. 6th. A measuring faucet comprising an elbow shaped tubular body portion adapted to be connected at one end to the source of supply and to discharge liquid from the other end, a chamber for registering mechanism formed above the bend in said body portion and registering mechanism therein, a fan wheel pivoted in the forwardly and downwardly inclined arm of the body portion and having a shaft extending upward through the wall of the flow passage into the said chamber and connecting with the registering mechanism, the perforation for said shaft being enlarged for a short distance in from the flow passage and communicating with the open air by a lateral aperture, an elastic ring arranged inside of the forwardly and downwardly inclined passage and providing a bearing for the lower end of the fan wheel shaft, a regulating strip fastened at one end flatwise against the interior wall of the flow passage and an adjusting screw for forcing the other end out from the wall to obstruct the flow passage, and a stop cock for shutting off the flow of liquid at a point nearer the source of supply than said regulating strip, fan wheel shaft, perforation, and fan wheel, substantially as set forth.

No. 66,343. Fruit Can Holder. (*Porte-bidon à fruits.*)

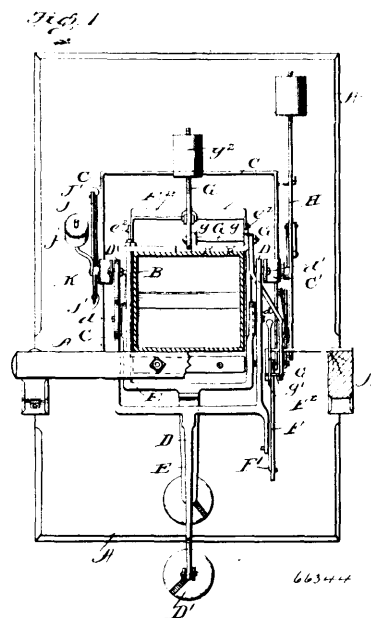


Thomas Delaney, assignee of John V. Stel, both of Grand Rapids, Michigan, U.S.A., 23rd February, 1900; 6 years. (Filed 7th February, 1900.)

Claim.—1st. In a can holder, a dripping dish, standards supported in said dish, a clamping band supported at the top of said standards, and handles upon said band, substantially as and for the purpose set forth. 2nd. In a can holder, a dripping dish, standards projecting up from said dish, a clamping band supported by said standards, handles to said band, and an adjusting filling hinge to said band, substantially as for the purpose set forth. 3rd. In a can holder, a dripping dish, standards in said dish, a clamping band supported on said standards, handles for manipulating said band,

and hinge for holding said handles together at one end, substantially as and for the purpose set forth. 4th. In a can holder, a dripping dish, standards in said dish, a clamping band supported on said standards, handles pivoted together at one end for manipulating said band, a spring for forcing the other ends of said handles apart, and a block pivoted to said band of a proper form to adjust the band to the circumference of smaller cans, substantially as shown and described.

No. 66,344. Weighing Machine. (*Bascule.*)

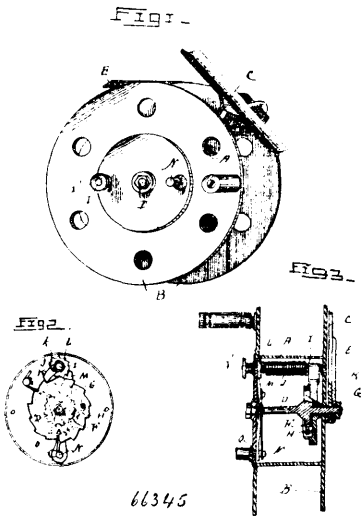


William H. Pierce, Tolono, Illinois, U.S.A., 23rd February, 1900; 6 years. (Filed 27th October, 1899.)

Claim.—1st. The combination with the weighing mechanism of an automatic weighing machine, of a weighing hopper divided by a central vertical partition into two compartments, each of which compartments is divided by an inclined transverse partition, said vertical partition being formed with an opening at each lower corner of the compartments above said transverse partitions, whereby the material received on one side of said vertical partition can flow through to beneath the transverse partition on its other side, and the weight of said material be thus distributed on both sides of the hopper at all times, substantially as set forth. 2nd. The combination in an automatic weighing machine of an ingress tube or chute, a weighing hopper, a main scale beam to which the weighing hopper is suspended, a secondary scale beam upon which the main scale beam is carried, and a shut-off gate to the ingress tube or chute carried by said secondary scale beam. 3rd. The combination in an automatic weighing machine of the ingress tube or chute, the weighing hopper, a main scale beam by which said weighing hopper is carried, a secondary scale beam which carries said main scale beam, and also a shut-off gate to the ingress tube or chute, a pivoted arm mounted on the framework and connected by a link to the main scale beam and carrying a pivoted catch, a pivoted bar carried from a fixed point and provided with a projection adapted to come in contact with said pivoted catch at one end, and provided with an arm which extends from at or near its pivot point into the path of the shut-off gate, whereby when the weighing hopper is nearly filled both scale beams will be first raised to a certain position, the secondary scale beam there momentarily stopped, the shut-off gate being meantime nearly closed until additional material is discharged into the weighing hopper, when the main scale beam will be raised independently of the secondary scale beam and the shut-off gate entirely closed, substantially as set forth. 4th. The combination in an automatic weighing machine of the frame, the main scale beam carried on the secondary scale beam, said secondary scale beam mounted on a pivot shaft mounted on the frame, the inlet chute, the cut-off gate E^2 thereto carried on arms extending out from said secondary scale beam, a divided weighing hopper, a shifting deflector at the top thereof under the discharge end of said chute, means for operating it to direct the flow to one or the other division of said hopper, discharge gates at the bottom of said hopper, and means for operating them, all substantially as described and for the purposes set forth. 5th. The combination in an automatic weighing machine with a weighing hopper divided into compartments, of a rock shaft at the upper end thereof carrying a deflector, a rock shaft at the lower end thereof carrying the discharge gates to the two compart-

ments, a connection between said two shafts whereby said deflector and said gates are simultaneously shifted, a locking mechanism carried by the hopper and connected to the lower rocking shaft, and a connection between said locking mechanism and the weighing mechanism at the upper end of the machine, whereby as the weighing hopper descends said rocking mechanism is unlocked and the gates and the deflector permitted to shift position, being operated thereto by the weight of the grain in the filled compartment of the weighing hopper, substantially as set forth. 6th. The combination in an automatic grain weighing machine of the ingress chute, the weighing hopper, the main scale beam, a secondary scale beam pivoted upon the frame and carrying the pivots on which said main scale beam is mounted, a cut-off gate to said chute carried by said secondary scale beam, a connection between said gate and a pivoted lock arranged to arrest the movement of said secondary scale beam momentarily at a certain point in the operation, and a connection with said pivoted lock and the main scale beam arranged to release said parts and permit the further movement of said secondary scale beam after said momentary pause, all substantially as set forth. 7th. The combination in an automatic weighing machine with the double compartment weighing hopper, a rock shaft secured centrally below said hopper and carrying both discharge gates, a locking mechanism mounted on the side of said hopper whereby said shaft may be locked in either position and either gate thus locked shut, and a connection therefrom to parts operated by the scale beam, whereby when the hopper is filled the locking mechanism may be unlocked and the gates permitted to shift position, substantially as set forth. 8th. The combination in an automatic weighing machine of the ingress tube or chute, the weighing hopper, the main scale beam, a secondary scale beam carrying the shut-off gate to the ingress tube, a pivoted bar G having an arm which extends into said shut-off gate and which is thus operated thereby, a catch for holding said bar at one end, a connection from said catch to the main scale beam, and a counterpoise at the other end of said bar, substantially as set forth.

No. 66,345. Fishing Reel Tension Device.
(Appareil de tension pour dévidoirs de pêche.)



Andrew Verd Chapin, Ferndale, California, U.S.A., 23rd February, 1900; 6 years. (Filed 31st January, 1900.)

Claim.—1st. In a reel for fishing lines, a winding drum and centrally disposed shaft upon which it is turnable, a ratchet fixed to the shaft and a second ratchet loosely turnable on the shaft, a pawl intermediate between the two ratchets by which the outer ratchet is prevented from turning in one direction and is allowed to move in the opposite direction, an exterior pawl carried by the drum engaging the outer ratchet and moving it and the intermediate pawl over the inner ratchet when the drum is turned to wind the line in, and an adjustable spring whereby the pressure of the exterior pawl upon the ratchet is regulated, and the amount of power necessary to turn the reel in a reverse direction is increased or diminished. 2nd. A tension regulating attachment for fishing reels consisting of a shaft, a pawl fulcrumed upon the shaft and engaging the backward turning ratchet of the reel, a spring carried by the shaft and adapted to press upon the pawl, an exterior turning device fixed to the shaft whereby it may be turned to increase the tension of the spring, and a second pawl and ratchet whereby the shaft is held at any desired point to which it may be turned. 3rd. A tension device for fishing reels, consisting of a shaft journaled and turnable in the winding drum, a pawl fulcrumed upon the shaft and engaging the teeth of the ratchet which controls the backward movement of the

reel, a spring carried by the shaft having one end fixed to the shaft and the other engaging and pressing upon the pawl, a turning knob fixed to the shaft exterior to the reel whereby the shaft may be turned to increase the tension of the spring, a holding ratchet fixed upon the shaft, a pawl adapted to engage said ratchet and hold it at any point of advance, and a means for disengaging the pawl and releasing the tension. 4th. A tension adjusting device for fishing reels consisting of a shaft journaled in the reel essentially parallel with the main shaft thereof, a pawl journaled upon said shaft and engaging the exterior ratchet which controls the backward movement of the reel, a spring coiled upon the shaft having one end passing through a hole in the pawl and again coiled upon the shaft, the opposite end of the coil being secured to and turnable with the shaft, a ratchet fixed upon the shaft, a means for turning the shaft so as to coil and increase the tension of the spring, a pawl engaging said ratchet holding it at any point of advance, said pawl being centrally fulcrumed extending across the interior of the reel and having a knob connected with the opposite end whereby it may be moved so as to disengage the pawl from the ratchet and the later be released from the tension of the spring. 5th. A tension regulating device for fishing reels, consisting of a shaft journaled within the reel essentially parallel with the main ratchet carrying shaft thereof, concentric ratchets whereby the reel is turnable in opposite directions and latched at any point, a means for regulating the tension of the ratchet which controls the outward movement of the line, consisting of a pawl fulcrumed upon the supplemental shaft, a coil spring surrounding said shaft having one end engaging and pressing upon the pawl and the other end connected with the shaft, a means exterior to the reel head whereby said shaft may be turned, a ratchet fixed upon the shaft, a pawl centrally fulcrumed upon the main reel shaft having one end adapted to engage the holding ratchet of the supplemental shaft, and the other provided with a projecting operating lug passing through a slot in the reel head whereby the pawl may be disengaged to release the ratchet and allow the spring to uncoil and the tension to be removed from the reel. 6th. An attachment for fishing line reels consisting of connected pawl and ratchet mechanisms by which the reel is turnable to wind or unwind the line, and an intermediate device whereby the tension upon the unwinding line may be varied independent of that upon the line when moving in the opposite direction.

No. 66,346. Process of Purifying Coal and Ores.
(Procédé pour purifier le charbon et les minerais.)

Edward M. Eidherr, Alleghany, Pennsylvania, U.S.A., 23rd February, 1900; 6 years. (Filed 1st March, 1899.)

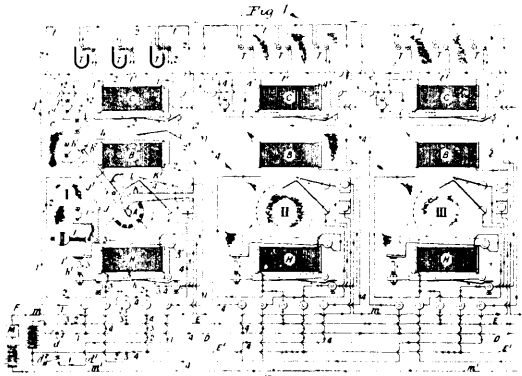
Claim.—1st. The herein described process for the elimination of impurities from coal or ores during the coking or roasting process, comprising the introduction into contact with the raw material of glycerine and hydrochloric acid through the action of superheated steam, as and for the purpose set forth. 2nd. The herein described process for the elimination of impurities from coal or ores during the coking or roasting process, comprising the introduction into contact with the raw material and nitric acid through the action of superheated steam, as and for the purpose set forth. 3rd. The herein described process for the elimination of impurities from coal or ores during the coking or roasting process, comprising the introduction into contact with the raw material of thoroughly mixed glycerine and hydrochloric acid through the action of superheated steam, and then the introduction into contact with the raw material of glycerine and nitric acid through the action of superheated steam, as and for the purpose set forth. 4th. The herein described process for the elimination of impurities from coal or ores during the coking or roasting process, which consists in the introduction of glycerine and nitric acid into contact with the raw material by the aid of superheated steam, and then subjecting the product to the action of superheated steam, substantially as set forth. 5th. The herein described process for eliminating impurities from coal or ores during the coking or roasting process, comprising the introduction into contact with the raw material of glycerine, nitric acid, and hydrochloric acid through the action of superheated steam, as and for the purpose set forth. 6th. The herein described process for the elimination of impurities from coal and ores during the coking or roasting process, consisting of the introducing into contact with the raw material by the aid of superheated steam, a quantity of glycerine and hydrochloric acid, and later introducing a quantity of glycerine and nitric acid, by the aid of superheated steam, and then subjecting the finished product to the action of the superheated steam, substantially as shown and described.

No. 66,347. Code Telegraph Fire Alarm Apparatus.
(Appareil de code télégraphique pour avertisseurs à incendie.)

Richard Pearson, 32 Wabbling Street, London, England, 23rd February, 1900; 6 years. (Filed 13th November, 1899.)

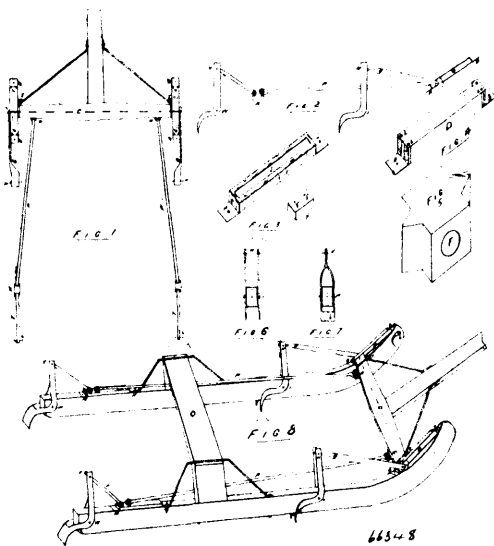
Claim.—1st. The combination with an electrically operated fire alarm transmitter such as described and with a normally open circuit upon which thermo-static circuit closers are arranged in multiple are, said circuit including a releasing electro-magnet, whose armature normally prevents the action of the transmitter, of an electro-magnetically operated circuit closer at the extremity of such thermostat circuit, a testing circuit including the electro-magnet coil of

such circuit closer, and a switch on such testing circuit at the station whereby the current of a battery may be passed through the testing



circuit so as to cause the releasing electro-magnet to be energized and the operation of the whole transmitter to be determined and consequently to enable the efficiency of the transmitter mechanism and of the thermostat circuit to be ascertained by closing the switch at the station as described. 2nd. The combination with a series of electrically operated fire alarm transmitting installations on the same main circuit upon which thermostatic circuit closers are arranged in multiple arc, said thermostat circuit including a releasing electro-magnet, whose armature normally prevents the action of the transmitter, of electro-magnetically operated circuit closers, one at the extremity of each such thermostat circuit, capable when excited of closing the thermostat circuit through the coil of the releasing magnet of the transmitter to which it corresponds, and of normally open testing circuits for each installation, each testing circuit including the coil of the corresponding thermostatic circuit closer and a testing circuit closer for each such testing circuit, the testing circuit closer for the first installation being situated at the central station and the testing circuit closers appertaining to the testing circuits for the second and succeeding installations of the series, being respectively combined each with the transmitter appertaining to the installation preceding in order that to whose testing circuit said testing circuit closer appertains, so that the operation of the transmitter wheel of each installation will determine in turn the closure of the testing circuit of the next succeeding installation, and will consequently determine the operation of the transmitter of the said installation, each in turn, substantially as specified.

No. 66,348. Sleigh Brake. (Frein de traineau.)

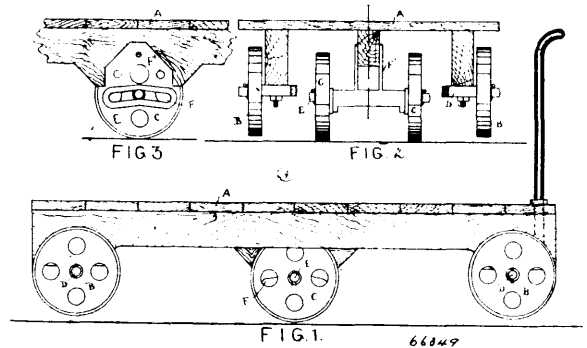


Daniel L. Clink, Trout Lake City, British Columbia, Canada, 23rd February, 1900; 6 years. (Filed 27th February, 1899.)

Claim.—In an automatic attachment for sleigh brakes of the character described, the combination of a slot D to be attached to the front curve of the runners, a block F which works therein,

a bolt C which passes through the roller of the tongue of the sleigh connecting the blocks F to the roller and keeping them in the slot D, the bars G connecting the roller with the front claws H, I, the front claws H, I, the shoe J to be attached to the hind end of the runner, the block K which works backwards and forwards therein, the rod P connecting the roller of the tongue with the block K, the rod T connecting the block K with the rear claws V, W, the staples R, the eyes Y and the hooks X, substantially as shown and described.

No. 66,349. Truck. (Camion.)

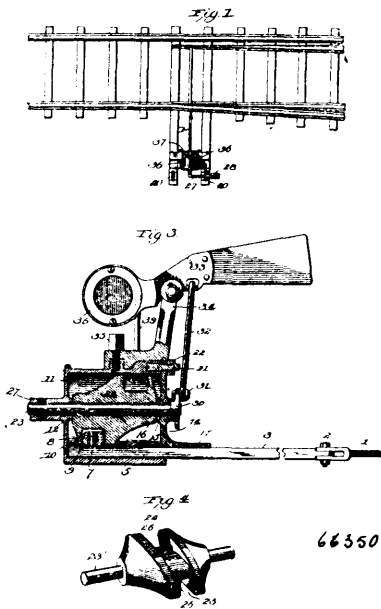


John Herbert Heblethwaite, Glens Cottage, Meols Drive, Hoylake, Chester, England, 23rd February, 1900; 6 years. (Filed 17th November, 1899.)

Claim.—1st. A truck having a pair of wheels near each end, an additional wheel or pair of wheels on a short axle at or near the centre arranged parallel, and on which the whole truck can be balanced and turned as on an axis, and means for enabling the centre axle to slide or roll towards one or other of the end axles according to the direction in which the truck is proceeding, thus extending the wheel base and giving more stability, substantially as described. 2nd. A truck having in addition to the usual wheels at the ends, a wheel or pair of wheels mounted near the centre, and so arranged that the whole truck with its load can be balanced or turned on them, thus acting as a centre pivot or axis, substantially as described. 3rd. A truck having a pair of wheels near each end, an additional wheel or pair of wheels on a short axle at or near the centre arranged parallel to the others, and on which the whole truck can be balanced and turned, brackets having horizontal slots in which the axle of the centre wheels is mounted, so that it can slide therein, whereby when the truck is set in motion the axle of the centre wheels will slide or roll to one end or other of the slots, according to the direction in which the truck is proceeding, thus extending the carrying base, substantially as set forth. 4th. A truck having a pair of wheels near each end, an additional wheel or pair of wheels on a short axle at or near the centre, arranged parallel to the others and on which the whole truck can be balanced and turned, brackets having slots in which the axle of the centre wheels is mounted so that it can slide therein, said slots being turned downwards towards the ends, whereby when the truck is set in motion the axle of the centre wheels will slide or roll to one end or other of the slots according to the direction in which the truck is proceeding, while if the truck is at a standstill the force of gravity causes the axle to roll automatically to the centre of the slot, thus balancing the weight and bringing the truck into position for revolving, substantially as described. 5th. A truck having a pair of wheels near each end, an additional wheel or pair of wheels on a short axle at or near the centre arranged parallel to the others, and on which the whole truck can be balanced and turned, in combination with a fixed spindle arranged longitudinally of the truck on which the centre axle is mounted so as to slide thereon, whereby when the truck is set in motion the axle will slide to one end or other of the spindle according to the direction in which the truck is proceeding, thus extending the carrying base, substantially as set forth. 6th. In a truck having a pair of wheels near each end, an additional wheel or pair of wheels on a short axle at or near the centre arranged parallel to the others and on which the whole truck can be balanced or turned, providing said wheels having a series of projections arranged in a circle on their side faces with spaces between, in combination with locking bars adapted to be held out of engagement with the said projections when pushing the truck along, but to spring into engagement and prevent the wheels revolving when the handle by which the truck is propelled is released, substantially as described. 7th. In a truck of the kind described, a locking device comprising a series of projections arranged in a circle on the face of the centre wheels, parallel locking bars adapted to normally engage said projections so as to lock the wheels and prevent them revolving, a sliding rod to which the rod locking bars are coupled, and a lever operating the said rod in such manner that when the lever is grasped in propelling the truck along, the locking

bars will be moved out of engagement with the projections, but when said lever is released, the locking bars will immediately fly into engagement with the projections, thus locking the wheels, substantially as set forth.

No. 66,350. Switch Stand and Signal for Railways.
(Support d'aiguille et signal pour chemins de fer.)

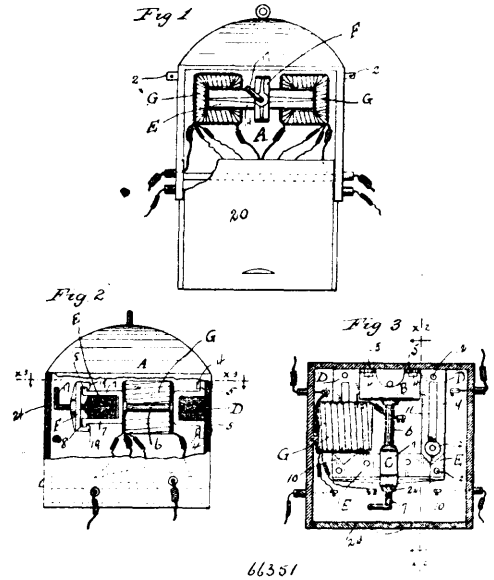


Harry Campbell Odenkirk, Cleveland, Ohio, U.S.A., 23rd February, 1900; 6 years. (Filed 16th January, 1900.)

Claim.—1st. In a combined switch stand and signal for railways, the combination with the switch rod, of a casing, a bar secured at one end to the switch rod, and having its opposite end within the casing, an oscillating cam supported within the casing and formed with a spiral groove, the walls of which are projected at diametrically opposite points to form abutments for the purpose described, and anti-friction roller supported upon said bar and adapted to the cam groove, and means for oscillating said cam. 2nd. In a combined switch stand and signal, the combination with the switch rod and operating mechanism thereof, of a casing enclosing said operating mechanism and formed with a depending channel or housing, and a removable cap for said casing having an extension co-operating with said depending housing to form a protecting guideway for the operating bar. 3rd. In a combined switch stand and signal, the combination with the switch rod, of a sliding bar secured thereto, a casing into which said bar extends, a roller mounted upon the end of the bar within the casing and having its surface rounded or convex, and an oscillating device comprising a cam formed with a spiral groove forming a trackway for the roller, the walls of said groove being projected to form an excess of metal at diametrically opposite points, for the purpose set forth. 4th. In a combined switch stand and signal, the combination with the switch rod, of a bar secured thereto at one end and carrying an anti-friction roller at its opposite end, a shaft mounted in bearings in the ends of the casing, a solid cam upon said shaft having a spiral groove, the walls of which project at diametrically opposite points to form abutments for the purpose described, a crank arm on one end of said shaft connected to a signal above the casing, and a lever upon the opposite end of said shaft. 5th. In a combined switch stand and signal for railways, the combination with the switch rod, of a bar secured at one end to said rod, and having its other end provided with an anti-friction roller, a casing into which the bar extends provided with an extension at one end serving as a protector or guard for the interior of the casing and a guide for the bar, and means within the casing for moving said bar and switch rod, comprising a grooved cam co-operating with the roller on the bar. 6th. In a combined switch stand and signal for railways, the combination with the switch rod and casing, of an oscillating cam within the casing, and a bar secured at one end of the rod and provided at its opposite end, which extends within the casing, with a stop shoulder, a pin projecting therefrom, and an anti-friction roller on said pin. 7th. In a combined switch stand and railway signal, the combination with the switch rod and its operating bar, of a casing, a shaft and an oscillating cam within the casing for moving said bar, a crank arm on one end of said shaft, a bracket for supporting a lantern, and a signal pivotally secured to said bracket and connected to said crank arm. 8th. In a combined railway switch stand and signal, the combination with the operating lever

thereof, of a locking device consisting of a base, a bifurcated standard recessed at its lower end and having one of its members vertically slotted, a weighted bell crank lever fulcrumed in the recess of the standard and having a hook to engage the lever, and a lever fulcrumed below the bell crank lever and provided with a treadle.

No. 66,351. Electric Transformer.
(Transformeur électrique.)

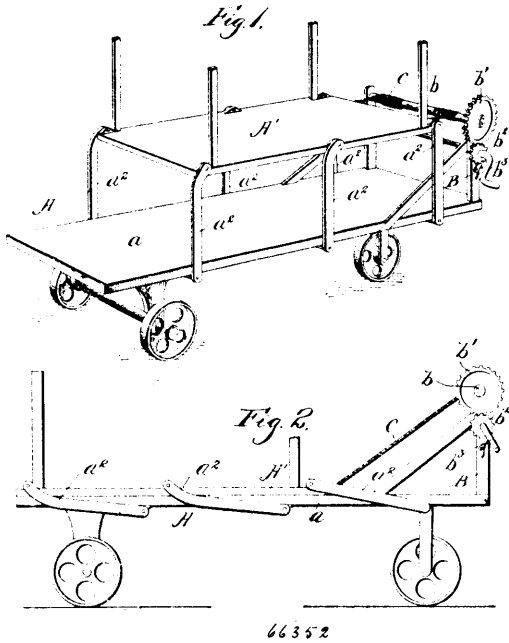


Arthur Henry Loring, Minneapolis, and Harry Lee Clark, St. Paul, 23rd February, 1900; 6 years. (Filed 27th January, 1900.)

Claim.—1st. A transformer core consisting of two sections, and a connecting device carrying one section and detachably secured to the other section. 2nd. In an electric transformer, the combination with the casing and the coils, of a core made in two sections, means for detachably securing one section to the casing, a supporting device arranged in connection with said section to hold and support the other section, and means connected with said device to bind the core sections together. 3rd. An electric transformer, comprising in combination a casing, a core piece made in separate sections, one of said sections being of general U-shape and the other section forming a yoke to connect the arms of the U-shaped section, coils carried by said arms, means within the casing for detachably holding said core sections together, and means for independently securing the same to the casing. 4th. In an electric transformer in combination with the casing and the coils, a core made in separate sections, means within the casing for detachably holding said core sections together, and means for independently securing the same to the casing. 5th. An electric transformer, comprising in combination a casing, a core piece made in separate sections, one of said sections being of general U-shape and the other section forming a yoke to connect the arms of said U-shaped section, coils carried by said arms, means within the casing for clamping said yoke against said arms to form a closure of the magnetic circuit, and means for detachably securing the U-shaped section to the casing. 6th. In an electric transformer, the combination with the coils of a laminated core piece made in separate solid sections, a casing, a supporting device secured thereto to hold the main section of the core, a bracket attached to said supporting device to hold the smaller section of the core, and means to bind said sections firmly together to form a closure of the magnetic circuit. 7th. In an electric transformer, the combination with the casing and the coils, of a laminated core piece made in separate solid sections, a bracket detachably secured to said casing to support the main section of the core, supporting arms secured to said bracket to support the smaller section of the core, and a clamping device to clamp said smaller section against the main section of the core to form a closure of the magnetic circuit. 8th. In an electric transformer, the combination with the casing, of a core piece made in separate sections, one of said sections being of general U-shape, and the other section forming a yoke adapted to abut against the arms of said U-shaped section and form a plane joint therewith, coils loosely fitting over said arms, a bracket detachably secured to the casing to hold the U-shaped core section, yoke supporting arms carried by said bracket, and clamping means for forcing said yoke into close engagement with the arms of the U-shaped section. 9th. In an electric transformer, the combination with the casing of a core piece made in separate sections, one of said sections being of general

U-shape, with arms terminating in V-shaped ends, and the other section forming a yoke with V-shaped sockets adapted to receive said V-shaped ends and form a plane joint therewith, coils loosely fitting over said arms, a bracket detachably secured to the casing to hold the U-shaped core section, yoke supporting arms carried by said bracket, and clamping means for forcing said yoke into close engagement with the arms of the U-shaped section. 10th. In an electric transformer, the combination with the casing, of a core piece made in separate sections, one of said sections being of general U-shape, and the other section forming a yoke adapted to abut against the arms of said U-shaped section, and form a plane joint therewith, coils loosely fitting over said arms, a bracket detachably secured to the casing to hold the U-shaped section of the core, yoke supporting arms connected with said bracket and formed with outwardly turned lugs, a sliding clamp adapted to slide upon said lugs and close the opening between said yoke supporting arms, and means for forcing said yoke into close engagement with the arms of the U-shaped section. 11th. In an electric transformer, the combination with the casing and the coils, of a core made in separate sections, one of said sections being of general U-shape and the other section forming a yoke adapted to abut against the open ends of said U-shaped section and form a plane joint therewith, a bracket detachably secured to the casing to hold said U-shaped section of the core, arms carried by said bracket to receive and support said yoke, and formed with transverse guides, and a clamp engaging said guides, to force said yoke into close engagement with the open ends of said U-shaped section. 12th. In an electric transformer, the combination with the casing and coils of a core made in separate sections, one of said sections being of general U-shape and the other section forming a yoke or bridge adapted to abut against the open ends of said U-shaped section and form a plane joint therewith, a bracket detachably secured to the casing to hold said U-shaped section, arms carried by said bracket to support said yoke, and a clamp engaging and co-operating with said arms to force said yoke into close engagement with the open ends of said U-shaped section.

No. 66,352. Truck. (Camion.)



66352

Octave Laurin, Beauharnois, Quebec, Canada, 23rd February, 1900; 6 years. (Filed 1st December, 1899.)

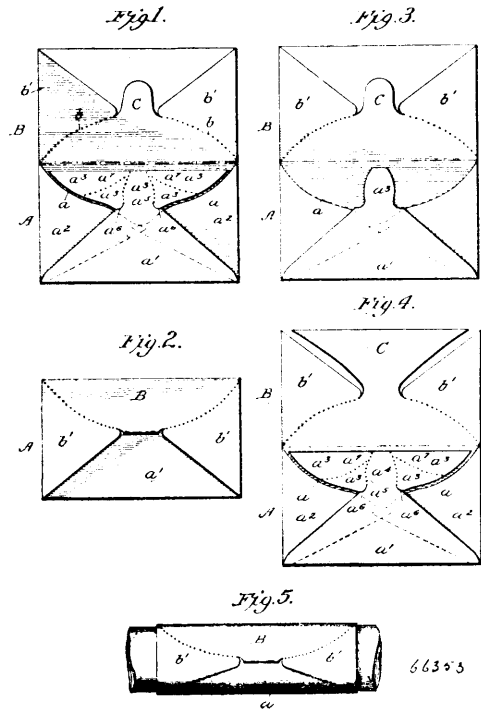
Claim.—1st. A truck provided with an adjustable platform and means whereby said platform may be adjusted to any desired height, substantially as described. 2nd. A truck, comprising a platform, an adjustable platform pivotally connected therewith, a winding drum mounted on said truck and a rope connecting said adjustable platform with said drum, substantially as described.

No. 66,353. Safety Envelope. (Enveloppe de sûreté.)

Mortimer Livingston Hinchman, Rutland, Vermont, U.S.A., 23rd February, 1900; 6 years. (Filed 22nd December, 1899.)

Claim.—1st. An envelope or wrapper comprising a body portion and a sealing flap provided with a central ungunmed portion, and having tearing lines formed therein and terminating at said ungunmed portion, adapted to register with the edge of the body portion, substantially as and for the purpose set forth. 2nd. An envelope or wrapper comprising a body portion having a central upper extension thereof, and a sealing flap, having an ungunmed

portion adapted to cover said extension, and having tearing lines extending from said ungunmed portion and on each side thereof to



66353

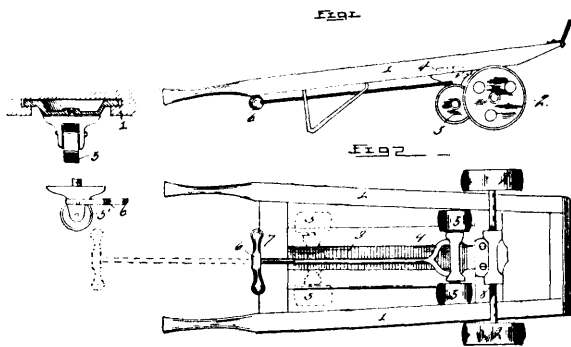
the upper corners of the envelope, and adapted to register with the upper edge of said body portion, substantially as and for the purpose set forth. 3rd. An envelope comprising a body portion and a sealing flap, the former being provided with an extension having a central portion and side portions separated from the body as far as said central portion and adapted to be torn from said central portion along the upwardly extending tearing lines, the said sealing flap having an ungunmed portion to cover said central portion, and a tearing line on each side thereof adapted to register with the lines formed by the separation of the said extension from the body portion, substantially as described and for the purpose set forth. 4th. An envelope having its bottom fold provided with a portion adapted to extend beyond the end folds, lie separated from said folds, and provided with upwardly extending tearing lines connecting the line of separation between it and the end folds, and a sealing flap adapted to be secured down over the lap of the bottom fold on the end folds, and provided with an ungunmed portion, and a tearing line on each side of said ungunmed portion, extending therefrom to the upper corners of the envelope and registering with said lines of separation between the body portion and its extension, substantially as described and for the purpose set forth. 5th. An envelope or wrapper comprising a body portion and a sealing flap, the former having a portion thereof adapted to be overlapped by, and torn away with, the sealing flap, the said sealing flap having tearing lines enclosing a portion adapted to correspond and register with the said detachable portion and having a foldable extension substantially conforming to and registering with the said portion of the flap enclosed by the tearing lines, as and for the purpose set forth.

No. 66,354. Truck. (Camion.)

G. M. Bott, Ashland, Ohio, U.S.A., 23rd February, 1900; 6 years. (Filed 10th January, 1900.)

Claim.—1st. A truck having a pair of permanent wheels secured near one end thereof, and a wheeled support shiftable longitudinally of the truck to bring the same at the opposite end of the truck or to bring said support in proximity to the permanent wheels so that their weight will be at the fulcrum point of the truck, substantially as described. 2nd. A truck having side bars and a body portion permanent wheels secured to said truck, and an auxiliary wheel support slidably secured to said body portion adapted to be shifted longitudinally thereof, substantially as described. 3rd. A truck having a pair of permanent wheels, and a pair of auxiliary wheels slidably secured to the truck of less diameter than said permanent wheels, adapted to be shifted longitudinally thereof, substantially as described. 4th. A truck body having a pair of wheels permanently secured near one end thereof, said body having a longitudinal guiding way, a block sliding in said way and a pair of wheels and a handle carried by said block, substantially as described. 5th. A truck body having a pair of wheels permanently secured thereto

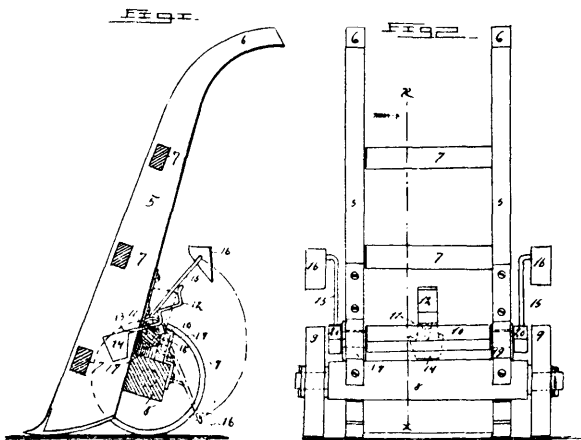
near one end thereof, said truck having a way therein extending longitudinally thereof from a point above said wheels, a sliding



66354

block guided in said way, a pair of wheels and a handle carried thereby and a top for said block closing the forward end of said way, substantially as described. 6th. The combination with a truck having a pair of permanently attached wheels, of auxiliary wheeled support swivelled to the body of said truck by a sliding pivot, substantially as described.

No. 66,355. Truck. (*Camion.*)

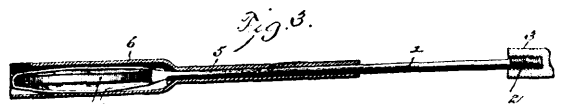
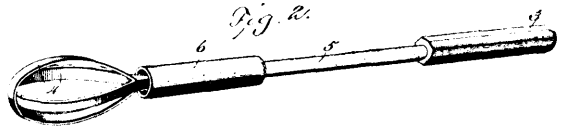
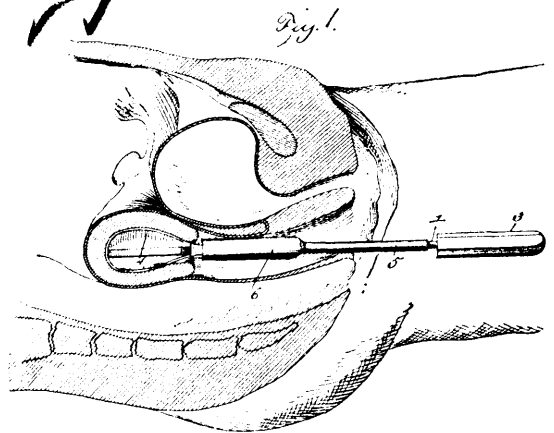


66355

John Maney, Ridgfield Park, New Jersey, U.S.A., 23rd February, 1900; 6 years. (Filed 10th January, 1900.)

Claim.—1st. A hand truck provided with the usual axle and wheels, a shaft mounted rearwardly thereof and provided at its ends with arms having brake shoes, a cross strip secured centrally to said shaft and provided with an backwardly-directed arm, and a forwardly directed weighted extension, said weighted extension being adapted to hold the arms of said shaft either in a raised or lowered position, substantially as shown and described. 2nd. A hand truck provided with the usual axle and wheels, a shaft mounted rearwardly thereof and provided at its ends with arms carrying brake shoes, and a cross strip or plate secured to said shaft and provided with end projections, one of which is provided with a weight which is adapted to hold said arms either in a raised or lowered position, substantially as shown and described. 3rd. A hand truck provided with the usual axle and wheels, a shaft mounted rearwardly thereof and provided at its ends with arms carrying brake shoes, a cross strip or plate secured to said shaft and provided with forwardly and backwardly directed extensions, one of which is provided with a weight which is adapted to hold said arms either in a raised or lowered position, said shaft being also provided with bearings composed of separate parts held in place by angular strips secured to the frame of the vehicle, substantially as shown and described. 4th. A hand truck provided with the usual axle and wheels, and a shaft mounted rearwardly thereof in bearings composed of separate parts held in place by angular strips secured to the frame of the truck, said shaft being provided with end arms having brake shoes, and means for holding said arms either in a raised or lowered position, substantially as described.

No. 66,356. Surgical Instrument.
(*Instrument de chirurgie.*)



66356

Ulysses Grant Kimmison, assignee of Milo Rob Stapp, both of Aberdeen, Washington, U.S.A., 23rd February, 1900; 6 years. (Filed 23rd December, 1899.)

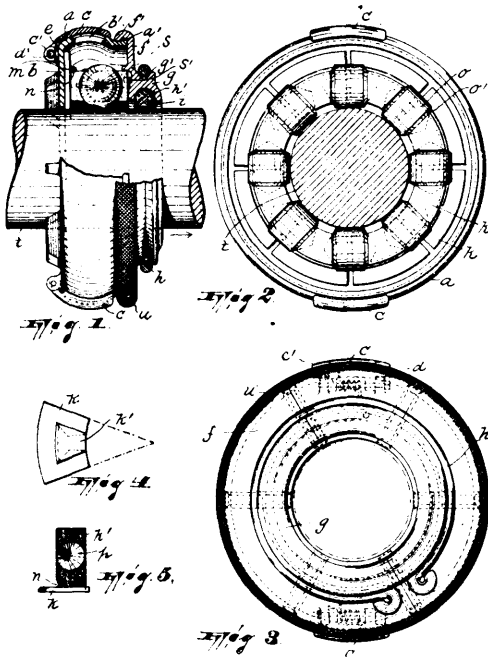
Claim.—1st. A curette consisting of a stem having intersecting loops rigidly held on the one extremity thereof, the said loops being formed of flat yielding material to provide opposite scraping edges, and of pear shape, the said loops having a normal fixed distension and present an outer smooth surface. 2nd. A curette consisting of a stem having intersecting spring loops rigidly fixed on the other extremity thereof, the said loops being formed of flat metal to present opposite scraping edges, and normally distended in pear shape and automatically conformable to the shape of the organ in which they are inserted, and a sheaf slidingly mounted on the stem and moveable over the said loops to contract and cover the same. 3rd. A curette consisting of a stem having a spring loop rigidly fixed on the outer extremity thereof and formed of flat spring metal to present opposite scraping edges, the loops being continuous, and the one extending through the other in a plane at right angles to the same, a handle removable, attached to the opposite extremity of the stem, and a sleeve slidingly mounted on the stem, and having a sheath continuous therewith for movement over the loops to cover the latter.

No. 66,357. Lubricator. (*Graisseur.*)

Fred. W. Wentworth, assignee of George Sandford Lee, both of Hawthorne, New Jersey, U.S.A., 23rd February, 1900; 6 years. (Filed 2nd September, 1899.)

Claim.—1st. A device for lubricating shafts having longitudinal movement in their bearings consisting of a shell or casing adapted receive said shaft and to contain the lubricant, and suitable rotary lubricant feeding devices arranged in said shell and adapted to bear against the shaft, substantially as described. 2nd. A device for lubricating shafts having longitudinal movement in their bearings consisting of a shell or casing adapted to receive said shaft and to contain the lubricant, suitable rotary lubricant feeding devices arranged in said shell and adapted to bear against the shaft, and a wiping ring operatively connected to said shell and adapted to surround the shaft, substantially as described. 3rd. A device for lubricating shafts having longitudinal movement in their bearings consisting of a shell or casing adapted to receive said shaft, lubricant feeding rollers arranged in said shell, a removable cap for said shell, and a wiping ring secured in said cap and adapted to surround the shaft, substantially as described. 4th. A device for lubricating shafts having longitudinal movement in their bearings and consisting of a shell or casing adapted to receive said shaft, lubricant feeding rollers arranged in said shell, bearing devices for said rollers arranged in said shell alternately therewith, an elastic ring surrounding said bearing devices, a removable cap for said shell, and a

wiping ring secured in said cap and adapted to surround the shaft, substantially as described. 5th. A device for lubricating shafts



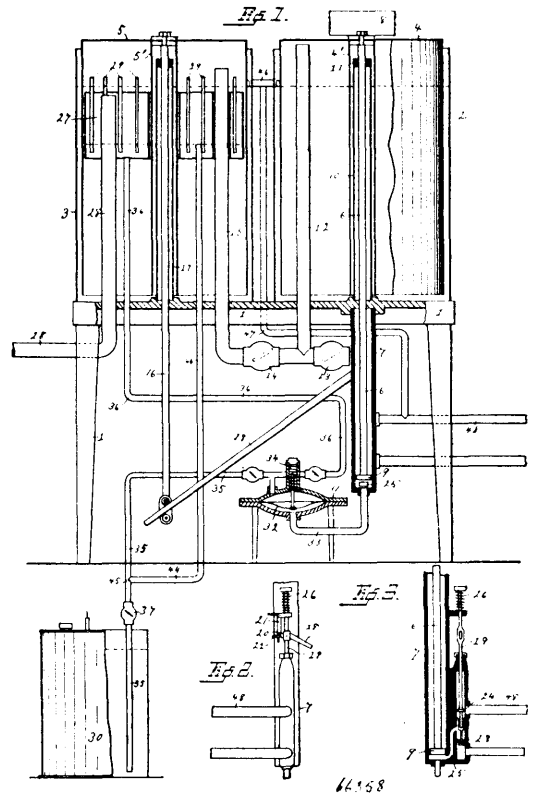
having longitudinal movement in their bearings consisting of a shell or casing adapted to receive said shaft, lubricant feeding rollers arranged in said shell, spaced bearing devices for said rollers arranged in said shell alternately therewith, an elastic ring surrounding said bearing devices, a two part revoluble cap for said shell, a wiping ring enclosed in said cap and adapted to surround the shaft, a split ring surrounding said cap and securing the members thereof together, said cap being provided with an inwardly projecting flange engaged by said bearing devices, and a pin carried by said cap and projecting into one of said bearing devices, substantially as described.

No. 66,358. Carburetter. (Carburateur.)

The Ransom Gas Machine Company, assignee of William J. Eganall of Milwaukee, Wisconsin, U.S.A., 23rd February, 1900; 6 years. (Filed 12th May, 1899.)

Claim. 1st. A carburetting apparatus, comprising a reciprocating air supported and actuated chamber adapted to exert a continuous pressure upon the air therein, a generator in communication therewith, a gas supply pipe leading from the generator, and means for automatically maintaining a supply of air in said chamber, whereby the pressure of said chamber expels the air continuously through the generator at a uniform pressure. 2nd. A carburetting apparatus, comprising a reciprocating air supported and actuated chamber arranged to exert a continuous pressure upon the air therein, a generator located in said chamber and in communication therewith, a gas supply pipe leading from the generator, and means for automatically maintaining a supply of air in said chamber, whereby the pressure of said chamber expels the air continuously through the generator at a uniform pressure. 3rd. A carburetting apparatus, comprising a reciprocating air supported and actuated chamber arranged to exert a continuous pressure upon the air therein, a generator in communication therewith, means for automatically recharging the generator with liquid hydro-carbon, a gas supply pipe leading from the generator, and means controlled by the air supported chamber for automatically maintaining a supply of air in said chamber, whereby the pressure of said chamber expels the air continuously through the generator at a uniform pressure. 4th. A carburetting apparatus, comprising a water tank, a reciprocating air supported and actuated chamber open at bottom and sealed in the water of said tank and arranged to exert a continuous pressure upon the air therein, a generator located in said chamber in communication therewith and partially submerged in the water of said tank, a gas supply pipe leading from the generator, and means controlled by said air supported chamber for automatically maintaining a supply of air in said chamber, whereby the pressure of said chamber expels the air continuously through the generator at a uniform pressure. 5th. A carburetting apparatus, comprising a reciprocating air supported and actuated chamber arranged to exert a continuous pressure upon the air therein, a generator located in the air chamber and in communication therewith, a gas supply pipe leading from the generator, water actuated mechanism for recharging the air supported chamber with air and the generator with liquid hydro-carbon, supply and exhaust valves controlling

the admission and exhaust of the power water to and from said water actuated mechanism, and connections for actuating said



valves alternately in opposite directions from the air supported chamber. 6th. A carburetting apparatus, comprising one or more water tanks, a generator partially submerged in the water of one of said tanks, a reciprocating air chamber open at bottom and covering said generator, with its lower edges sealed by the water in said tank, a primary gravity actuated air chamber for recharging said first mentioned air chamber with air, a hydraulic lifting jack for raising said primary chamber, a pump operated by the power liquid or said lifting jack to recharge the generator with hydro-carbon, and means for controlling the inlet and exhaust of said jack from one of the air chambers. 7th. A carburetting apparatus, comprising one or more water tanks, reciprocating air chambers open at bottom with their lower edges sealed in the water of the tank or tanks, a valved air passage communicating between the chambers, a valve for admitting air to one of the chambers, means for reciprocating said chamber to supply the other chamber with air, and connections for controlling its movement in both directions from said other chamber, a generator in communication with the last mentioned chamber, a gas supply pipe leading from said generator, a supply tank for carburetting liquid, and means controlled by one of the air chambers for intermittently charging the generator from the supply tank. 8th. A carburetting apparatus, comprising a reciprocating air supported and actuated chamber arranged to exert a continuous downward pressure upon the air therein, a generator located in said chamber and in connection therewith, a gas supply pipe leading from said generator, a reciprocating air forcing chamber provided with a valved inlet and valved pipe connections with the air supported chamber, and means for automatically controlling the movement of the air forcing chamber in both directions from the air supported chamber. 9th. A carburetting apparatus, comprising one or more water tanks, reciprocating air chambers open at bottom and having their lower edges sealed in the water of the tank or tanks, a valved air passage communicating between the chambers, a valve for admitting air to one of the chambers, means for reciprocating said chamber and connections for controlling its movement from the other of said chambers, a generator in communication with said last mentioned chamber and adapted to receive air therefrom, a gas supply pipe connected with the generator, a supply tank, a pump controlled by one of said air chambers for charging the generator from the supply tank, and an overflow communicating between the generator and the inlet or suction pipe of said pump. 10th. A carburetting apparatus, comprising a reciprocating air supported and actuated chamber arranged to exert a continuous pressure upon the air therein, a generator in communication with said chamber and provided with a gas supply pipe leading therefrom, a reciprocating air forcing chamber provided with a valved inlet and valved connections with the air supported chamber, a hydraulic lifting jack for raising said air forcing cham-

ber, and means for communicating the downward movement of the air supported chamber to actuate the valves of said lifting jack successively on both directions, whereby said jack and air forcing chamber are actuated to supply the air. 11th. A carburetting apparatus, comprising a reciprocating air supported and actuated chamber arranged to exert a continuous pressure upon the air therein, a generator in communication with said chamber and provided with a gas supply pipe leading therefrom, a reciprocating air forcing chamber provided with a valved inlet and valved connections with the air supporting chamber, a hydraulic lifting jack for raising said air forcing chamber, a hydraulic pump for recharging the generator with liquid hydrocarbon, arranged to be actuated by the liquid supply of the lifting jack, and means for communicating the downward movement of the air supported chamber to actuate the valves of said lifting jack successively in both directions, whereby said jack and air forcing chamber and hydrocarbon pump are actuated to supply the air supported chamber with air and the generator with liquid hydrocarbon. 12th. A carburetting apparatus, comprising one or more water tanks, a primary air chamber open at bottom and having its lower edges sealed in the water of one of the tanks, an air inlet valve for said chamber, a lifting jack adapted to raise said chamber to draw in air from the exterior, a secondary air chamber open at bottom and sealed in the water of one of the tanks, a valved pipe connection between the air chambers, said primary air chamber being heavier than the secondary chamber, and adapted to force its contained air into said secondary chamber, means for controlling the operation of said jack from the secondary air chamber, a generator in communication with said chamber, a supply tank, and means for charging the generator therefrom. 13th. A carburetting apparatus, comprising one or more water tanks, a primary air chamber having an opening sealed in the water of one of the tanks, an air inlet valve for said chamber, inlet and exhaust valve for said lifting jack, one or more valve actuated rods, provided with a spring or springs for holding said valve normally with the inlet closed and exhaust open, a secondary air chamber also having its open side sealed in the water of the tank or tanks, a rod depending from said chamber, a valve actuating lever loosely coupled to the rod and pivotally secured to the valve stem or stems, and a swinging bracket provided with a shoulder adapted to serve as a temporary fulcrum from said lever, together with a generator in communication with said secondary chamber, and a gas supply pipe leading therefrom, to the place or places of use. 14th. A carburetting apparatus, comprising a generator, a fluid actuated mechanism for forcing air through the generator, and a pump for charging the generator with liquid hydrocarbon, said pump being in communication with the power chamber of the air forcing mechanism and adapted to be actuated by a portion of the power fluid therefrom. 15th. A carburetting apparatus, comprising a generator, fluid actuated mechanism for forcing air through the generator, and a diaphragm pump for charging the generator with liquid hydrocarbon, said pump being in communication with the power chamber of the air forcing mechanism and adapted to be actuated by power fluid therefrom. 16th. A carburetting apparatus, comprising a generating chamber having a plurality of small air inlet openings for the admission of air to the interior of the chamber at points near its bottom, means for forcing air through said openings, a gas supply pipe leading from said chamber, a supply tank for carburetting liquid, a pump for recharging the generator from the supply tank, and an overflow leading from the generator and communicating with the pump supply, substantially for the purpose set forth. 17th. A carburetting apparatus, comprising a generating chamber having a plurality of small air inlet openings for the admission of air to the interior of the chamber, means for forcing air through said openings, a gas supply pipe leading from said chamber, a source of hydrocarbon supply for said chamber, and means for limiting the supply of hydrocarbon in the chamber, whereby the same is maintained at a uniform shallow depth, sufficient to cover the mouths of the air inlet openings, substantially for the purpose set forth. 18th. In a gas apparatus, the combination of one or more tanks, primary and secondary air chambers open at bottom and having their lower edges submerged in the water tank or tanks, tubular openings leading through the bottom of said water tank or tanks, to the interior of said chamber, rods extending through said openings and connected with said chambers, an air inlet valve for the primary chamber, a valved air passage leading from said chamber to said secondary chamber, means for temporarily applying power to the rod of the primary chamber to lift the same, and connections for communicating the motion of the secondary rod to control the power applied to the primary rod. 19th. In a gas apparatus, the combination of one or more water tanks, primary and secondary air chambers open at bottom and having their lower edges submerged in the water of said tank or tanks, tubular openings leading through the bottom of said tank or tanks to the interior of said chambers, rods extending through said openings and connected with said chambers, an air inlet valve for the primary chamber, a valved air passage leading from said chamber to the secondary chamber, means for applying power to the rod of the primary chamber to temporarily lift the same, and connections for communicating the motion of the secondary chamber, to control the power applied to the primary rod, together with a generator in communication with the secondary chamber and adapted to receive air therefrom. 20th. In a carburetting apparatus, the combination of a generator, means for

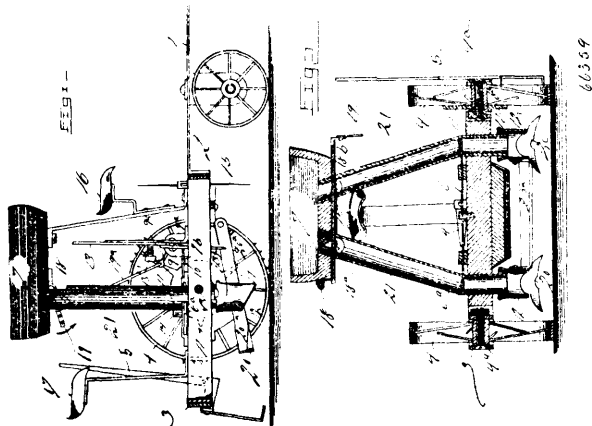
forcing air through the same, a tank for containing a supply of liquid hydrocarbon, a pump for charging the generator from the supply tank, and an overflow leading from a point in the generator to a point in the suction pipe of said pump. 21st. A carburetting apparatus, comprising one or more water tanks, a primary air chamber open at bottom and having its lower edges sealed in the water of one of the tanks, and air inlet valve for said chamber, a hydraulic lifting jack located below said water tank or tanks and having a piston rod projecting upwardly through a tubular opening therein, and connected to said air chamber, inlet and exhaust valves for said lifting jack, a secondary air chamber of lighter weight, open at bottom and having its lower edges sealed in the water of one of the tanks, a valved pipe connection communicating between the air chambers, connections for operating the inlet and exhaust valves of the jack from the secondary air chamber and subsequently releasing the same, and means for automatically reversing the position of said valves when said connections are released, together with a generator in communication with said secondary air chamber, a gas supply pipe connected with the generator, a supply tank, and means for charging the generator therefrom. 22nd. A carburetting apparatus, comprising one or more water tanks, a primary air chamber open at bottom and having its lower edges sealed in the water of one of the tanks, an air inlet valve for said chamber, a hydraulic lifting jack located below said water tank or tanks, and having a piston rod projecting upwardly through a tubular opening therein and connected to said air chamber, inlet and exhaust valves for said lifting jack, a secondary air chamber of lighter weight open at the bottom and having its lower edges sealed in the water of one of the tanks, a valved pipe connection communicating between the air chambers, connections for operating the inlet and exhaust valves of the jack from the secondary air chamber, and subsequently releasing the same, and means for automatically reversing the position of said valves when said connections are released, together with a generator in communication with said secondary air chamber, a gas supply pipe connected with the generator, a supply tank, and a pump for charging the generator therefrom, operated by the supply water of the jack. 23rd. A carburetting apparatus, comprising one or more water tanks, a primary air chamber having an opening sealed in the water of one of the tanks, an air inlet valve for said chamber, a hydraulic lifting jack for raising said air chamber, inlet and exhaust valves for said lifting jack, one or more valve actuating rods, provided with a spring or springs for holding said valves normally with the inlet closed and the exhaust opened, a secondary air chamber also having its open side sealed in the water of the tank or tanks, a valve rod depending from said chamber, a valve actuating lever loosely coupled to the rod and pivotally secured to the valve stem or stems, and a swinging bracket provided with a shoulder, adapted to serve as a temporary fulcrum for said lever, and a set screw regulating the engagement of the lever underneath said shoulder, together with a generator in communication with said secondary air chamber, and a gas supply pipe leading therefrom to the place or places of use. 24th. A carburetting apparatus, comprising a generator, fluid actuated mechanism for forcing air through the generator, and a sealed pump provided with one or more spring retracted pistons for charging the generator with liquid hydrocarbon, said pump being in communication with the power chamber of the air forcing mechanism, and adapted to be actuated by power fluid therefrom. 25th. A carburetting apparatus, comprising a generator, a fluid actuated mechanism for forcing air through the generator, and a sealed pump for charging the generator with liquid hydrocarbon, provided with spring retracted pistons separated by a connecting rod, said pump being in communication with the power chamber of the air forcing mechanism and adapted to be actuated by power fluid therefrom, and being provided with a waste pipe intermediate of said pistons. 26th. In a carburetting apparatus, the combination with a generator and supply tank therefor, and means for supplying the generator with air under pressure, of a pump cylinder provided with valved suction and discharge pipe connections communicating with the supply tank and generator respectively, one or more pistons loose within said cylinder, a spring for driving the pistons in one direction, and means for admitting liquid under pressure to temporarily drive the pistons in the other direction, whereby the liquid is alternately drawn into the pump cylinder from the supply tank and discharged therefrom into the generator. 27th. In a carburetting apparatus, the combination with a generator and supply tank therefor, of a pump cylinder provided with valved suction and discharge pipe connections communicating with the supply tank and generator respectively, one or more pistons loose within said cylinder, a spring for driving the pistons in one direction, and means for admitting liquid under pressure to temporarily drive the pistons in the other direction, whereby the liquid is alternately drawn into the pump cylinder from the supply tank and discharged therefrom into the generator, together with an overflow pipe leading from a suitable point in the generator to the suction pipe of the pump.

No. 66,359  **Potato Planter.** (*Senoir à patates.*)

Cornelius Houson and Jacob Kuhn, both of Belding Michigan, U. S. A., 23rd February, 1900; 6 years. (Filed 7th February, 1900.)

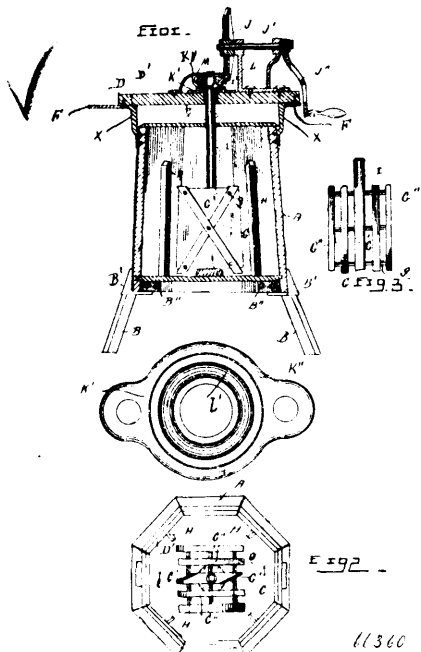
Claim. 1st. In a potato planter, the combination with tubes through which the potatoes are conveyed into furrows, of valves

arranged in said tubes, a rock shaft to which the valves are attached a spring for holding the rock shaft in normal position. transporting



wheels, a tappet wheel arranged on the same, a rock shaft having an arm for engaging the tappet wheel, and means which connect the two rock shafts whereby as the machine advances the valves rock shaft is oscillated, as shown and described. 2nd. In a potato planter the combination with transporting wheels and a tappet wheel affixed to one of them, of a spring retracted rock shaft which is slidable in its bearings and provided with a lateral projection adapted to engage the tappet wheel, a lever for sliding the rock, to remove it from engagement with the tappet wheel, conductors or tubes for conveying potatoes into the furrows, a rock shaft provided with valves working in said tubes, and means for connecting with the two rock shafts, substantially as shown and described. 3rd. In a potato planter, the combination with a pivoted frame, and furrow openers carried thereby, of a lever connected with said frame, the transporting wheels, a tappet wheel affixed to one of them, a slidable rock shaft engaging said tappet wheel, tubes for conveying the potatoes into the furrows, valves working therein, and means for connecting them with the rock shaft, and devices connecting the said lever and rock shaft, whereby, upon operating the lever the machine is thrown out of action, substantially as shown and described. 4th. In a potato planter, the combination with valve mechanism for governing dropping of the potatoes, and devices for operating said mechanism, of a lever which is connected with said devices and provided with a lateral stud, a fixed stand having holes for receiving said stud, a pivot for the lever and a spring applied to the pivot for holding the lever in normal engagement with said stand, substantially as set forth.

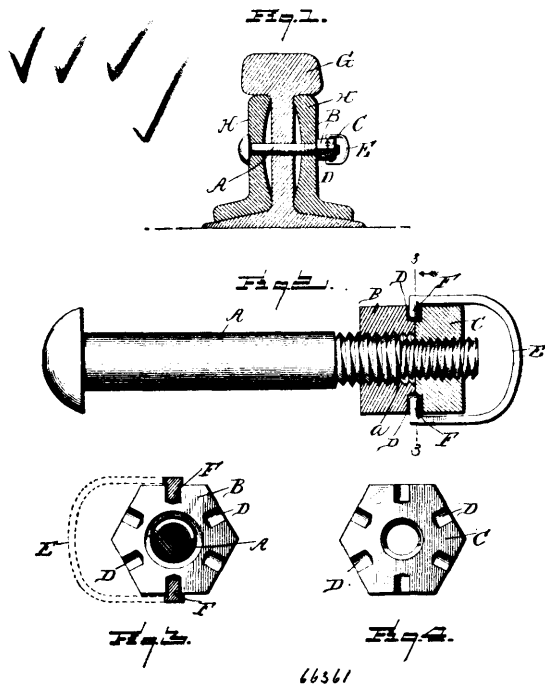
No. 66,360. Churn. (Baratte.)



Hannible Felt and Harvey Nye, both of St. Johns, Michigan, U.S.A., 23rd February, 1900; 6 years. (Filed 7th February, 1900.)

Claim. - 1st. A churn dasher consisting of a body portion, pins extending from the opposite sides thereof and a pair of blades supported on the pins on opposite sides of the body portion, the blades on each side being spaced apart and spaced from the sides of the body portion their entire length and arranged obliquely relative to the vertical axis of the body portion and each blade of each pair extending in opposite oblique directions. 2nd. The combination with a churn having an angular body, abutments arranged at intervals on the interior of the body, of a churn dasher consisting of a body portion, and a pair of obliquely and oppositely extending blades spaced apart and out of contact with the body portion and arranged on opposite sides thereof.

No. 66,361. Nut Lock. (Arrêt-écrou.)



Edward Robert Post, Edward Serfine Grise and William Rampe, all of Ottawa, Ohio, U.S.A., 23rd February, 1900; 6 years. (Filed 9th February, 1900.)

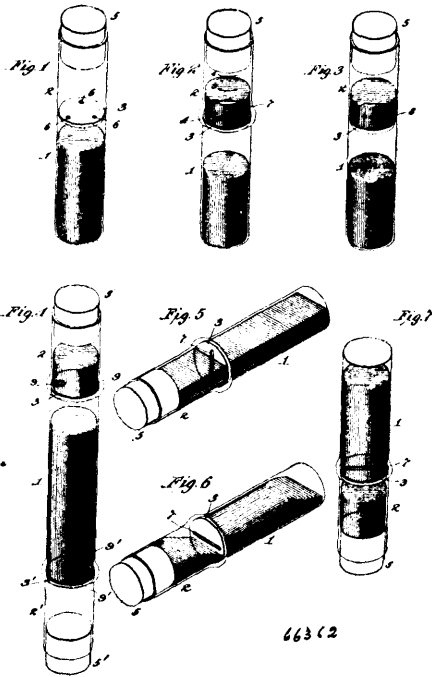
Claim. - 1st. The combination with a bolt with right and left threads, of nuts engaging the same, and a spring fastener having its ends engaged in corresponding openings in the adjacent faces of diametrically opposite sides of said nuts to lock them against movement, as set forth. 2nd. The combination with a bolt with right and left threads, of nuts engaging the said threads and having corresponding openings upon their adjacent faces, and a spring bow having projections on its ends engaging in the openings in the nuts upon diametrically opposite sides thereof without engagement with the threads of the bolt, as set forth. 3rd. A bolt with right and left threads, nuts engaging said threads and having upon their adjacent faces corresponding openings extending toward the centre, and a spring bow having its ends bent at right angles to the length of its sides and sprung into diametrically opposite openings in the adjacent faces of the nuts, the bow being of a length to swing over the outer end of the bolt, substantially as shown and described.

No. 66,362. Medicine Carrier and Measure. (Porte-médicine et mesure.)

Leon Hoage, Albert Nyvall and John Robert Taylor, all of Brooklyn, New York, U.S.A., 23rd February, 1900; 6 years. (Filed 31st October, 1899.)

Claim. - 1st. As a new article of manufacture, a medicine carrier and measurer comprising a receptacle divided into a plurality of chambers, and a diaphragm between said chambers, said diaphragm being so perforated as to allow a liquid, when the receptacle is inclined in a predetermined position, to flow readily from one chamber to the other, and the reverse flow of air, and not permitting such flow to occur when the receptacle is in another inclined position, owing to an equalization of hydrostatic pressure, substantially as set forth. 2nd. As a new article of manufacture, a medicine carrier and measurer, comprising a receptacle divided into a plurality of chambers, and a diaphragm between two of said chambers and perforated in or upon a diameter of said diaphragm, whereby, by maintaining such in a vertical disposition, a flow of liquid and, reversely, of air from one chamber to the other may take place, and by maintaining such

diameter in a horizontal position an equalization of hydrostatic pressure is secured, substantially as set forth. 3rd. As a new article



66362

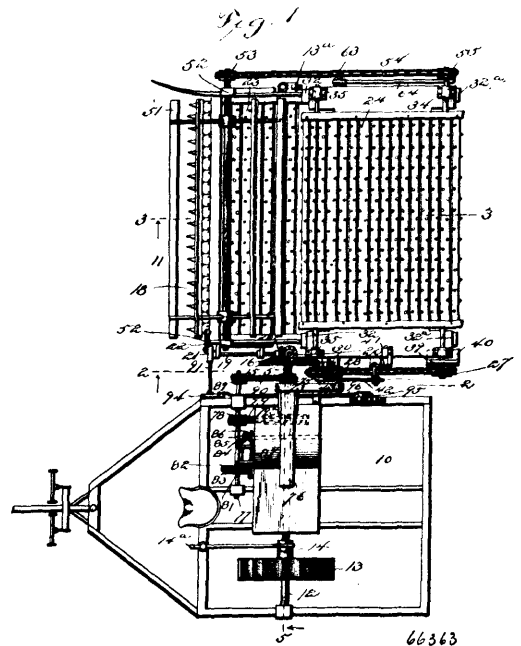
of manufacture, a medicine carrier and measurer, comprising a receptacle divided into a plurality of chambers, one of said chambers being calibrated, and a diaphragm between two of said chambers and perforated in or upon a diameter of said diaphragm, whereby, by maintaining such diameter in a vertical disposition, a flow of liquid and, reversely, of air from one chamber to the other may take place, and by maintaining such diameter in a horizontal position an equalization of hydrostatic pressure is secured, substantially as set forth. 4th. As a new article of manufacture, a medicine carrier and measurer, comprising a receptacle divided into three chambers, two diaphragms separating the central chamber from each end chamber, said diaphragms being perforated in or upon a diameter thereof, and the area of perforation of one being greater than that of the other, substantially as set forth. 5th. As a new article of manufacture, a medicine carrier and measurer, comprising a receptacle divided into a plurality of chambers, said receptacle having a groove formed in its walls and a diaphragm between two of said chambers, engaging said groove, and perforated in or upon a diameter of said diaphragm, whereby, by maintaining such diameter in a vertical position, a flow of liquid and, reversely, of air from one chamber to the other in a horizontal position an equalization of hydrostatic pressure is secured, substantially as set forth.

No. 66,363. Harvester. (Moissonneuse.)

Joseph G. Evans and John H. Morrow, both of Waitsburg, Washington, U.S.A., 23rd February, 1900; 6 years. (Filed 9th February, 1900.)

Claim.—1st. In a combined header and thresher, the combination with a cutter mechanism, of a pair of endless co-acting aprons having threshing studs or teeth, one of said aprons extending beyond the other and terminating adjacent to the cutter mechanism for conveying the grain therefrom, means for moving one apron in a path at right angles to the travelling motion of the aprons, and means for imparting travelling motion to both aprons, substantially as described. 2nd. In a combined header and thresher, the combination with a cutter mechanism, of a pair of endless co-acting aprons having threshing studs or teeth on their opposing faces, one of said aprons extending beyond the other and terminating adjacent to the cutter mechanism, a shaking table or floor supported for movement in a path across the endless travel of the aprons and said floor or table carrying one of the aprons, means for reciprocating said floor or table, a driving mechanism for propelling a roller of the non-shaking apron and a friction driving gear operable by the roller

of the non-shaking apron, and adapted to impart the endless travel to the apron which is carried by the shaking floor or table, substan-



66363

tially as described. 4th. In a combined header and thresher, the combination with a cutter apparatus, of a threshing mechanism comprising endless travelling aprons having threshing teeth or studs on their opposing faces, one of said aprons being longer than the other to be partly exposed beyond said other apron and having an end portion thereof arranged contiguous to the cutter apparatus to receive the heads of grain directly therefrom, and means for moving the short apron across the surface of the long apron, substantially as described. 5th. In a combined header and thresher, the combination with a harvesting mechanism, of an endless apron supported by rollers and arranged to receive the heads of grain directly from the harvesting mechanism, another apron of less length than the first named apron and supported in parallel relation thereto, said aprons having threshing studs or teeth on their working faces, means for giving the travelling motion to the lower apron, means for moving the upper short apron across the face of the long lower apron, and a friction driving gear between a roller of the lower apron and a roller of the upper apron to give the travelling motion to the latter, substantially as described. 6th. In a combined header and thresher the combination with a cutter mechanism, of a pair of endless aprons having threshing teeth or studs on their working faces, one of said aprons being longer than the other and receiving the grain from the cutter apparatus, a reciprocatory floor or table guided to move in a path at right angles to the travel of the endless aprons and said floor or table carrying the shorter apron, and pressure devices supported by the floor or table to maintain the active lead of the apron carried thereby in parallel relation to the lead of the other apron, substantially as described. 7th. In a combined header and thresher, the combination with a cutter mechanism, of a reciprocatory floor or table, a pair of endless travelling aprons having threshing teeth on their opposing surfaces, one of said aprons being longer than the other to convey the grain from the cutter apparatus and the shorter apron carried by the floor or table to reciprocate therewith across the face of the long apron, means for giving the endless travelling motion to said aprons, and pressure devices supported by the floor or table in operative relation to the short apron, substantially as described. 8th. In a combined header and thresher, the combination with a frame having elevated guideways, and a cutter apparatus on the front part of said frame, of the shaking floor or table slidably supported in the guideways, apron rollers mounted in the frame, other apron rollers supported by the floor or table, a pair of endless travelling aprons, one longer than the other to convey the grain from the cutter apparatus and said aprons supported respectively by the rollers on the frame and on the shaking table, a friction drive gear between driving rollers of the two aprons, and means for reciprocating the table and the apron carried thereby across the path of the apron supported on the frame, substantially as described. 9th. In a combined header and thresher, the combination with a cutter mechanism, of a pair of endless co-acting aprons, one of which is longer than the other to convey the grain from the cutter apparatus, and yieldable pressure devices co-operating with one apron, whereby the pressure of grain between the aprons is prevented from

moving the working surfaces thereof away from operative relation, substantially as described. 10th. In a combined header and thresher, the combination with a cutter apparatus, of endless threshing aprons having studs or teeth on their opposing faces, one of said aprons being movable across the face of the other apron, a grain pan below the delivery end of the lower apron, and arranged to partially embrace the latter, and means for reciprocating said grain pan, substantially as described. 11th. In a combined header and thresher, the combination with a cutter mechanism, of a threshing mechanism comprising endless aprons provided with threshing teeth on their working surfaces, one of said aprons being movable across the path of the other apron, a screw conveyor below the lower apron, a grain pan supported partly below the lower apron to deliver the grain to the casing of said screw conveyor, and having a hood which conforms to the curvature of the lower apron, and driving devices between the screw conveyor shaft and the grain pan to reciprocate the latter, substantially as described. 12th. In a combined header and thresher, the combination with a main driving shaft having a master gear, of a cutter apparatus driven from said shaft, a pair of endless parallel aprons provided with threshing teeth on their working faces, one of said aprons being longer than the other to convey the grain from the cutter apparatus, means for supporting the upper apron for movement across the face of the lower apron, a compound intermediate gear provided with a wrist pin and driven by the master gear, sprocket gears between the compound intermediate gear and a driving roller of the lower apron, a bell crank lever having pitman connection with the compound intermediate gear and with the supporting means for the upper apron, and a friction driving gear between the driving roller of the lower apron and the corresponding roller of the upper apron, substantially as described. 13th. In a combined header and thresher, the combination of a two-part frame, a cutter mechanism supported by one member of the frame, and having one apron longer than the other to convey the grain from the cutter mechanism below the other threshing apron, a cleaning mechanism supported by the other member of the frame, a main driving shaft, driving devices propelled by said shaft for operating the cutter mechanism, the threshing aprons and the cleaning mechanism, and an elevator also actuated by the shaft and arranged to receive grain from the threshing aprons and deliver the same to the cleaning mechanism, substantially as described. 14th. In a combined header and thresher, the combination with a frame and a cutter mechanism thereof, of posts fixed to the frame and having the guideways, a reciprocating floor or table fitted slidably in the guideways, an upper apron carried by the floor or table and having the threshing teeth, a lower longer apron supported by the frame in parallel relation to the upper apron and extending beyond the latter to a point adjacent to the cutter apparatus, a series of yieldable pressure rolls suspended from the floor or table and riding upon the lower lead of the upper apron, means for giving the travelling motion to the aprons, and means for reciprocating the table and upper apron across the lower apron, substantially as described.

No. 66,364. Electric Motor. (Moteur électrique.)

Ricardo Arno, Turin, Italy, 24th February, 1900; 6 years. (Filed 8th September, 1898.)

Claim.—1st. A method of starting asynchronous monophase alternating current motors, which consists in inserting a suitable resistance in the rotor coils and momentarily rendering the coils of the rotor unsymmetrical and gradually cutting out the resistance, substantially as and for the purpose set forth. 2nd. A method of starting asynchronous monophase alternating current motors, which consists in inserting a suitable resistance in the rotor coils, momentarily placing one or more of the rotor coils on open circuit and then gradually cutting out the resistance, substantially as and for the purpose set forth. 3rd. A method of starting asynchronous monophase alternating current motors, which consists in inserting in the rotor coil circuits a resistance of $r = 0.414$ times the maximum, just allowing the machine to act as a motor when considered as a rotary field motor imparting a slight impulse to the motor, and gradually cutting out such resistance, substantially as set forth. 4th. A method of starting asynchronous monophase alternating current motors, each consists in inserting a suitable resistance in the rotor coil circuits, rendering the coils of the rotor unsymmetrical by placing some of them on the open circuit, successively closing them when current is supplied to the motor, and gradually cutting out the resistances, substantially as and for the purpose set forth. 5th. A method of starting asynchronous monophase alternating current motors, which consists in inserting in the rotor coil circuits a resistance of $r = 414 + 2 a n L$ giving the motor a slight impulse and gradually cutting out the resistance, substantially as and for the purpose set forth. 6th. A method of starting asynchronous monophase alternating current motors, which consists in rendering the coils of the rotor unsymmetrical by placing one or more of them in open circuit, placing a suitable resistance in the circuit of said coils, the resistance in the closed coils being comparatively small,

immediately increasing the resistance in the closed coils after the current is turned on in the motor, closing the open coil circuits and

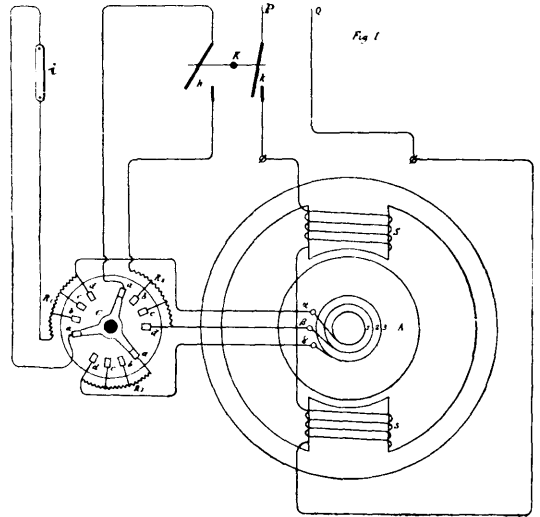
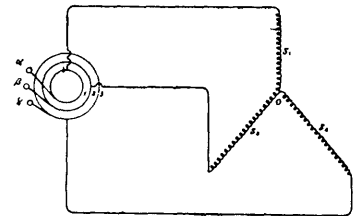


Fig. 2



then gradually cutting out the resistance in all the coils or groups of coils, substantially as and for the purpose set forth.

No. 66,365. Gate. (Barrière.)

Fig. 1.

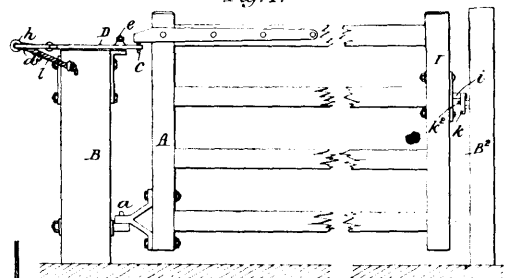


Fig. 2.

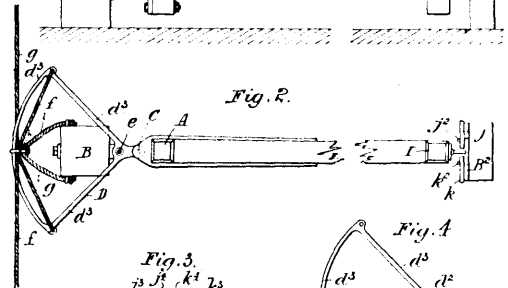


Fig. 3.

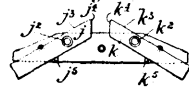


Fig. 4.

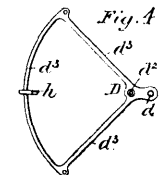
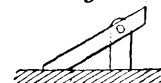


Fig. 5.

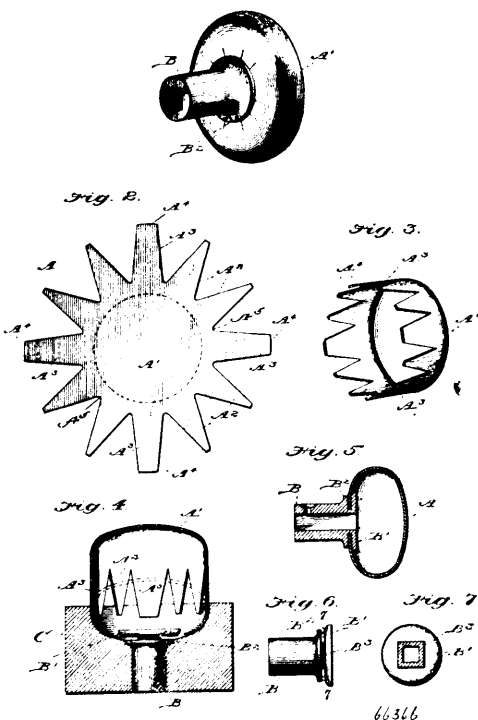


44365

William Henry Gilfillan Greaves, Cradock, Cape Colony, Africa, 24th February, 1900; 6 years. (Filed 29th November, 1899.)

Claim.—1st. In combination with a gate a lever such as D centered to the gate post with the hanging style engaging with its shorter arm with a quadrant or sector as its longer arm provided with cords or chains so arranged and guided that by pulling either of the said cords or chains, the gate can be opened and closed substantially as hereinbefore described and illustrated by the accompanying drawings. 2nd. In combination with a gate a tongue or projection such as *i* secured to the falling style and a pair of levers such as *j k* which normally retain the gate in its closed position, but either of which will yield to allow the gate to close whilst the other act as a stop, substantially as hereinbefore described. 3rd. In combination with a gate a lever such as D centered to the gate post the hanging style engaging with its shorter arm and with a quadrant or sector as its longer arm, and at the falling style a tongue or projection engaging between a pair of levers such as *j k* the said quadrant or sector being provided with cords or chains so arranged and guided that by pulling either of the said cords or chains the tongue or projection at the falling style is released from the retaining levers and swings open or is released from a catch at the side of the road and swings to and is retained closed by the said tongue or projection engaging between the aforesaid pair of levers, all substantially as hereinbefore described.

No. 66,366. Knob. (Bouton.)



James W. Lawson, Allegheny, Pennsylvania, U.S.A., 24th February, 1900; 6 years. (Filed 10th February, 1900.)

Claim.—1st. The combination with a knob formed of a single piece of sheet metal struck up from a star shaped blank, of a shank having an annular depression to receive and confine the tongue of the blank when shaped, substantially as shown and described. 2nd. The combination with the knob formed of a single piece of sheet metal struck up from a star shaped blank, one or more of the points or tongues being straight at the ends, of the shank, having the flange and collar, the space between the flange and collar being adapted to receive the points or tongues of the blank when shaped, the portion of the shank intermediate the flange and collar having one or more flat faces adapted to contract with the straight end or ends of the blank, substantially as shown, and for the purpose described. 3rd. An improvement knob, constructed substantially as herein shown and described.

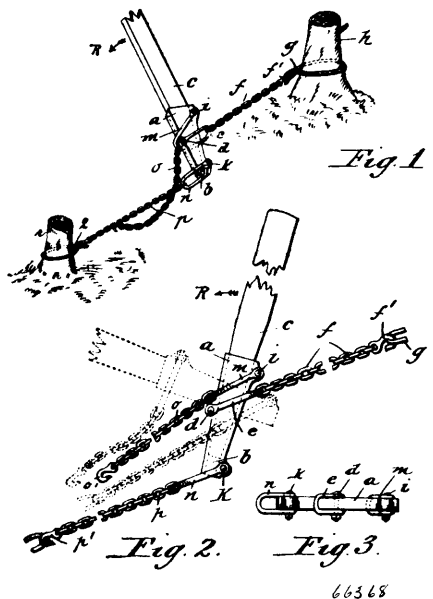
No. 66,367. Medium for Disguising Unpalatable Medicines. (Capsule pour médécines.)

Daniel Frederick Davenport, Americus, Georgia, U.S.A., 24th February, 1900; 6 years. (Filed 13th January, 1900.)

Claim.—1st. The improved preparation for disguising unpalatable medicines, the same comprising balsam of fir, shellac, alcohol, and

olive oil, substantially as specified. 2nd. The improved preparation for disguising unpalatable medicines, the same comprising balsam of fir, five hundred grains Troy, shellac, two thousand grains Troy, strong alcohol, twelve fluid ounces, and olive oil, three and one-half fluid ounces, the same being intimately mixed to form a liquid, as specified. 3rd. The improved process of producing a disguising solution for use in preparing unpalatable medicines for consumption, which consists, first, in dissolving balsam of fir and shellac in alcohol, in the presence of olive oil and mixing thoroughly, then allowing the liquid to stand a due time, the proportions of the several ingredients being preferably as hereinbefore specified. 4th. The improved process of rendering an unpalatable drug or medicine practically tasteless, the same consisting in mixing with such medicines a liquid composed of balsam of fir, shellac, alcohol, and olive oil, heating the pasty mass thus formed, then allowing it to cool, reducing the same to small particles, and reheating it, substantially as shown and described.

No. 66,368. Stump or Tree Extractor. (Arrache-souche.)



Albert Forrer, Ramsay, New Jersey, U.S.A., 24th February, 1900; 6 years. (Filed 30th October, 1899.)

Claim.—In a stump or tree extractor, the combination of an elongated tapering stock having a longitudinal tapering orifice therein and provided with integral lugs disposed on one side of said stock at each end thereof and on the other side approximately midway thereof, bolts penetrating said lugs, shackles pivotally secured to said bolts and extending transversely across and around the stock, chains provided with hooks and connected to said shackles, and a removable lever having one tapering end and adapted to be inserted in said orifice, substantially as described.

No. 66,369. Entrenching Tool.

(Outil pour faire des tranchées.)

John C. Michie, Durham, North Carolina, U.S.A., 24th February, 1900; 6 years. (Filed 29th September, 1899.)

Claim.—1st. An entrenching shovel having a socket adapted to receive the scabbard, of a bayonet, a stop block arranged at a bottom of a socket, and the fastening springs for securing the scabbard within the socket, substantially as shown and described. 2nd. An entrenching shovel having the upturned sides and upwardly curved shoulders and the centrally raised portion, the depressed plate riveted to the bottom of the shovel and providing a socket adapted to receive the bayonet scabbard, a block secured in the bottom of the socket and the securing springs also fastened in the socket adjacent so the bottom thereof extending toward each other and also toward the stop block, substantially as shown and described.

3rd. An entrenching shovel having a socket adapted to receive the scabbard, and two inwardly projecting spring plates secured within

Fig. 1.

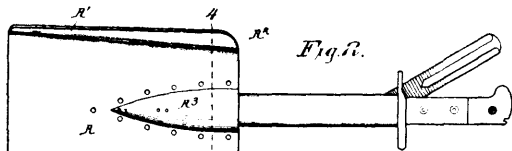
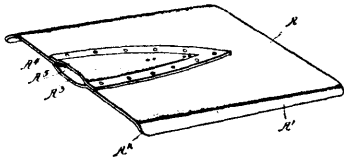


Fig. 2.

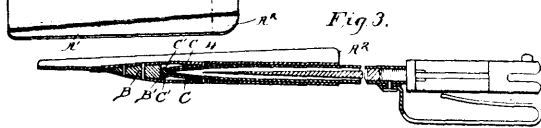


Fig. 3.

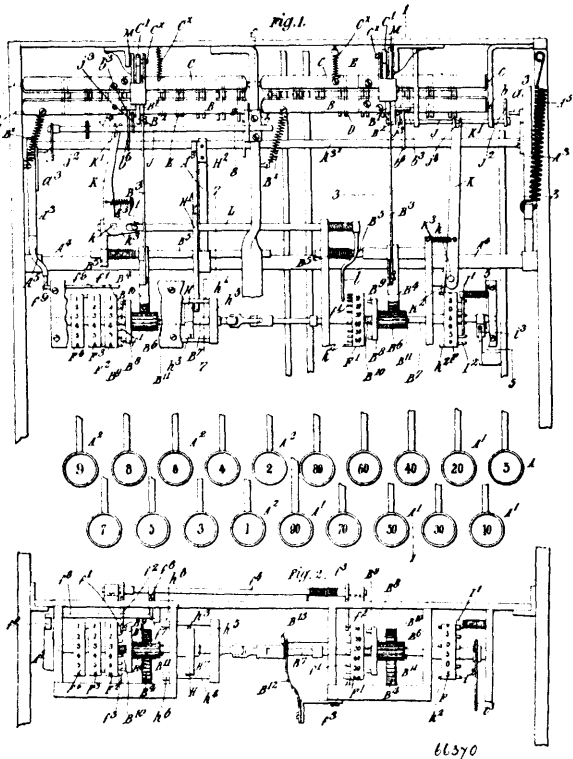


Fig. 4.

66369

said socket, adapted to engage the end of the scabbard, substantially as described.

No. 66,370. Computing Machinery. (Machines à compter.)



66370

Edward Moriarty, Fulham, Middlesex, England, 24th February, 1900; 6 years. (Filed 5th December, 1899.)

Claim.—1st. Adding apparatus consisting in the combination with a series of key levers, of a series of cam plates adapted to be actuated

by said key levers to a greater or less extent according as one or other of the key levers is operated, and of a recording device which is operated by the movement of the said cam plates. 2nd. In adding apparatus, the combination with a series of key levers, of a series of cam plates adapted to be actuated simultaneously to a greater or less extent according as one or other of the key levers is operated, and of means for transmitting the movement of the said cam plates to a recording device. 3rd. In adding apparatus, the combination with a series of key levers, of a series of cam plates carried by a rocking bar and adapted to be actuated simultaneously to a greater or less extent according as one or other of the key levers is operated and of means for transmitting the movement of the rocking bar to a recording device. 4th. In adding apparatus, the combination with a series of key levers, of a series of cam plates carried by a rocking bar each having a cam surface of different contour to the other and of a shape to cause the cam plates and their rocking bar to be moved to predetermined extent which varies with the operation of one or other of the key levers, and of means for transmitting the movement of the rocking bar to a recording device. 5th. In adding apparatus, the combination with the series of key levers and the series of cam plates adapted to be actuated thereby of a registering drum and of means for imparting thereto the varying movements of the aforesaid cam plates for the purpose specified. 6th. In adding apparatus, the combination with the series of key levers and the series of cam plates adapted to be actuated thereby of a registering drum mounted loosely on a longitudinally movable shaft, of a device capable of engaging with said drum when the shaft is shifted longitudinally in the proper direction, of means for longitudinally shifting said shaft and of means for transmitting to said engaging device the varying movements of the aforesaid cam plates for the purpose specified. 7th. In adding apparatus, the combination with the series of key levers and the series of cam plates adapted to be actuated thereby, of a registering drum mounted loosely on a longitudinally movable shaft, of a clutch device for engaging with said drum and loosely mounted on said shaft but adapted to move longitudinally therewith, of means for longitudinally shift said shaft, of an elongated toothed pinion forming part of and moving with said clutch device, of a rack in constant gear with said pinion, and of means for transmitting to said rack, the varying movements of aforesaid cam plates, for the purpose specified. 8th. In adding apparatus, the combination with the series of key levers and the series of cam plates adapted to be actuated thereby, of a registering drum mounted loosely on a longitudinally movable shaft and formed with a circular series of apertures in one of its faces, of a clutch device consisting of arms having pins at their extremities for engagement with said apertures in the registering drum, the said clutch device being loosely mounted on said shaft but capable of longitudinal movement therewith, of means for longitudinally shifting said shaft, of an elongated toothed pinion forming part of and moving with said arms, of a segmental rack in constant gear with said pinion, and of a connecting rod coupled respectively to the said segmental rack and to a bar which is common to the series of cam plates for the purpose specified. 9th. In adding apparatus, the combination with the registering drum mounted loosely on the longitudinally movable shaft and with the means for transmitting to said drum the varying movements of the cam plates when the key levers are actuated, of retaining pawls for normally retaining the said drum in a fixed position, and of means for releasing one of said pawls to permit of the drums rotary movement by the aforesaid motion transmitting means, substantially as described. 10th. In adding apparatus, the combination with the registering drum mounted loosely on the longitudinally movable shaft and with the means for transmitting to said drum the varying movements of the cam plates when the key levers are actuated, of two retaining pawls adapted to engage with lateral pins on said drum, one of the pawls acting to prevent movement of the drum in a forward direction and the other acting to prevent movement of the drum in a backward direction, whereby such pawls normally retain the said drum in a fixed position, of a spindle to which the pawl preventing forward movement of the drum is connected, and of means for actuating said spindle to release the pawl it carries each time the key lever is operated, substantially as described. 11th. In adding apparatus, the combination with the registering drum mounted loosely on the longitudinally movable shaft and with the means for transmitting to said drum the varying movements of the cam plates when the key levers are actuated, of two retaining pawls adapted to engage with lateral pins on said drum, one of said pawls acting to prevent movement of the drum in a forward direction and the other acting to prevent movement of the drum in the reverse direction, whereby such drum is normally retained in a fixed position, of a spring controlled spindle to which the pawl preventing forward movement of the drum is connected, of a finger on said spindle, of a rocking frame which receives motion each time one or other of the key levers is actuated and of means for actuating said spindle each time the said rocking frame is operated, substantially as and for the purpose specified. 12th. In adding apparatus, the combination with the registering drum loosely mounted on the longitudinal movable shaft and with means for transmitting to said drum the varying movements of the cam plates when the key levers are actuated, of two retaining pawls adapted to engage with lateral pins on said drum, one of said pawls acting to prevent movement of the drum in a forward direction and the other acting to prevent movement of the drum in reverse direction, whereby such drum is normally retained in a fixed position, of a spring controlled spindle

to which the pawl preventing forward movement of the drum is connected, of a finger on said spindle, of a rocking frame which latter receives motion each time one or other of the key levers is actuated, of a second spindle provided with a finger adjacent to the finger on the first spindle, of an arm on said second spindle and of a projection on the rocking frame for actuating said arm, substantially as and for the purpose specified. 13th. In adding apparatus, the combination with the registering drum and the clutch device both mounted loosely on the longitudinally movable shaft, and with the means for imparting rotary movement to said clutch device, of a cam adapted to be actuated each time a key lever is operated, and of projections on the aforesaid longitudinally movable shaft upon which projections said cam operates when actuated and thereby imparts the said longitudinal movement to the shaft and the said clutch device thereon, for the purpose specified. 14th. In adding apparatus, the combination with the registering drum and the clutch device both mounted loosely on the longitudinally movable shaft, and with the means for imparting rotary movement to said clutch device, of a cam located concentrically with respect to the longitudinally movable shaft, of means for imparting to said cam an oscillatory movement each time a key lever is operated, and of projections on said shaft with which the cam engages to impart a longitudinal movement to said shaft first in one direction and then in the opposite direction against the resistance of a spring, thereby alternately causing the said clutch to engage and disengage the said registering drum for the purpose specified. 15th. In adding apparatus, the combination with the registering drum and the clutch device both loosely mounted on the longitudinally movable shaft and with the means for imparting rotary movement to said clutch device, of a cam located concentrically with respect to the longitudinally movable shaft and having a double cam surface, one portion of which operates to impart to the said shaft longitudinal movement in one direction and the other portion of which operates to impart to the said shaft longitudinal movement in the opposite direction, of means for imparting to said cam an oscillatory movement each time a key lever is operated, of projections on said bar for the said double cam surface to act upon, and of springs for operating to return said bar to its normal position for the purpose specified. 16th. In adding apparatus, the combination with the registering drum and the clutch device both loosely mounted on the longitudinally movable shaft and having a pair of double cam surfaces disposed diametrically opposite each other, of a connecting rod coupling the said cam to a rocking frame which is lifted each time a key lever is depressed, thereby imparting an oscillatory movement to said cam, of a pair of lateral projections extending from arms on said longitudinally movable shaft and bearing pins at their extremities, which pins are acted upon by said cam surfaces to impart the longitudinal movement to the said movable shaft, and of springs acting in opposite directions upon said shaft, substantially as and for the purpose specified. 17th. In adding apparatus, the combination with the series of key levers, the series of cam plates and the recording device, of an additional series of cam plates adapted to be operated simultaneously with the main series of cam plates to prevent the latter from exceeding their proper ambit of movement when a key lever is actuated. 18th. In adding apparatus, the combination with the series of key levers, the main series of cam plates, the rocking bar carrying them, and the recording device, of an additional series of cam plates carried by a rocking bar and adapted to be operated by the said key levers simultaneously with the operation of the main series of cam plates to an extent depending on that to which the main cam plates are operated, and of stop pieces on the rocking bars of the said additional and main cam plates respectively, for the purpose specified. 19th. In adding apparatus, the combination with the series of key levers, the main cam plates, the rocking bar carrying them and the recording device, of an additional series of cam plates carried by a rocking bar and adapted to be operated by the said key levers simultaneously with the operation of the main series of cam plates to an extent depending on that to which the main cam plates are operated, and of stop pieces on the rocking bars, one of such stop pieces being in the form of a movable arm carried by the main rocking bar and the other in the form of a fixed arm carried by the additional rocking bar, substantially as and for the purpose specified. 20th. In adding apparatus the combination with the series of key levers, the series of main cam plates, the rocking bar carrying them, and the recording device, of an additional series of cam plates carried by a rocking bar, the cam surfaces of the latter series of cam plates being situated in close proximity to the cam surfaces of the main series of cam plates and facing in an opposite direction thereto, and of projections on the aforesaid key levers adapted to enter between the proximate cam surfaces of the two series of cam plates each time the key levers are actuated whereby the said two series of cam plates are shifted in opposite directions for the purpose specified. 21st. In adding apparatus, the combination with the series of key levers, the series of cam plates and the recording device, of means whereby said recording device can be caused to perform a registering movement independently of the registering movement it receives from the aforesaid cam plates, substantially as and for the purpose specified. 22nd. In adding apparatus, the combination with a plurality of the series of key levers, a plurality of the series of cam plates carried by a plurality of the main rocking bars, and means for transmitting the movement of said main rocking bars to a plurality of registering drums, of a movable arm mounted on

each of the aforesaid main rocking bars and forming part of the said means for transmitting movement to said registering drums, and of means for moving said arm independently of the movement it receives from its rocking bar, substantially as and for the purpose specified. 23rd. In adding apparatus, the combination with a plurality of the series of key levers, a plurality of the series of cam plates carried by a plurality of the main rocking bars, and means for transmitting the movement of said main rocking bars to a plurality of registering drums, of a pivoted arm mounted on each of the aforesaid main rocking bars and forming part of the said means for transmitting movement to said registering drums, of means for keeping said pivoted arm normally incapable of independent movement, of means for releasing said pivoted arm and of means for moving it independently of the motion it receives from the said rocking bar, substantially as and for the purpose specified. 24th. In adding apparatus, the combination with a plurality of the series of key levers, a plurality of the series of cam plates carried by a plurality of the main rocking bars and means for transmitting the movement of said main rocking bars to a plurality of registering drums, of a pivoted arm mounted on each of the aforesaid main rocking bars and forming part of the said means for transmitting movement to said registering drums, of a locking device which by the action of a spring normally lies transversely of said pivoted arm, of a sliding oscillatory shaft, of means for sliding said shaft to displace the locking device and so release the pivoted arm, and of means for oscillating said shaft to cause the independent movement of the said pivoted arm, substantially as and for the purpose specified. 25th. In adding apparatus, the combination with a plurality of the series of key levers, a plurality of the series of cam plates carried by a plurality of the main rocking bars, and means for transmitting the movement of said rocking bars to a plurality of registering drums, of an arm pivotally mounted on each of the aforesaid main rocking bars and forming part of the said means for transmitting movement to the registering drums, of a locking device comprising a hinged plate which is normally maintained by a spring in a position transverse of the said pivoted arm, of a sliding oscillatory shaft connected to the pivoted arm and to the locking device by a contrivance which permits the said shaft to shift longitudinally without becoming operatively disconnected from the said pivoted arm and the said locking device, of means for sliding the said shaft and of means for oscillating it, substantially as and for the purpose specified. 26th. In adding apparatus, the combination with a plurality of the series of key levers, a plurality of the series of cam plates carried by a plurality of the main rocking bars and means for transmitting the movement of the said rocking bars to a plurality of the registering drums, of an arm pivotally mounted on each of the main rocking bars and forming part of the means for transmitting the movement of the said rocking bars to the registering drums, of a locking device comprising a hinged plate normally maintained transverse of said pivoted arm by a spring, of a sliding oscillatory shaft connected to the said pivoted arm by a crank, of lever mechanism adapted to be actuated by the registering drums for causing said shaft to slide each time the record of one drum is to be transferred to another of higher denomination, of a projection on said sliding oscillatory shaft, of a long pin on said hinged plate against which said projection strikes and so displaces the hinged plate when the sliding oscillatory shaft is moved outward by the said lever mechanism, of a finger on said sliding oscillatory shaft, and of a projection adapted to be moved each time a key lever is operated and to actuate said finger when the latter is caused to slide into the path of said projection, whereby said shaft is oscillated, and, through the intervention of said crank, imparts the independent movement to the hinged arm, substantially as and for the purpose specified. 27th. In adding apparatus, the combination with the series of key levers, the series of cam plates carried by the main rocking bar, and means for transmitting the movement of said main rocking bar to a recording device, of a movable arm mounted on the aforesaid main rocking bar and forming part of the said means for transmitting movement to said recording device, of means for moving said arm independently of the movement it receives from its rocking bar and of means for limiting the extent of such independent movement, substantially as and for the purpose specified. 28th. In adding apparatus, the combination with the series of key levers, the series of cam plates carried by the main rocking bar and means for transmitting the movement of the main rocking bar to a recording device, of a movable arm mounted on the aforesaid main rocking bar and forming part of the said means for transmitting movement to the recording device, of means for moving said arm independently of the movement it receives from its rocking bar and of a hinged stop piece which normally occupies a position to limit the extent of independent movement of the said pivoted arm when the latter is shifted about its pivot, substantially as described. 29th. In adding apparatus, the combination with the series of key levers the series of cam plates carried by the main rocking bar and means for transmitting the movement of the main rocking bar to a recording device, of a movable arm mounted on the aforesaid main rocking bar and forming part of the said means for transmitting movement to the recording device, of means for moving said arm independently of the movement it receives from its rocking bar, of a hinged stop piece which normally occupies a position to limit the extent of independent movement of the said movable arm, and of means for displacing said stop piece when the said arm is to be moved with the rocking bar, substantially as described. 30th. In

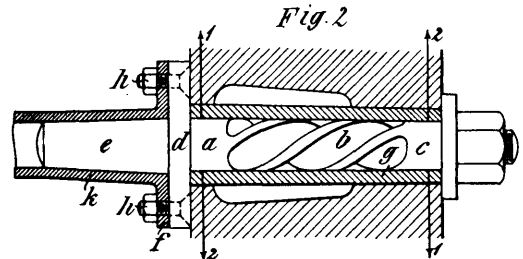
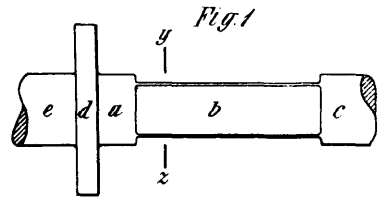
adding apparatus, the combination with the movable arm carried by the main rocking bar, the fixed arm carried by the additional rocking bar, and the hinged stop piece, of means whereby said hinged stop piece is shifted from its stopping position whenever the additional rocking bar is actuated, substantially as described. 31st. In adding apparatus, the combination with the movable arm carried by the main rocking bar, the fixed arm carried by the additional rocking bar, and the hinged stop piece, of an incline on said hinged stop piece and of a pin on said fixed arm of the additional rocking bar, whereby said hinged stop piece is shifted out of the path of the movable arm of the main rocking bar by said pin, each time the additional rocking bar is actuated, substantially as and for the purpose specified. 32nd. In adding apparatus, the combination with the series of key levers, the series of cam plates carried by the main and additional rocking bars and means for transmitting the movement of the main rocking bar to a recording device, of a movable arm mounted on the main rocking bar and forming part of the said means for transmitting movement to the recording device, of a fixed arm carried by the additional rocking bar and adapted to act as a stop piece for limiting the movement of the main rocking bar, of means for moving said movable arm independently of the movement it receives from its rocking bar, of a hinged stop piece for limiting the extent of such independent movement, of a locking plate normally occupying a position transverse of and between the said movable and fixed arms, of means for displacing said hinged stop piece when the additional rocking bar is actuated and of means for withdrawing said locking plate from its position between the fixed and movable arms, so that sufficient space will be left between these arms to permit of the independent movement of the movable arm when such independent movement has to be performed in addition to the movement due to rocking of the main rocking bar. 33rd. In adding apparatus, the combination with the pivoted arm carried by the main rocking bar, the locking device therefor and the sliding oscillatory shaft for actuating said pivoted arm and locking device, of a spring for returning said shaft to its normal position and of means for retarding said return of the shaft, substantially as and for the purpose specified. 34th. In adding apparatus, the combination with the pivoted arm, the locking device and the sliding oscillatory shaft, of a spring for returning said shaft longitudinally to its normal position, of a pivoted finger adapted to engage with and hold the shaft when the latter slides into a position to be oscillated and of means for releasing said finger and liberating the shaft, substantially as and for the purpose specified. 35th. In adding apparatus, the combination with the pivoted arm, the locking device and the sliding oscillatory shaft, of a spring for returning said shaft longitudinally to its normal position, of a pivoted finger adapted to engage with a notch in said shaft when the latter slides into a position to be oscillated, of a spring normally tending to keep said finger in engagement with said notch and of a rocking frame having a transverse bar extending above all the key levers and adapted to normally keep said finger out of engagement with the notch in the shaft and to permit such engagement to take place each time a key lever is operated and the frame raised, substantially as and for the purpose specified. 36th. In adding apparatus, the combination with the registering drum of lowest denomination of a pawl and ratchet device which is actuated a distance of one step each time the key lever corresponding to said registering drum is depressed, substantially as described. 37th. In adding apparatus, the combination with the registering drum of lowest denomination, of a spring pawl carried by said drum, of a ratchet wheel loosely mounted on the shaft upon which the said drum is mounted and engaging with said spring pawl, of a crank arm forming part of the ratchet wheel, and of a link connecting said crank arm to the key lever corresponding to said drum, all substantially as and for the purpose specified.

No. 66,371. Axle Pin. (*Bout d'essieu.*)

Bruno Wesselmann, Berlin, Germany, 24th February, 1900; 6 years. (Filed 14th August, 1899.)

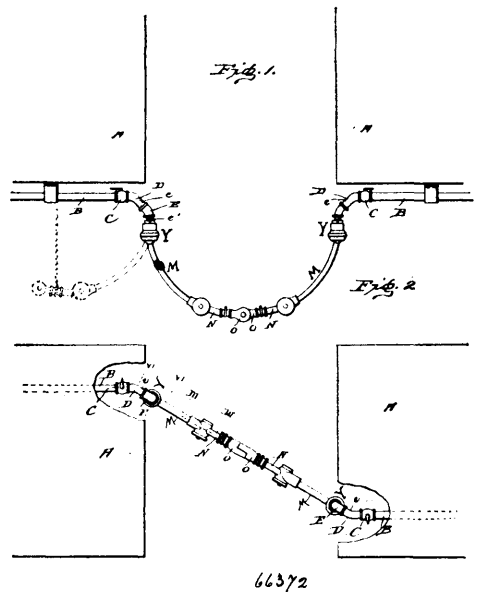
Claim.—1st. An axle pin consisting of a central part in the form of a spirally wound shaft of nearly prismatic cross section and two end parts of the full circular cross section, substantially as set forth. 2nd. An axle pin, the middle part of which in the shape of a prism is wound, substantially as set forth. 3rd. The combination

with a nave box, of an axle pin, the end parts of which close said nave box and prevent the lubricating material from being pressed



with a nave box, of an axle pin, the end parts of which close said nave box and prevent the lubricating material from being pressed out, while the middle part of said pin is provided with spiral recesses for the lubricating material, substantially as set forth.

No. 66,372. Fluid Pressure Couplings for Railway Cars. (*Joint de tuyau de fluide à pression pour chars.*)



Albert Ross Martin, Beaver Falls, Pennsylvania, U.S.A., 24th February, 1900; 6 years. (Filed 12th February, 1900.)

Claim.—1st. In a flexible duct for railway cars, a metallic or other rigid pipe, a single ball and socket joint having one of its

members fixed on an immovable support on the car and communicating with the train pipe and its other member on said pipe, and a coupler mounted directly on the outer end of said rigid pipe by means of a single joint having a horizontal transverse axis, substantially as set forth. 2nd. In a flexible duct for railway cars, the combination, with the train pipes, of metallic or other rigid pipes jointed with said train pipes and extending downwardly and outwardly toward each other, supplemental pipes jointed with said rigid pipes, springs acting between said rigid and supplemental pipes to depress the latter, and coupling means uniting said supplemental pipes, substantially as set forth. 3rd. In a flexible duct for railway cars, the combination, with the train pipes, of metallic or other rigid pipes, each jointed with its train pipe to turn upon a vertical axis, and extending downwardly and outwardly toward each other, supplemental pipes jointed with said rigid pipes upon horizontal axes, detachable coupling means uniting said supplemental pipes, and springs acting on said supplemental pipes to turn the latter on their axes toward their coupled position, substantially as set forth. 4th. As an attachment for the train pipe of railway cars, a metallic or other rigid pipe bent downwardly and outwardly, a single movable joint having a vertical axis by which said rigid pipe is connected directly with the train pipe and on which it may be turned to extend back beneath the car, a supplemental pipe section jointed with said rigid pipe upon a horizontal axis, and coupling means for uniting said attachment with the corresponding attachment of another car, substantially as set forth. 5th. In a flexible duct for railway cars, the combination, with the train pipes, of metallic or other rigid pipes, jointed with said train pipes by universal joints, and extending downwardly and outwardly toward each other, supplemental pipes jointed with said rigid pipes, springs acting between said rigid and supplemental pipes to depress the latter, and coupling means uniting said supplemental pipes, substantially as set forth. 6th. In a flexible duct for railway cars, the combination with the train pipes, of metallic or other rigid pipes, each jointed with its train pipe by a universal joint, and extending downwardly and outwardly toward each other, supplemental pipes jointed with said rigid pipes upon horizontal axes, detachable coupling means uniting said supplemental pipes, and springs acting on said supplemental pipes to turn the latter on their axes toward their coupled position, substantially as set forth. 7th. As an attachment for the train pipe of railway cars, a metallic or other rigid pipe bent downwardly and outwardly, a single universal joint by which said rigid pipe is connected directly with the train pipe and on which it may be turned to extend back beneath the car, a supplemental pipe section jointed with said rigid pipe upon a horizontal axis, and coupling means for uniting said attachment with the corresponding attachment of another car, substantially as set forth. 8th. As an attachment for the train pipe of railway cars, a metallic or other rigid pipe bent downwardly and outwardly, a single universal joint by which said rigid pipe is connected directly with the train pipe and on which it may be turned to extend back beneath the car, a supplemental pipe section jointed with said rigid pipe upon a horizontal axis, and coupling means for uniting said attachment with the corresponding attachment of another car, substantially as set forth. 9th. The combination of a train pipe, a metallic or other rigid pipe extending downward and outward from the train pipe, said pipes having rigidly and inflexibly connected therewith the one a socket and the other a ball to form a universal joint, a supplemental pipe jointed with said rigid pipe on a horizontal axis, and coupling means on said supplemental pipe, substantially as set forth. 10th. The combination of a train pipe, a metallic or other rigid pipe extending outward and downward from the train pipe, and pipes having rigidly and inflexibly connected therewith, the one a socket and the other a ball to form a universal joint, a supplemental pipe jointed with said rigid pipe on a horizontal axis, a spring acting between said rigid and supplemental pipes to depress the latter, and coupling means on said supplemental pipe, substantially as set forth. 11th. A fluid pressure coupling for railway cars, the combination of a ball and socket joint, one member of which is rigid with the car, a horizontal transverse joint, a rigid pipe leading from the other member of said ball and socket joint to said horizontal joint, and a coupling means connected with the latter joint, substantially as set forth. 12th. In a fluid pressure coupling for railway cars, the combination of the rigid pipes jointed together on a horizontal axis, a supporting joint for connecting one of said pipes with the train pipe, an automatic uncoupling device carried by another of said pipes, and operated by turning the latter pipe to a certain angle, and means whereby the former pipe controls the latter pipe to turn it to the uncoupling position when the former pipe is actuated on its supporting joint by the separation of the cars, substantially as set forth. 13th. In a fluid pressure coupling for railway cars, the combination of rigid pipes jointed together on a horizontal axis, a supporting joint for connecting one of said pipes with the train pipe, an automatic uncoupling device carried by another of said pipes and operated by turning the latter pipe to a certain angle, a stop whereby the former pipe controls the latter pipe to turn it to the uncoupling position when the former pipe is actuated on its supporting joint by the separation of the cars, and a spring tending to turn the latter pipe to its coupled position, substantially as set forth. 14. In a fluid pressure coupling for railway cars, the combination of rigid pipes jointed together, a casing for one of said joints, a coupler carried by one of said pipes next to said casing and a spring enclosed within the casing and connected with the last mentioned pipe and acting to press the same with its coupler into the coupled

position, substantially as set forth. 15th. In a fluid pressure coupling for railway cars, the combination of rigid pipes jointed together, a casing for one of such joints, a coupler carried by one of said pipes, a spring within the casing and connected with the last mentioned pipe, to press the coupler to the coupled position, and means for changing the tension of said spring, substantially as set forth. 16th. In a fluid pressure coupling, the combination of a universal joint, one member of which is rigid with the car, a metallic or other rigid pipe leading outward from the other member of said joint, an automatic uncoupling device carried at the outer end of said rigid pipe and jointed thereto whereby it may be turned by hand to the uncoupling position, and a stop carried or operated by said rigid pipe for moving said coupling device into the uncoupling position when said rigid pipe is elevated by the separation of the cars, substantially as set forth. 17th. In a fluid pressure coupling for railway cars, the combination of the pipe M having the casing *m* formed with a tapering seat *m'*, the plug *n* fitting said seat and carrying a coupling device, and the spring T acting upon the end of the plug, said parts forming a continuous duct, substantially as set forth. 18th. In a fluid pressure coupling for railway cars, the combination of the pipe M, a casing *m* having a seat *m'*, a plug *n* fitting in said seat, and carrying a coupling device, and a stop arranged at the end of said plug, and adjustable, whereby a lateral movement of the coupler is prevented from unseating said plug, substantially as set forth. 19th. In a fluid pressure coupling for railway cars, the combination of the pipe M, having a casing *m*, formed with a seat *m'*, a plug *n*, fitting in said seat and carrying a coupling device, and closed oil chambers at the ends of said plug, substantially as set forth. 20th. In a joint for fluid pressure ducts and other purposes, the combination of an interior or ball member having a through passage or chamber and adapted to be connected with a pipe, an external or socket member enclosing said ball and adapted to be connected with a pipe, said socket member comprising a casing having an internal shoulder, a supplemental socket piece engaging said ball and secured to the casing, and a socket piece fitting within the casing, movable longitudinally therein and having an external shoulder, and a spring interposed between said shoulders, substantially as set forth. 21st. In a joint for fluid pressure ducts and other purposes, the combination of an interior or ball member having a through passage or chamber and adapted to be connected with a pipe, an external or socket member enclosing said ball and adapted to be connected with a pipe, said socket member comprising a casing having two internal shoulders on different planes, a supplemental socket piece engaging said ball and secured to the casing, and a socket piece fitting within the casing, movable longitudinally therein and having two external shoulders opposing said shoulders of the socket piece, a spring interposed between the two of said opposing shoulders, and a ring I, interposed between the other two of said opposing shoulders, substantially as set forth. 22nd. In a joint for fluid pressure ducts and other purposes, the combination of an interior or ball member having a through passage or chamber and adapted to be connected with a pipe, an external or socket member enclosing said ball and adapted to be connected with a pipe, said socket member comprising a casing having an internal shoulder, a supplemental socket piece engaging said ball and secured to the casing, and a socket piece fitting within the casing, movable longitudinally therein and having an external shoulder and a seat *g'*, a spring interposed between said shoulders, and a cleaning washer K, in said seat, substantially as set forth. 23rd. In a fluid pressure coupling for railway cars, the combination of the pipe M, and a ball and socket joint connected therewith, said joint comprising a casing, a movable socket piece within said casing and having a seat *g'*, a ball J, a supplemental socket piece secured to said casing and co-operating with the first-mentioned socket piece to hold the ball, and a cleaning washer carried by the socket piece above its seat and engaging the bearing surface of the ball, substantially as set forth. 24th. In a fluid pressure coupling for railway cars, the combination of a casing, having inclined walls *f'*, a movable socket piece therein having a seat *g'*, and formed with a tapering end opposite said inclined walls, a ball engaging said seat, a supplemental socket piece secured to said casing and engaging the ball, and a loose packing ring between said inclined walls and the end of said socket piece and adapted to follow the latter, substantially as set forth.

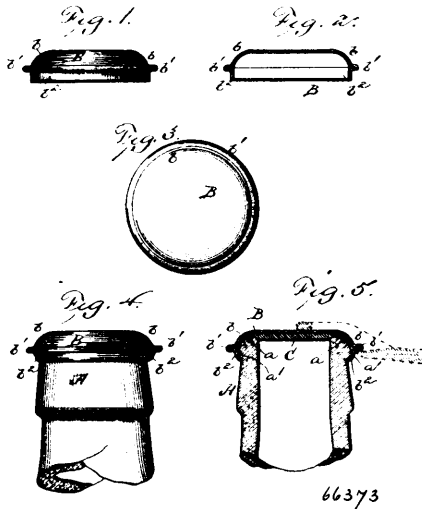
No. 66,373. Bottle Sealing Device.

(Appareil à sceler les bouteilles.)

William H. Northall, Elwood, Indiana, U.S.A., 24th February, 1900. 6 years. (Filed 12th February, 1900.)

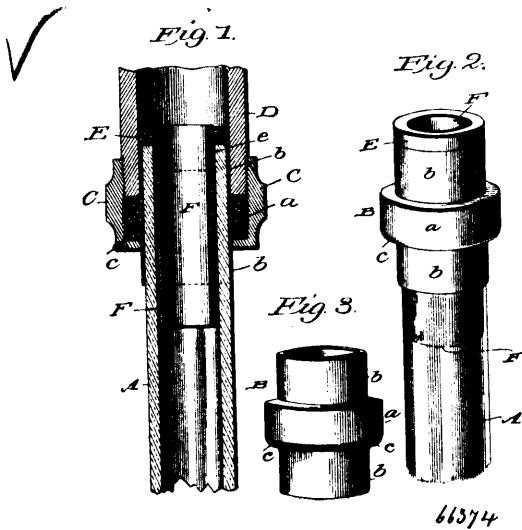
Claim.—1st. The combination with a bottle having below its lip, an annular locking shoulder, of a compressed suitable seal and a metallic sealing cap, having an annular detaching rib, and below said rib having a flange which is forced into locking contact with said shoulder for firmly confining the cap on the bottle and maintaining the seal in its compressed sealing condition. 2nd. A bott

sealing cap composed of metal, and having a flange adapted to be compressed into close contact with a locking shoulder, and having



above said edge a peripheral projecting rib for engagement by a bottle opener, substantially as described.

No. 66,374. Water Gauge. (*Jauge d'eau.*)



Henry K. Gilbert, Providence, Rhode Island, U.S.A.. 24th February, 1900; 6 years. (Filed 17th July, 1900.)

Claim.—1st. The combination with a sight tube of a water gauge of a gasket surrounding the same, and a gasket seated tube supported upon the end thereof and extending within the same, as and for the purpose specified. 2nd. The combination with a sight tube of a water gauge, of a gasket embracing the same and having portions extending in opposite directions from its flange, a gasket resting upon the end of the tube, and a tube depending within the sight tube and supported by the last mentioned gasket, as and for the purpose specified. 3rd. The combination with the sight tube of a water gauge, of a tube suspended within the same, and gaskets protecting the end of the sight tube inside and outside, substantially as specified. 4th. The combination with a sight tube of a water gauge, of a gasket surrounding the same, a gasket resting upon the end of the said tube and having a portion extending within the tube, and a tube supported upon the gasket on the end of the sight tube and extending within the said tube and out of contact therewith, substantially as and for the purpose specified.

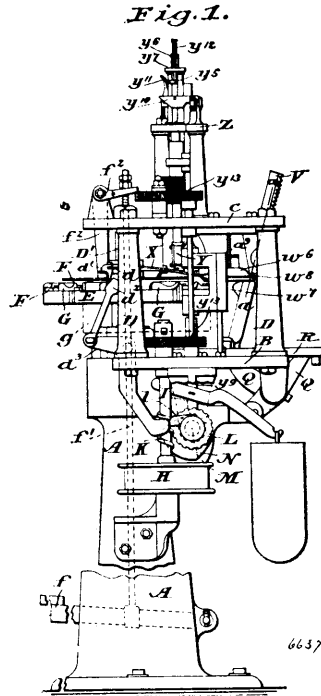
No. 66,375. Medicinal Compound. (*Composé médicinale.*)

Rosario Torchia, Brooklyn, New York, U.S.A., 21th February, 1900; 6 years. (Filed 8th January, 1900.)

Claim.—1st. The herein described method of preparing a compound of potassa and corrosive mercuric chloride which consists in mixing water and potassa in about the proportions stated, allowing such mixture to stand and settle, pouring off the clear fluid and

boiling the same, to which is then added corrosive mercuric chloride in about the proportions stated, boiling the last mixture until the water is evaporated and obtaining thereby a residum powder of a dark, reddish color. 2nd. As a new article of manufacture, a medicinal compound of potassa and corrosive mercuric chloride, which is a dark reddish powder.

No. 66,376. Machine for Forming Spiral Tags on Boots and Shoes. (*Machine à ferret pour chaussures.*)

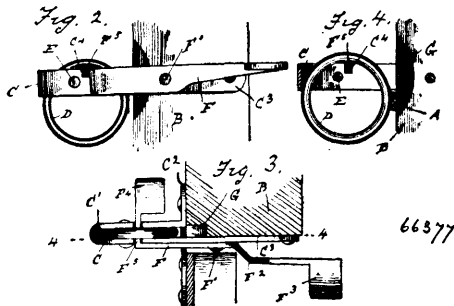
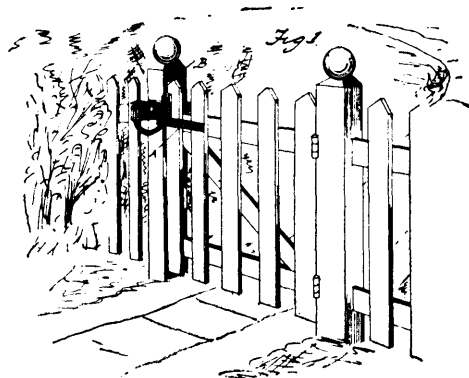


Frederick Thomas Adams, 25 Howard Street, Derby, England 24th February, 1900; 6 years. (Filed 10th February, 1900.)

Claim.—1st. In a machine for forming spiral tags on boot and other laces and the like the employment of a horizontally revolving or other rotary table having a step by step motion imparted thereto by means of ratchet and pawl operated by means of a complex lever from an eccentric on a worm gear driven cam shaft, the said table having slotted cones on or near its outer edge and spring jaws to hold laces in said slotted cones, said spiral jaws being operated by means of a treadle and rod or their equivalent, substantially as described. 2nd. In a machine for forming spiral tags on boot and other laces and the like the employment of a rotary table with details as set forth in claim 1, in combination with a device for cutting, pointing and piercing the said laces and for stopping the table in the different positions consisting of a spring weighted spindle carrying on its lower end a slotted casing having a recessed cone on its underside to engage the slotted cones of the table, said casing also containing a fixed pointed and a sliding inverted V shaped knife and piercer combined, operated by means of another rod from an arm connected to rack and complex lever operating the revolving table, the sliding knife being brought back to its normal position by means of the first position of the stroke of a lifting rod operated by means of a cam on the cam shaft the remaining part of the stroke lifting the device clear of the cones while the table revolves substantially as described. 3rd. In a machine for forming spiral tags on boot and other laces and the like, the employment of a rotary table with details as set forth in claim 1, in combination with a device for feeding and cutting off the wire consisting of a frame carrying a pair of adjustable rollers carrying toothed wheels, one of said rollers carries a ratchet wheel on one end and through said roller also passes a spindle carrying a pawl at one end and having at the other end a pinion engaging a rack driven from a complex lever operated by an eccentric on the cam shaft, said frame also carrying a fixed and a movable guide, the latter capable of being opened by means of a projection on the aforesaid rack, said frame also carrying a cutter operated by an inclined plane on aforesaid rack, substantially as described. 4th. In a machine for forming spiral tags on boot and other laces and the like, the employment of a rotary table with details as set forth in claim 1, in combination with a device for twisting the wire consisting of a pair of jaws pivoted between two plates said jaws being connected to each other by means of springs, said plates being carried by a hollow spindle through which passes a plunger whose lower end is suitable shaped for opening aforesaid jaws, the sides of plunger being grooved to receive a pair of pincers which pass upwards and are connected to each other by means of a

collar or the like, tensions rods and springs being provided in connection therewith for the purpose set forth, gear for revolving the hollow spindle and twisting jaws, said gear being operated from the driving spindle of the machine, means for raising the revolving hollow spindle and twisting jaws consisting of a weighted vertical rod lifted direct from a cam on a cam shaft and connected to the spindle by means of a small bracket which works between collars on said spindle, means for opening aforesaid jaws and pinners consisting of a small spring arm pivoted near the upper end of the weighted lifting rod and connected at one end to the frame and at the other end engaging an inclined plane on said frame as the aforesaid lifting rod comes down, substantially as described. 5th. In a machine for forming spiral tags on boot and other laces and the like, the employment of a rotary table with details as set forth in claim 1, in combination with a device for cutting off the said tags after leaving the wire twisting device, consisting of a fixed knife to which is pivoted a movable knife with an inclined edge, the said movable knife being operated by a rod having a suitably shaped extremity through the medium of a cranked lever engaging a projection on worm wheel on cam shaft, substantially as described. 6th. In a machine for forming a spiral tags on boot and other laces and the like, the employment of a rotary revolving table with details as set forth in claim 1, in combination with a cutting, pointing and piercing device as set forth in claim 2, a wire feeding and cutting device as set forth in claim 3, a wire twisting device as set forth in claim 4, a cutting off device as set forth in claim 5, the whole being mounted in suitable bearings and framings and driven from one pulley or its equivalent, substantially as set forth.

No. 66,377. Gate Latch. (*Loquet de barrière.*)



Willard I. Tripp, Deming, New Mexico, U.S.A., 24th February, 1900; 6 years. (Filed 5th February, 1900.)

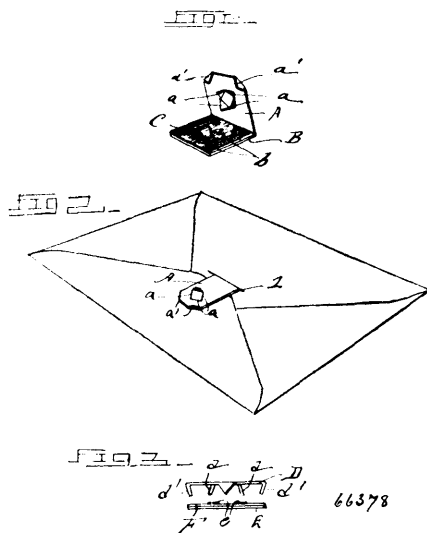
Claim.—In a gate latch, the combination with the bracket, of the post to which said bracket is attached, the corner of said post embraced by said bracket, a ring pivotally suspended within the bracket, a lever pivoted to the side of the bracket and having a lifting arm F^2 passing through the ring and adapted to rest in a notched portion of the bracket, a handle arranged upon each end of the lever, the inner, end of said lever having an offset or shoulder F^3 , and the latch bar secured to the gate and adapted to operate upon said ring, substantially as shown and described.

No. 66,378. Envelope Fastener. (*Attache d'enveloppe.*)

Charles P. Schachman, Havetia, Arizona, U.S.A., 24th February, 1900; 6 years. (Filed 10th February, 1900.)

Claim.—1st. An envelope fastener, comprising an upper plate having a series of centrally located pointed tongues extended from the under surface thereof at an angle outwardly, and a series of pointed tongues extended from the edge thereof at an angle inwardly, in combination with a lower plate having no projecting tongues or spurs and having its face opposite the tongued face of the upper plate covered with a fabric secured thereto and into which fabric the tongues of the upper plate bind when clenched, substantially as

shown and described. 2nd. In an envelope fastener, the combination of an upper and lower plate formed of a single piece of sheet



metal and bent into shape relative to each other, a sheet of fabric secured to and covering the upper surface of the lower plate, and a series of tongues formed integral with the upper plate and extending centrally therefrom at an angle outwardly, and adapted for being bent upon the upper surface of the lower plate by contact therewith, and a series of pointed tongues extended from the edge of the said upper plate at an angle inwardly, said tongues of the upper plate entering and binding under the fabric face of the lower plate when the same are clenched, substantially as shown and described. 3rd. The combination with an envelope, of a fastener comprising an upper and a lower metallic plate, the upper plate having a series of pointed tongues extended therefrom, and the lower plate having a sheet of fabric secured to and covering its face which is opposite the tongued face of the upper plate, the tongues of the upper plate are adapted to pass through the fabric and the material comprising the envelope for the purpose of fastening the same and bind under the fabric face of the lower plate when they are clenched, substantially as shown and described.

No. 66,379. Fishing Rod Reel.

(*D'évidoir pour lignes de pêche.*)

Taylor Ross, Sodam, New York, U.S.A., 24th February, 1900; 6 years. (Filed 12th February, 1906.)

Claim.—1st. A hand grip with a reel casing at its rear end divided lengthwise, the parts being hinged at said end and provided at the forward or outer end with means for securing the casing and hand grip in a closed position and for engaging the rod. 2nd. A divided hand grip for a fishing rod, carrying at one end a divided reel casing and adapted at the other end to receive a fishing rod, the casing being arranged to counterbalance the weight of the rod, substantially as described. 3rd. A fishing rod reel, comprising a divided casing, the parts of which are hinged at one side and provided at the opposite side with a divided hand grip adapted at its outer end to receive the inner end of a fishing rod, a gear frame within said casing, a shaft journaled in said frame, a spring secured to said shaft, a reel journaled on said shaft, gearing connecting said shaft and reel, and means for throwing said reel into and out of engagement with its actuating mechanism. 4th. A divided fishing rod hand grip and reel casing, in combination with a gear frame secured within said casing, a through shaft journaled in said frame, a spring secured at one end to said shaft and at the opposite end to a disc having a pawl and a ratchet connection with the shaft, a reel loose on said shaft, an internally toothed rim or gear wheel fast on said shaft, a pinion loose on said shaft geared to said rim and carrying a clutch adapted to engage a corresponding clutch on the sleeve of the reel, substantially as described. 5th. In a fishing rod reel, the divided casing therefor, having its parts hinged and provided with a divided hand grip arranged on the opposite side of the casing from the hinge, a gear frame within said casing, a through shaft journaled in said frame, a coiled spring secured at one end to said shaft, a flanged disc having a pawl and ratchet connection with the shaft and to which the outer end of the spring is secured, an internally toothed rim fast on the shaft, a reel geared to said rim, a brake for engaging said rim for preventing backward movement, means for releasing said brake, and means for releasing the reel from its actuating mechanism. 6th. A fishing rod reel comprising a gear frame, a divided casing therefor, a through shaft journaled in said frame, a flanged disc having a pawl and ratchet connection with the shaft, a coiled spring secured at its inner end to

nation, a displacement compartment containing liquid ingress and egress openings, a main valve, a main valve chamber, an exhaust therefrom, a supplemental valve, a supplemental valve chamber, an exhaust therefrom, a main ingress compressed gas passage leading to said main valve chamber, a main egress compressed gas passage leading from said main valve chamber to said displacement compartment, a branch compressed gas passage leading through said supplemental valve chamber and against a surface connected with said main valve and another branch compressed gas passage leading against a surface connected with said supplemental valve, substantially as described, whereby said main valve is pneumatically actuated independently of the liquid pumped, and a retarder whereby the movement of said supplemental valve is timed. 9th. In a displacement pump, in combination, a displacement compartment containing liquid ingress and egress openings, a main valve, a main valve chamber, an exhaust therefrom, a supplemental valve, a supplemental valve chamber, an exhaust therefrom, a main ingress compressed gas passage leading to said main valve chamber, a main egress compressed gas passage leading from said main valve chamber, to said displacement compartment, a branch compressed gas passage leading through said supplemental valve chamber and against a surface connected with said main valve and another branch compressed gas passage leading against a surface connected with said supplemental valve, substantially as described, whereby said main valve is pneumatically actuated independently of the liquid pumped, and a throttle whereby the duration of pressure against said surface connected with said supplemental valve is controlled. 10th. In a displacement pump, in combination, a displacement compartment containing liquid ingress and egress openings, a main valve, a main valve chamber, an exhaust therefrom, a supplemental valve, a supplemental valve chamber, an exhaust therefrom, a main ingress compressed gas passage leading to said main valve chamber, a main ingress compressed gas passage leading from said main valve chamber to said displacement compartment, a branch compressed gas passage leading through said supplemental valve chamber and against a surface connected with said main valve and another branch compressed gas passage leading against a surface connected with said supplemental valve, substantially as described, whereby said main valve is pneumatically actuated independently of the liquid pumped, and a throttle whereby both the pressure and exhaust against said surface connected with said supplemental valve are retarded. 11th. In a displacement pump, in combination, a displacement compartment, a main valve regulating the pressure in the same, a passage whereby pressure is conducted against a surface connected with the main valve to move the same, a supplemental valve outside the displacement compartment controlling the pressure in said passage, a passage independent of the displacement compartment whereby the pressure and exhaust produced by the movements of the main valve are communicated with a surface connected with said supplemental valve and means whereby the movement of said supplemental valve is retarded, substantially as described, whereby the main valve independently of the liquid pumped controls itself by the aid of said retarded supplemental valve. 12th. In a displacement pump, in combination, a displacement compartment containing liquid ingress and egress openings, a main piston valve and a differential plunger for operating the same, cylinders therefor, a supplemental valve, a supplemental valve chamber, a main compressed gas passage leading through said main valve cylinder, a branch compressed gas passage leading through said supplemental valve chamber against said plunger and means whereby said supplemental valve is controlled independently of the water pumped, substantially as described. 13th. In a displacement pump, in combination, a displacement compartment containing liquid ingress and egress openings, a main piston valve and a differential plunger connected therewith, cylinders therefor, a supplemental piston valve and a differential plunger connected therewith, cylinders therefor, a main compressed gas passage leading through said main valve cylinder, a branch compressed gas passage leading through said supplemental valve cylinder against said first named plunger and another branch compressed gas passage leading against said second named plunger, substantially as described. 14th. In a displacement pump, in combination, a displacement compartment containing liquid ingress and egress openings, a main valve chamber, an ingress pressure passage to said main valve chamber, an egress pressure passage from said main valve chamber, a pressure controlling valve in said main valve chamber, a branch passage whereby pressure for actuating said main valve is conducted from said ingress passage against a surface connected with said main valve and mechanism independent of the displacement compartment whereby said main valve actuating pressure is intermitted, said mechanism being mechanically disconnected from said surface, substantially as described. 15th. In a displacement pump, in combination, a displacement compartment containing liquid ingress and egress openings, a compressed gas pressure supply pipe leading thereto, a piston valve controlling said pressure, a differential surface connected with said piston valve, a differential cylinder containing said piston valve and said differential surface, a passage whereby valve actuating pressure is conducted independently of the displacement compartment from said supply pipe into said differential cylinder against said differential surface, and mechanism outside of said displacement compartment whereby said valve actuating pressure against said differential surface is intermitted, substantially as described. 16th. In a displacement pump, in combination, a dis-

placement compartment, a main differential cylinder 17, 18, a valve therein containing the differential plungers 43 and 45, a supplemental differential cylinder 19, 20, a valve therein containing the differential plungers 47 and 48, a pressure passage connected with the main cylinder between the plungers therein, an exhaust connected with the minor part of the main cylinder outside of the plunger contained therein, a port in said minor part of the main cylinder connected with said displacement compartment, a port in the minor part of said supplemental cylinder, a passage connecting the same with the major part of said main cylinder outside of the plunger therein, a pressure passage connected with the minor part of said supplemental cylinder outside of the plunger therein, an exhaust connected with said supplemental cylinder between the plungers therein, a passage connecting the major part of said supplemental cylinder outside the plunger therein with a passage to said displacement compartment, substantially as described. 17th. In a displacement pump, in combination, a duplex displacement compartment, a main differential cylinder 17, 18, a valve therein containing the plungers 43, 44 and the differential plunger 45, a supplemental differential cylinder 19, 20, a valve therein containing the differential plungers 47, 48, a pressure passage connected with the main cylinder between the differential plungers 44, 45, an exhaust connected with the minor part of the main cylinder outside of the plunger therein, a port in said minor part of the main cylinder connected with part 1 of said displacement compartment, an exhaust connected with the major part of the said main cylinder between the plungers 43 and 44, a port in said major part of the main cylinder co-operating with the plunger 44 and connecting with part 2 of said displacement compartment, a port in the minor part of said supplemental cylinder, a passage connecting the same with the major part of said main cylinder outside of the plunger 43, a pressure passage connected with the minor part of said supplemental cylinder outside of the plunger therein, an exhaust connected with said supplemental cylinder between the plungers therein, a passage connecting the major part of said supplemental cylinder outside the plunger therein with a passage to said displacement compartment, substantially as described. 18th. In combination, a differential cylinder 17, 18, a plunger in each part thereof, a connection between said plungers, a pressure passage leading into the space between said plungers, an exhaust connected with the minor part of said cylinder outside of the plunger therein, a passage connected with the major part of said cylinder outside of the plunger therein, an auxiliary valve in said auxiliary cylinder, pressure and exhaust passages connected with said auxiliary cylinder and a throttle valve in one of such pressure passages, whereby the transitions of pressure in said supplemental cylinder are timed, substantially as described. 19th. In combination with a pressure controlling valve and the ingress and egress passages thereof, the differential cylinder 47, 48, the differential plungers therein, pressure passages connecting the major and minor parts of said cylinder respectively with said ingress and egress passages and a throttle valve interposed in one of said pressure passages, whereby the speed of said plungers is regulated, substantially as described, independently of the body moved by the pressure controlled by said valve. 20th. In combination, the aligned plungers, 43, 44, of substantially equal area and the differential plunger 45, the cylinder part 18, the cylinder part 17, the pressure passage 21, entering between said cylinder parts, pressure ports in the minor cylinder part co-operating with plunger 45, pressure ports in the major cylinder part co-operating with plunger 44, exhaust ports between plungers 43 and 44, and exhaust port outside of plunger 45, a passage connecting cylinder 18, outside the plunger 43, with the passage 21, a valve 48, a plunger 47, connected therewith and a passage leading from the ports 24, to said plunger, substantially as described.

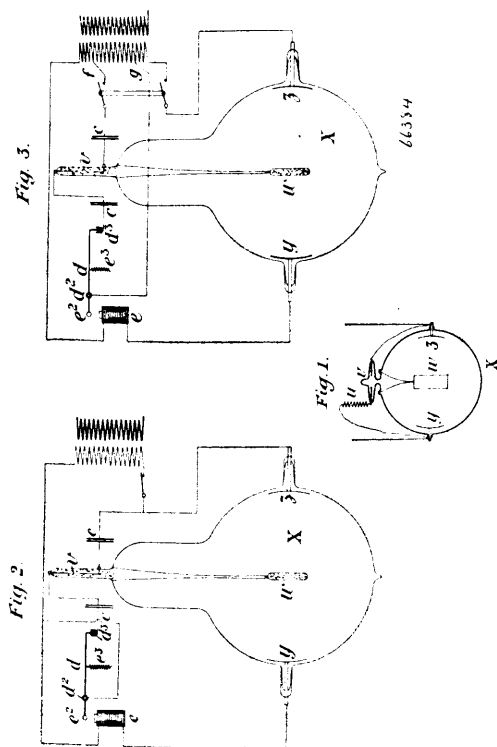
No. 66,381. Fire Escape. (*Scieur d'incendie.*)

Arthur P. O'Brien, New York City, New York, U.S.A., 24th February, 1900: 6 years. (Filed 9th February, 1900.)

Claim.—1st. In a fire escape, a receptacle comprising a casing, tubes secured to each side of said casing and adapted to be secured at their other ends to the sides of a window, a reel in said casing, a tape on said reel adapted to support a descending person, and gearing between said reel and devices for reversing the motion of same when released, substantially as described. 2nd. In a fire escape, the combination with a reel, a tape adapted to wind upon the same, and a governor adapted to be actuated by the revolution of the tape in one direction, of a spring adapted to be compressed by the rotation of the reel in one direction, a member bearing against said spring, and gearing between said member and said reel for actuating said member to compress said spring, substantially as described. 3rd. In a fire escape, the combination with a tubular casing, enlarged at its middle portion and adapted to span a window, a reel in said enlarged portion of said casing, a tape on said reel adapted to support a descending person, connection between said reel and a governor for actuating the latter to regulate the speed or descent, a rigid shaft passing centrally through said casing, a spring on said shaft, a member longitudinally movable on said shaft and bearing against said spring, and gearing between said member and said reel to move said member to compress said spring during the descent of a person, said spring being adapted to reverse the movement of said reel to wind up said tape when the latter is

pivoted arms M, connected with said frame H, the folding legs b, at the foot end of said frame I, the levers f, pivoted to said head frame, rods c, pivoted to said levers and said legs b, and the links g pivoted to said leg portions V, and said levers f, substantially as set forth.

No. 66,384. Electric Lamp. (Lampe électrique.)



Charles Henry Stearns and Charles Frederick Topham, both of Westminster, England, 26th February, 1900; 6 years. (Filed 17th April, 1899.)

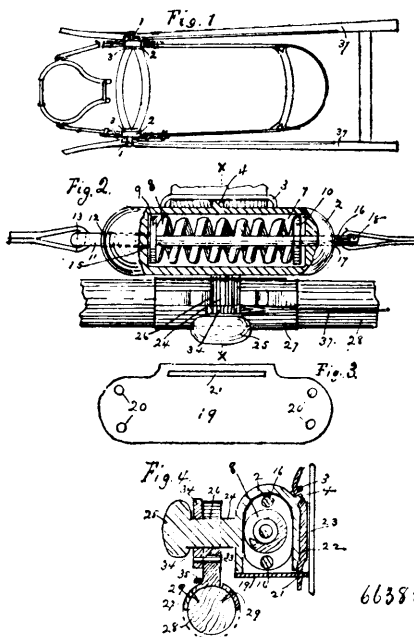
Claim.—1st. In a lamp or illuminating device for producing radiation and light by means of cathode rays, the combination with a sparking chamber of a condenser, or condensers, or induction, or choking coil, or coils, substantially as hereinbefore described. 2nd. In a lamp or illuminating device for producing radiation and light by means of cathode rays, the combination with a sparking chamber of an interrupter, and a condenser, or condensers, or self-induction, or choking coil, or coils, substantially as hereinbefore described. 3rd. In a lamp or illuminating device for producing radiation and light by means of cathode rays, the combination of two transformers, or two sections of the same transformer, with the main circuit and with the sparking chamber respectively, and an interrupter in the sparking circuit actuated by the current in the principal circuit of the lamp, or exhausted vessel, substantially as described. 4th. In a lamp or illuminating device for producing radiation and light by means of cathode rays worked by means of a transformer, a regulating magnet interposed in the primary circuit of the transformer, substantially as hereinbefore described. 5th. In a lamp or illuminating device for giving light by means of cathode rays, the electrodes situated at one end of the bulb, or exhausted vessel, and an incandescing body with the sides, or surface, or surfaces to be rendered incandescing, opposed to such electrodes, substantially as hereinbefore described. 6th. In a lamp or illuminating device for giving radiation and light by means of cathode rays, a narrow tube situated between the aperture of the sparking chamber and the interior of the bulb, or exhausted vessel, substantially as and for the purpose hereinbefore described. 7th. The combination in a lamp or illuminating device, of apparatus for giving light by means of cathode rays and a transformer which forms a part of the lamp, substantially as hereinbefore described.

No. 66,385. Harness Hitching Device. (Attelage.)

James Polk Field, Atlanta, Georgia, U.S.A., 26th February, 1900; 6 years. (Filed 6th February, 1900.)

Claim.—1st. A harness hitching device, comprising a casing having a toggle formed thereon, said toggle having an enlarged free end, a socket on the shaft of the vehicle engaging said toggle and a latch to prevent vertical displacement thereof, draft and backing relieving spring within said casing and means for attaching the said casing to the lug strap and belly girth of a harness, substantially as

shown and described. 2nd. In a harness hitching device of the type specified, the combination of a casing provided with a toggle, a



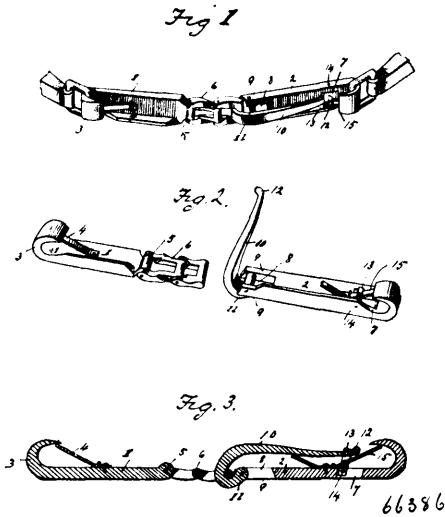
compressible spiral spring within said casing, said spring being normally extended between the forward wall of the casing and a sliding plate fixed upon the rear end of a draft rod, said draft rod passing longitudinally forward through the centre of said spiral spring and through a suitable aperture in the forward end of said casing, its free end terminating in a loop adapted to receive one end of the trace, said casing being provided with a loop formed integrally therewith, and adapted to receive and confine one end of the backing strap, and with an integral loop and spur adapted to secure said casing to the lug strap of the harness, with a socket and spring latch upon the shaft of a vehicle, said socket engaging the toggle of the said casing, and said latch preventing vertical displacement thereof, substantially as shown and described. 3rd. In a harness hitching device of the type specified a casing provided with a toggle, a compressible spiral spring within said casing, said spring being normally extended between a plate fixed upon the rear end of the draft rod, and a plate fixed upon the forward end of two oppositely positioned backing rods, said backing rods being adapted to slide through suitable apertures in the rear wall of said casing, and terminating in an integral loop adapted to receive and confine one end of the backing strap, with an integral loop and spur adapted to secure said casing to the lug strap of the harness, substantially as shown and described. 4th. In a harness hitching device, the combination of the casing, provided with a toggle, a compressible spring within said casing, draft and backing rod, and a detachable plate adapted to close the open side of said casing, said plate being provided with a longitudinal slot near the inner edge thereof, said slot being adapted to receive the end of the lug strap and means for securing said plate to said casing, substantially as shown and described. 5th. In a harness hitching device, a socket embodying a base portion, the lower side of which is concaved and adapted to fit closely to the shaft of the vehicle, means for connecting said base portion to said shaft, an upwardly projecting neck formed integrally with said base plate and adapted to form the base of the socket, two upwardly projected spurs formed integrally with said neck and adapted to form the side walls of the socket, the upper portion of walls being bevelled to facilitate the entrance of the hitching toggle, and a spring latch to prevent vertical displacement of the toggle, substantially as shown and described.

No. 66,386. Hame Fastener. (Couplière d'attelles.)

Irving Abell, Otisco, Minnesota, U.S.A., 26th February, 1900; 6 years. (Filed 31st January, 1900.)

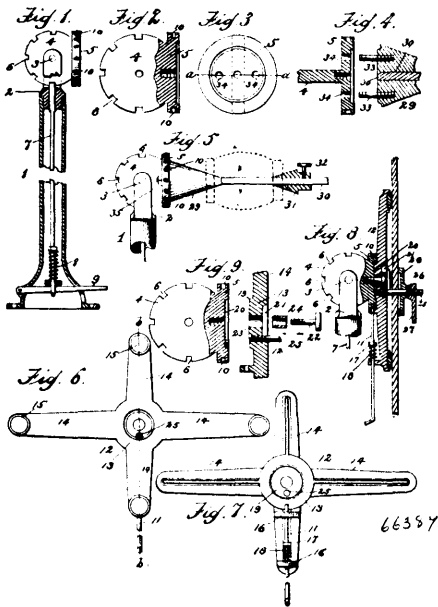
Claim.—The combination with two members having hooks at their outer ends adapted to engage the eyes at the lower ends of a pair of hames, one of said members having its inner end provided with a chain, and the other member being provided with a pivoted curved lever having its free end formed with a stop shoulder, a bail pivoted to this member on a transverse pivot and adapted to engage the free end of the lever, and a spring secured to said member and having one end projecting through the bail and curved downward into engagement with the hook to form a spring tongue, and having its

other end curved downward and engaging the upper side of the lever to force said lever into firm engagement with the bail, and



thereby prevent the bail from accidentally becoming disengaged from the end of said lever, substantially as set forth, for the purpose described.

No. 66,387. Vehicle Jack. (*Chèvre de carrosserie.*)

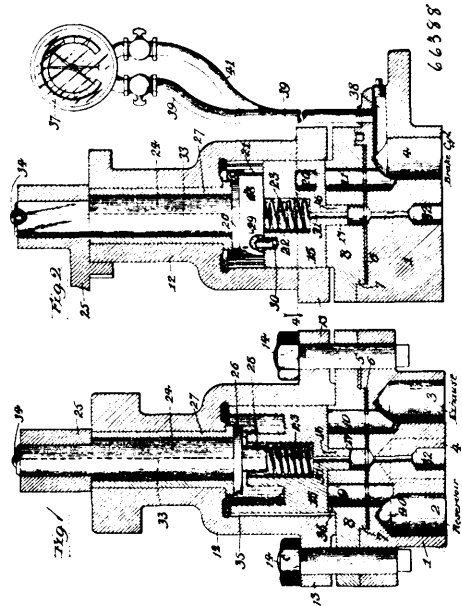


Nevin B. LeFevre, Philadelphia, Pennsylvania, U.S.A., 26th February, 1900; 6 years. (Filed 25th January, 1900.)

Claim.—1st. A repair or assembling jack for vehicles comprising a standard, a head movably connected to said standard, a device to hold said head in different desired positions, a casting removably connected to said head, and means substantially as described to secure parts of a vehicle to said casting, as and for the purpose specified. 2nd. A repair or assembling jack for vehicles comprising a standard, a head connected to said standard, connected discs pivoted to said head, a casting movably connected to said discs, and means substantially as described to adjust said discs upon said head and said casting upon said discs, as and for the purpose set forth. 3rd. In a repair or assembling jack for vehicles a tubular standard, a head thereon, a disc pivoted to said head and provided with peripheral indents, a locking rod normally in engagement with said indents, a device to move said rod from said indents, a casting removably connected to the disc, and a device connected to said casting to secure parts of a vehicle thereto, substantially as described. 4th. In a repair or assembling jack for vehicles, a standard, a disc pivoted to said standard, a device to hold said disc at different adjustments, a casting pivoted to said disc, a locking device to hold said casting in different adjustments on said disc, and means substantially as

described to hold parts of a vehicle on said casting, as and for the purpose set forth. 5th. In a repair or assembling jack for vehicles a tubular standard, a head thereon, a disc 4, pivoted to said head and provided with peripheral indents, a locking rod in said standard to engage the indents on said disc, and a device to move said rod from said indents in combination with a disc 5, connected to said disc 4, a casting hinged to said disc 5, a device to hold said casting in different positions on said disc, and a device to secure parts of a vehicle to said casting, substantially as described. 6th. In a repair or assembling jack for vehicles a standard, a head thereon, a disc 4, hinged to said head and provided with peripheral indents, a locking rod to engage said indents to hold the disc 4, in different desired adjustments, and a device connected to move said rod to release said disc, in combination with a disc 5, connected to said disc 4, and having peripheral apertures, a casting pivoted to said disc 5, a locking rod carried by said casting to engage the apertures in said disc 5, and means substantially as described to secure parts of a vehicle to said casting as and for the purpose set forth.

No. 66,388. Valve for Brakes. (*Souppape de frein.*)



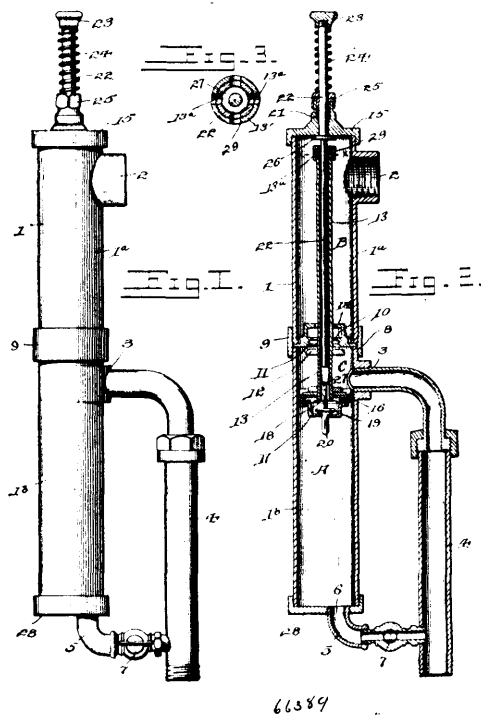
Nils Anton Christensen, Milwaukee, Wisconsin, U.S.A., 26th February, 1900; 6 years. (Filed 19th December, 1899.)

Claim.—1st. An engineer's valve for fluid pressure brake systems, comprising a head having ports communicating with the air brake system and with the atmosphere, a removable valve seat having ports communicating with said first named ports and also having a central opening passing therethrough, a rotary valve governing such ports and having a depending stem received by the said central opening, and provided with a passage communicating with said opening and means for operating the valve, said head having a valve governed drain passage communicating with said central opening in said valve seat. 2nd. An engineer's valve, comprising a seat having ports communicating with the brake system and with the atmosphere, a rotary valve having on its under face ports connecting means for governing said ports, and having a transverse slot and a central socket, and also a hole at one side of the socket, an operating stem having a rectangular end engaging in the slot and a pin arranged upon the end of the stem and entering said hole. 3rd. An engineer's valve, comprising a casing having ports communicating with the brake system and the atmosphere, and also having a central valve governed drain opening, a rotary valve governing said ports and having a central drain opening communicating with the opening in the casing, and means for rotating the valve. 4th. An engineer's valve, comprising a casing having ports communicating with the brake system and the atmosphere, and also having a chamber and a cylindrical valve fitting closely but operatively in said chamber, and having port connecting means on its lower face for performing all the functions, such chamber having a substantially vertical score on its inner wall along the entire height of the valve, which score communicates with one of said ports. 5th. An engineer's valve, comprising a casing having ports communicating with the brake system and the atmosphere, and also having a cylindrical chamber, a rotary cylindrical valve of the same diameter as said chamber and having port connecting means on its lower face for performing all the functions, such chamber having a substantially vertical score on its inner wall adjacent to said valve and of the same height as the valve, and a passage communicating between said score and one of said ports. 6th. An engineer's valve, com-

prising a casing having ports 9, 10 and 11 communicating with the brake system and the atmosphere, and having a cylindrical chamber, a cylindrical rotary valve 15 governing said ports and of the same diameter as the chamber, to fit closely but operatively therein, said valve performing all the functions on its lower face, such casing having a score 35 extending substantially vertically on its inner wall and along the entire side of the valve, and a passage 36 communicating with port 9 whereby moisture is drained from the casing and the valve prevented from becoming frozen. 7th. An engineer's valve, comprising a head 1, having ports 2, 3 and 4 communicating with the brake system and atmosphere, a removable valve seat 8 having ports 9, 10 and 11 communicating with ports 2, 3 and 4 respectively, and having a groove 9a for port 9, a valve casing connected to the head and seat, a rotary valve 15 therein having on its under face ports 18 and 19 for governing all said ports 9, 10 and 11, and an operating shaft 25 for the valve. 8th. An engineer's valve, comprising a seat having ports communicating with the brake system and the atmosphere, and having a central drain opening, a rotary valve governing said ports and having a depending stem entering said opening, said valve and its stem having an opening communicating with said opening in the seat, and means for rotating the valve. 9th. An engineer's valve operating a head 1, a removable seat 8 having ports 9, 10 and 11, a rotary valve 15 having ports 18 and 19 connected by passage 20 and having a transverse slot 21 and socket 22 in its top, a stem 24 engaging the valve, a valve casing 12, and means for securing together the head and casing and the interposed seat. 10th. An engineer's valve, comprising a head 1, a removable valve seat 8 having ports 9, 10 and 11, and also a central opening 17, a rotary valve 15 having ports 18 and 19, and a slot 21 and socket 22 in its top, a depending stem 16 upon the valve entering the opening 17, such valve also having a passage 31 communicating with the socket and opening 17, an operating stem 24 having an end 28 engaging in the slot, a spring 23 in the socket, a casing 12, and means for securing the head, casing and seat together.

No. 66,389. Water Closet Valve.

(*Soupape de latrines à eau.*)



is provided with two inlets, of a partition between said cylinders provided with a valve seat, a piston between the inlets provided with a valve seat, an open ended tubular stem communicating with said valve seat on the piston and projecting through the partition, a valve adjustably secured to the lower end of said stem in position to close the partition when the piston is at the limit of its upward movement, a gravity valve at the lower end of the stem provided with means for engaging with the end of the cylinder, and a push-rod through the stem for unseating said valve. 2nd. In a flushing device, the combination with two cylinders, one of which is provided with an outlet and the other one is provided with two inlets, a partition between said cylinders provided with a valve seat and a guide, of a piston between the inlets provided with a valve seat, an open-ended tubular stem, the lower end of which is screw-threaded, and extends through the guide and the piston communicates with the valve seat of the piston, a valve adjustably secured upon the screw-threaded portion of the stem in position to engage with the valve seat in the partition when the piston is at the limit of its upward movement, a gravity valve at the lower end of the stem provided with means for engaging with the end of the cylinder, and a push-rod through the stem for unseating said valve. 3rd. In a flushing device, the combination with two cylinders, one of which is provided with an outlet and the other one is provided with two inlets, a partition between said cylinders provided with a valve seat, of a piston between the inlets provided with a valve seat and a bail upon its underside, an open ended tubular stem projecting through the partition and the piston and provided with a valve, a valve, each side of which is provided with a stem, one of which extends into the tubular stem and the other one extends through the bail in position to engage with the end of the cylinder, and a push-rod through the stem for unseating said valve, substantially as specified. 4th. In a flushing device, the combination with two cylinders, one of which is provided with an outlet and the other one is provided with two inlets, of a partition between said cylinders provided with a valve seat and a guide, an open ended tubular stem through said guide, the upper end of which is provided with a regulator and the lower end is provided with a valve and a piston, said piston being located between said inlets, a graduating valve on the piston, and a push-rod through the stem, the lower end of which is adapted to unseat said graduating valve. 5th. In a flushing device, the combination with two cylinders, one of which is shorter than the other one and provided with an outlet and the longer cylinder is provided with two inlets, one of the inlets being located substantially midway of the length of said cylinders, of a partition between the cylinders, a piston between said inlets provided with a valve and a tubular stem, said stem projecting through the partition and extending above the same substantially the same distance that the piston is above the opposite end of the cylinder when at the limit of its movement in an upward direction, the upper end of the stem being provided with graduated openings, a graduating valve on the piston in position to engage with the end of the cylinder, and a spring actuated push-rod through the end of the cylinder and projecting through the stem to a point below the partition in position to engage with and unseat the graduating valve. 6th. A flushing apparatus for water closet bowls having a cut-off valve provided with a tubular stem in communication at one end with an exhaust, a fluid operated valve actuating piston attached to said stem and having a port in communication with the interior thereof, a graduating valve for controlling said port, a piston cylinder having feed and supply chambers separated by the piston and exposed to supply pressure, the supply chamber being in communication with a port controlled by said cut off valve, and said graduating valve of the piston being in communication with the feed chamber, means for automatically seating the graduating valve at the limit of inward movement of the piston, and a spring returned operating rod or pin extending through said tubular valve stem, and adapted for contact with the graduating valve to unseat the same.

No. 66,390. Fluid Drawing and Measuring Device.

(*Appareil à soutirer et mesurer les fluides.*)

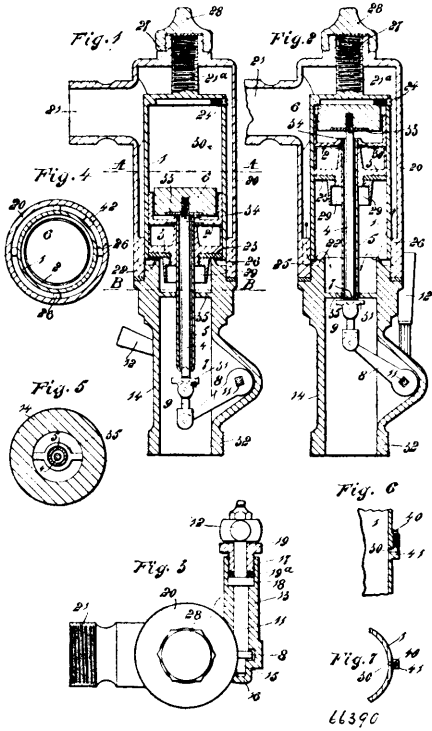
William Turnbull, Wellington, New Zealand, 26th February, 1900; 6 years. (Filed 14th April, 1899.)

Claim.—1st. In apparatus such as described herein, in combination, an outer casing, a dome suspended in the casing, a piston having a valve seat, a weight having a valve face, a piston rod secured to the said weight, means for connecting the piston rod to an operating handle, a tube secured to the piston and surrounding the piston rod, scallops upon the bottom of this said tube, a collar upon the piston rod to support the tube, a valve and an inverted conical cup loose upon the tube, a valve seat upon the top of the base, and a vent screw and vent hole in the dome, substantially as and for the purposes set forth herein. 2nd. In apparatus such as described herein, in combination, an outer casing, a dome suspended in the casing by a stem screwed into the top of the casing, a cap on the casing, a groove in the top of the stem, a piston having a valve seat, a weight having a valve face, a piston rod secured to the said weight, means for connecting the piston rod to an operating handle, a tube secured to the piston and surrounding the piston rod, scal-

Louis B. Smith, Jameston, New York, U.S.A., 26th February, 1900; 6 years. (Filed 25th September, 1899.)

Claim.—1st. In a flushing apparatus, the combination with two cylinders, one of which is provided with an outlet and the other one

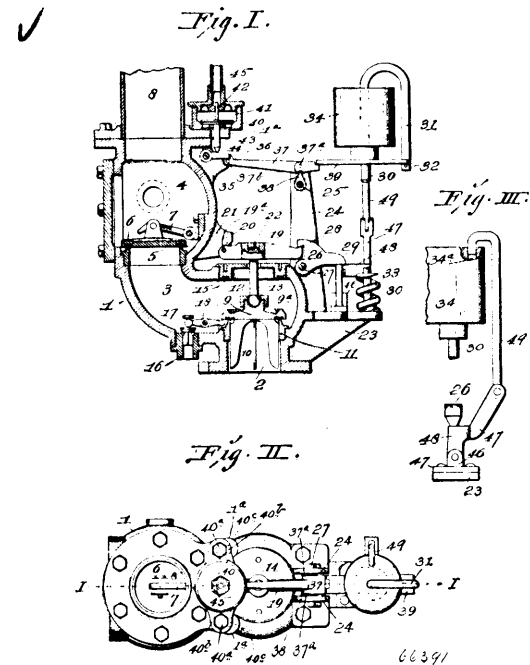
lops upon the bottom of this said tube, a collar upon the piston rod to support the tube, a valve seat upon the top of the base, and a



means, substantially as described. 2nd. In an automatic valve, the combination of a housing having an inlet and provided with connection to a conveying pipe, a valve controlling said inlet, a bar arranged to hold said valve to its seat, a dog arranged to retain said bar, a sliding weight adapted to trip said dog, a pressure controlled valve, a fulcrumed lever, a dog adapted to bear against said lever and be held thereto by said pressure controlled valve, a trigger bar bearing upon said lever and supporting said weight, and means for holding said dog until said weight falls and releases said holding means, substantially as described. 3rd. In an automatic valve, the combination of a housing having an inlet and provided with connection to a conveying pipe, a valve controlling said inlet, a bar arranged to hold said valve to its seat, a dog arranged to retain said bar, a pest, a weight adapted to slide on said post and to trip said dog, a pressure controlled valve, a fulcrumed lever, a dog adapted to bear against said lever and be held thereto by said pressure controlled valve, a trigger bar bearing upon said lever and supporting said weight, and means for holding said dog until said weight falls and releases said holding means, substantially as described. 4th. In an automatic valve, the combination of a housing having an inlet and provided with connection to a conveying pipe, a valve controlling said inlet, a bar arranged to hold said valve to its seat, a dog arranged to retain said bar, a sliding weight adapted to trip said dog, a pressure controlled valve, a fulcrumed lever, a dog adapted to bear against said lever and be held thereto by said pressure controlled valve, a trigger bar bearing upon said lever and supporting said weight, a rocking bar upon which the said first mentioned dog is adapted to bear, and a rod connected to said rocking bar and adapted to connect with said weight, substantially as described. 5th. An automatic valve, comprising a valve housing having lateral extensions provided with elongated openings or slots, a main valve, means connecting with the main valve to hold the main valve to its seat, a pressure receiving chamber mounted on the extensions and having lateral ears overlapping the lateral extensions, a pressure valve within the pressure receiving chamber, having a stem adapted to contact with the holding means of the main valve in the different positions to which the pressure-receiving chamber is moved, and bolts whereby the lateral ears and lateral extensions are detachably connected, substantially as described.

vent screw and vent hole in the dome, substantially as and for the purposes set forth herein.

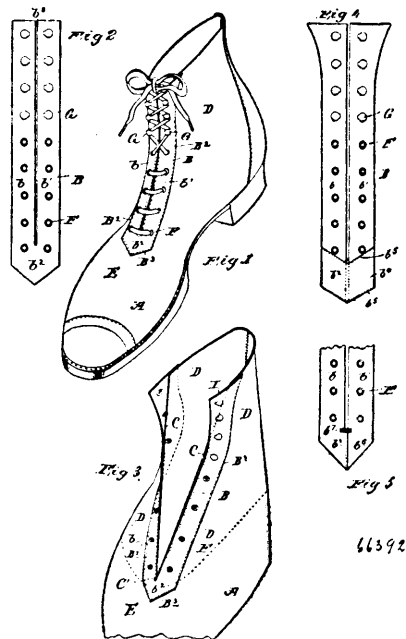
No. 66,391. Valve. (Soupape.)



Campbell Beaugard Shaw, Kirkwood, Missouri, U.S.A., 26th February, 1900; 6 years. (Filed 6th November, 1899.)

Claim.—1st. In an automatic valve, the combination of a housing having an inlet and provided with connections to a conveying pipe, a valve controlling said inlet, a bar arranged to hold said valve to its seat, a dog arranged to retain said bar, a sliding weight adapted to trip said dog, a pressure controlled valve, means whereby said weight is upheld by said pressure controlled valve, and means for holding said dog until said weight falls and releases said holding

No. 66,392. Shoe. (Chaussure.)

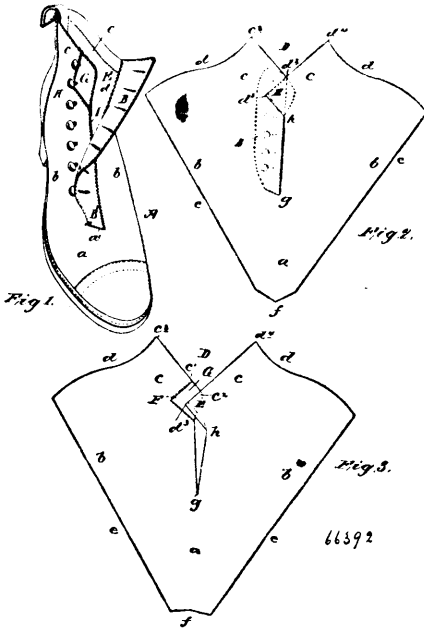


Alfred Alexander Kohn, Montgomery, Alabama, U.S.A., 26th February, 1900; 6 years. (Filed 12th February, 1900.)

Claim.—1st. A shoe having a vamp and two sides that extend above the ankle, each side comprising two portions secured together one portion of each side being in the same piece of material as the vamp and extending above the ankle from the back to the front opening, the other portion of each side being a strip located at the front opening and projecting outwardly in front beyond the material of the first mentioned portion above the ankle, said strips being of substantially the same area, the back edges of the sides being secured together, and fastening devices attached to said strips, substantially as described. 2nd. A shoe having a vamp and two sides that extend above the ankle, each side comprising two portions secured together, one portion of each side being in the same piece of material as the vamp and extending above the ankle from the back

to the front opening, the other portion of each side being a strip extending from the vamp along the front of and projecting outwardly in front beyond the material of the first mentioned portion above the ankle, the lower ends of the strips lying upon the vamp below the front opening and stitched to said vamp across the same, said strips being of substantially the same area, the back edges of said sides being secured together, and fastening devices being attached to said strips, substantially as described.

No. 66,393. Shoe. (Chaussure.)



Alfred Alexander Kohn, Montgomery, Alabama, U.S.A., 26th February, 1900; 6 years. (Filed 12th February, 1900.)

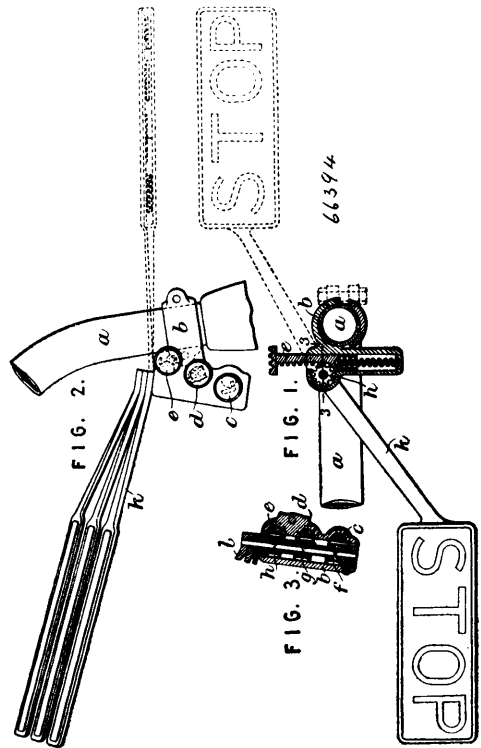
Claim.—1st. A shoe having a vamp, two sides, and a flap, one side extending above the ankle from the back to the front opening in the same piece of material as the vamp but having a cut out part in its top front corner the lower side of which is above the instep and ankle, the other side extending from the back to the front opening above the ankle in the same piece of material as the vamp, the back edges of the sides being secured together, said flap being secured to the complete side at the edge of the front opening and having its lower end laid upon the vamp and secured thereto, said flap overlying the cut out part of the other side when buttoned, substantially as described. 2nd. A shoe upper having a vamp, two sides, and a flap, one side extending above the ankle from the back to the front opening in the same piece of material as the vamp but having a cut out part in its top front corner, the lower edge of which is above the instep and ankle, a filling piece secured to the side having side cut out part to close the latter, the other side extending complete from the back to the front opening above the ankle in the same piece of material as the vamp, the back edges of the sides being secured together, said flap being secured to the complete side at the edge of the front opening and having its lower end laid upon the vamp and secured thereto, said flap overlying the cut out part of the other side when buttoned, substantially as described. 3rd. A blank for a shoe upper comprising a piece of material having a recess D, on one side to form the upper edges of the sides, said blank also having a cut along the line g, h, that extends centrally along the instep to a point above the same, a cut along a line from h to d³, extending in to the upper front edge of one side above the ankle portion, and a cut along a line from d³ to d², to the apex of recess D, the last two mentioned cuts forming an extension on the upper front edge of one side, and a recess in the corresponding edge of the other side, substantially as described.

No. 66,394. Cycle Signal. (Signal pour bicycles.)

Sophia Julia Straus, Warrington, Crescent, Maida Vale, London, England, 26th February, 1900; 6 years. (Filed 6th April, 1899.)

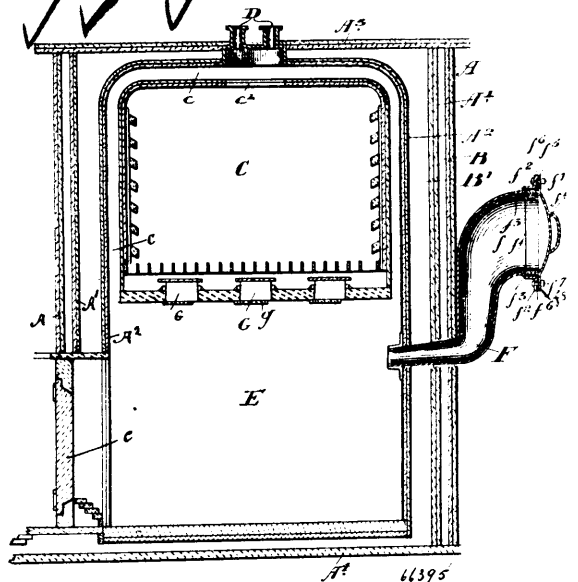
Claim.—1st. A signal attachment for bicycles comprising a series of signs carried by the bicycle and adapted to normally lie unseen in front of the rider, and each sign adapted to be separately thrown out or projected to one side, with means for so projecting same, substantially as described. 2nd. A signalling attachment for bicycles comprising a frame piece adapted to be secured to a handle bar,

a series of signs carried by levers, a spindle or sleeve for each lever and a pinion on each spindle, or sleeve with spring plungers pro-



vided with rack teeth to engage said pinions, all substantially as shown and described.

No. 66,395. Refrigerator. (Réfrigérateur.)

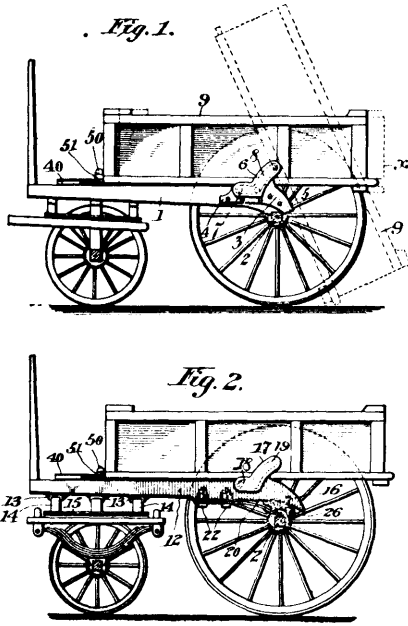


Michael Ouillette, Ottawa, Ontario, Canada, 26th February, 1900; 6 years. (Filed 11th December, 1899.)

Claim.—1st. In a refrigerator of a class described, the combination with the casing provided with an air outlet in the upper portion thereof, of a pipe located at or in proximity with the base of the refrigerator and connecting the interior of the refrigerator with the outside atmosphere, as and for the purpose specified. 2nd. In a refrigerator of the class described, the combination with the casing provided with an air inlet at its upper end of a pipe located at or in proximity with the base of the refrigerator and connecting the

interior of said refrigerator with the outside air said pipe, having its outer end upturned and cowl shaped and means for temporarily closing the outer end of said pipe, as and for the purpose specified.

No. 66,396. Dumping Wagon. (Wagon à bascule.)

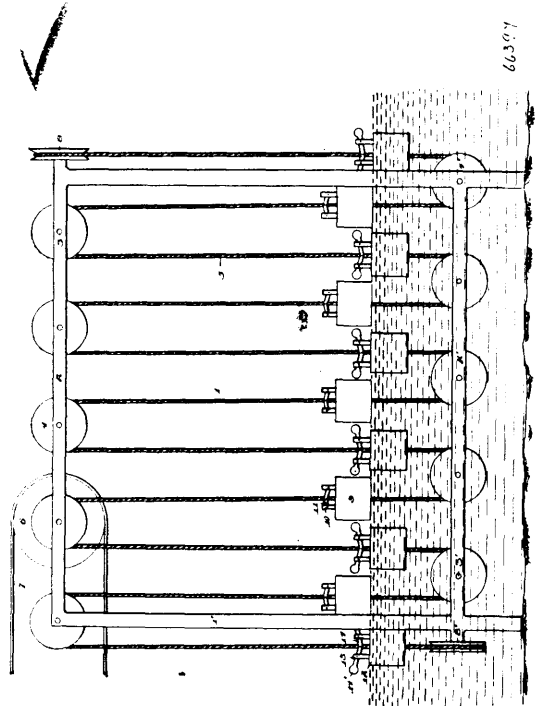


66396

Thomas Hill, Jersey City, New Jersey, U.S.A., 26th February, 1900; 6 years. (Filed 28th August, 1899.)

Claim.—1st. In a dumping vehicle, a frame having its side portions curved downward at the rear end on the upper side, offsets from said rear portions provided with upwardly and rearwardly inclined guide slots, the said guide slots being forward of the axle, to which the frame is attached, and trunnions extended from the vehicle body into said guide slots, substantially as specified. 2nd. In a dumping vehicle, a frame comprising side bars curved downward at the upper sides of the rear end, an offset extended from each side bar, the said offset having a horizontally disposed guide slot and an upwardly and rearwardly disposed guide slot forming a junction with the first named guide slot, the said guide slots being forward of the axle, a dumping body, and trunnions extended from said body and adapted to move in the guide slots, substantially as specified. 3rd. In a dumping vehicle, a frame comprising side bars, each consisting of a hollow casting having its rear end curved downward at the upper side, an offset formed on said casting near its rear end, the said offset having a horizontally disposed guide slot and an upwardly and rearwardly curved guide slot, a body, trunnions on the body adapted to move in the guide slots, a spring arranged in each side bar or hollow casting and mounted to slide on the axle of the vehicle, and link connections between the casting and the rear ends of the spring, substantially as specified. 4th. In a dumping vehicle, a frame side bar consisting of a hollow casting, an offset on said casting provided with a guide slot, the said casting being curved on its upper side rearward of the offsets, a leaf spring seated in a hollow casting, loop bolts engaging said spring and passing through lugs formed on the casting and secured by nuts, and link connections between the rear end of the spring and the casting, substantially as specified. 5th. In a dumping vehicle, a frame side bar curved downward at its rear end, and an offset on the side bar forward of said curved portion, the said offset being provided with a curved guide slot closed at its outer side, substantially as specified. 6th. In a dumping vehicle, a frame side bar consisting of a hollow casting curved downward at its rear end, an offset on said casting forward of its curved portion, said offset being provided with a curved guide slot, a spring secured to the said casting, and lugs extending downward from the forward portion of the casting, substantially as specified. 7th. A device for moving the body of a dumping vehicle, comprising a longitudinally movable rack bar having a pin to engage with a keeper on the body, a segment gear engaging with said rack, a lever mounted to swing on the pivot of the gear, and a dog pivoted to the lever and having divergent members for engaging with shoulders formed on the gear, substantially as specified. 8th. A device for moving the body of a dumping vehicle, comprising a rack bar having a pin to engage with a keeper on the body of the vehicle, a casing in which said rack bar is mounted to move, a segment gear having its teeth engaging with the rack bar, a lever mounted to swing on the pivot of the gear, and a dog pivoted to said lever and having two divergent members to engage with shoulders formed on the gear, substantially as specified.

No. 66,397. Wave Motor. (Moteur à marées.)



66397

David K. Bryson, Pittsburg, Pennsylvania, U.S.A., 26th February, 1900; 6 years. (Filed 15th June, 1899.)

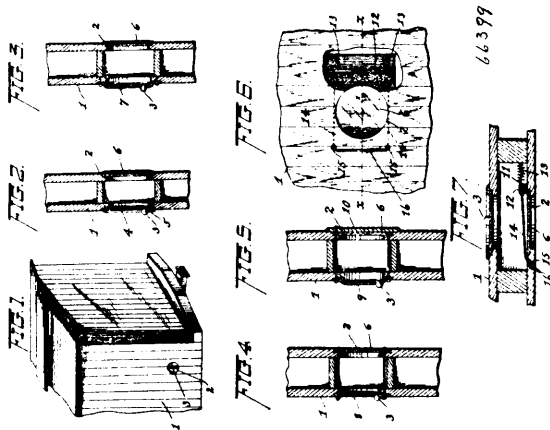
Claim.—1st. A wave power motor, consisting of an open structure or pier, a series of pulley wheels arranged in the upper portion thereof, a series of pulley wheels arranged in the lower portion thereof, an endless chain, cable or belt operating over the said pulley wheels, and a series of weights and buoys operated by the waves for operating the said cable, substantially as set forth. 2nd. A wave power motor, consisting of an open structure or pier, a series of pulley wheels suitably connected thereto, an endless chain, cable or belt operating over said pulley wheels, a series of buoys and weights carrying means for gripping the said cable for operating the same when operated by the waves, substantially as set forth. 3rd. In a wave power motor, an open structure or pier, a series of pulley wheels suitably connected thereto, an endless chain, cable or rope operating over the said pulley wheels for obtaining power, a series of floats operated by the waves adapted to grip the said chain, cable or rope on the upward movement of the floats, and a series of weights operated by the waves adapted to grip the said chain, cable or rope on the downward movement of the weights, substantially as set forth. 4th. In a wave power motor, an open structure or pier, a series of pulley wheels suitably connected thereto, an endless chain, cable or belt operating over the said pulley wheels, a series of buoys and grips suitably connected to the said buoys adapted to engage the said chain, cable or belt on their upward movement thereby operating the same, substantially as set forth. 5th. In a wave power motor, an open structure or pier, a series of pulley wheels suitably connected thereto, an endless chain, cable or belt operating over the said pulley wheels, a series of weights, and grips suitably connected to said weights adapted to engage the said cable on their downward movement thereby operating the same, substantially as set forth. 6th. In a wave power motor, an open structure or pier, a series of pulley wheels suitably connected thereto, an endless chain, cable or rope operating over the said pulley wheels, a series of buoys, grips suitably connected to the said buoys adapted to engage the said chain, cable or rope on their upward movement thereby operating the same, a series of weights, grips suitably connected to the said weights adapted to engage the said chain, cable or rope on their downward movement thereby operating the same, and means connected to one of the said pulley wheels for transmitting the power created by the operation of the endless chain, cable or rope to the point desired, substantially as set forth.

No. 66,398. Food Compound. (Composé d'aliments.)

James Moffatt Douglas, Tantallon, East Assiniboia, Canada, 26th February, 1900; 6 years. (Filed 14th February, 1900.)

Claim.—The herein described composition of matter: Wheat flour, taka diastase and chloride of sodium, compounded in the proportion above mentioned and prepared as directed as an infant and invalid food.

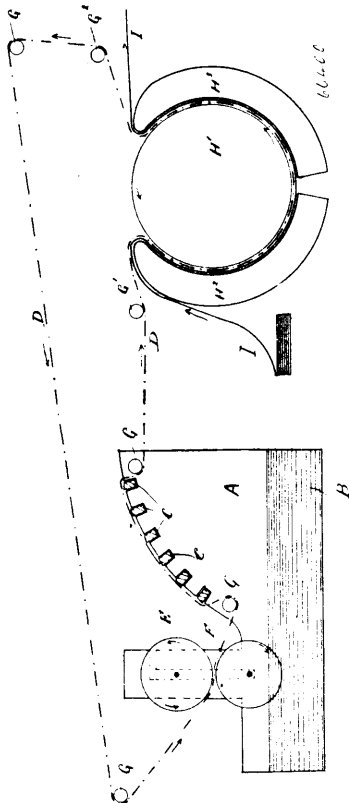
No. 66,399. Thermometer for Refrigerator Cars.
(*Thermomètre pour chars réfrigérants.*)



William Turner, Wenatchee, Washington, U.S.A., 26th February, 1900; 6 years. (Filed 12th April, 1899.)

Claim.—The combination of a refrigerating car having a tightly enclosed chamber in one of its sides, and provided with an outer transparent cover and an inner supporting plate having an opening therethrough, a thermometer in said chamber secured against the outer side of the inner plate and having its bulb closely and immovably fitting the opening therein and exposed to the interior of the car, the scale and registering tube of said thermometer being directly in front of the transparent cover, and a longitudinally movable wiping device contained within the said tightly enclosed chamber and adapted to bear against and operate to remove moisture from the inner side of said transparent cover.

No. 66,400. Apparatus for Applying Waterproofing Composition.
(*Appareil pour appliquer des compositions imperméables à l'eau.*)

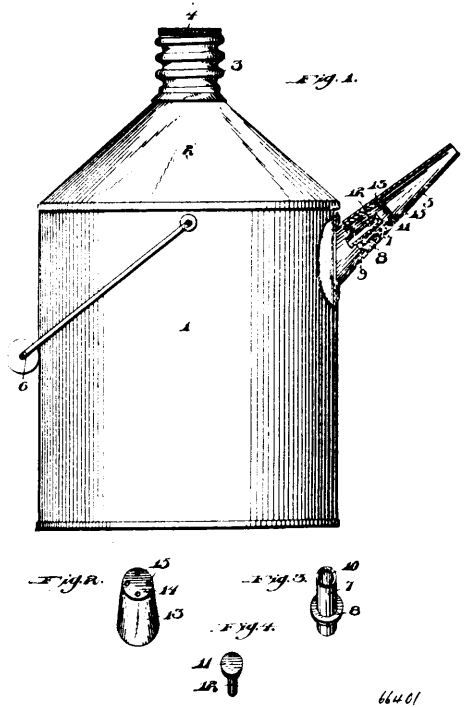


Edward Stephens, Totnes, Devonshire, England, 26th February, 1900; 6 years. (Filed 4th February, 1899.)

Claim.—A combination of parts forming and operating as an apparatus for applying waterproofing compositions, the said apparatus comprising essentially a receptacle to contain the composition,

a web to take up the composition rollers for transferring the composition to the web, a series of drawing bars, rollers to guide the web, and means for applying heat and pressure for transferring the composition from the web to the material to be waterproofed, the whole substantially as described in the above specification and exemplified as regards a rotary machine by the accompanying drawing.

No. 66,401. Non-Explosive Oil Can.
(*Bidon à huile non-explosive.*)



Ernest J. Schindehutte, McKee's Rocks, Pennsylvania, U.S.A., 26th February, 1900; 6 years. (Filed 31st January, 1900.)

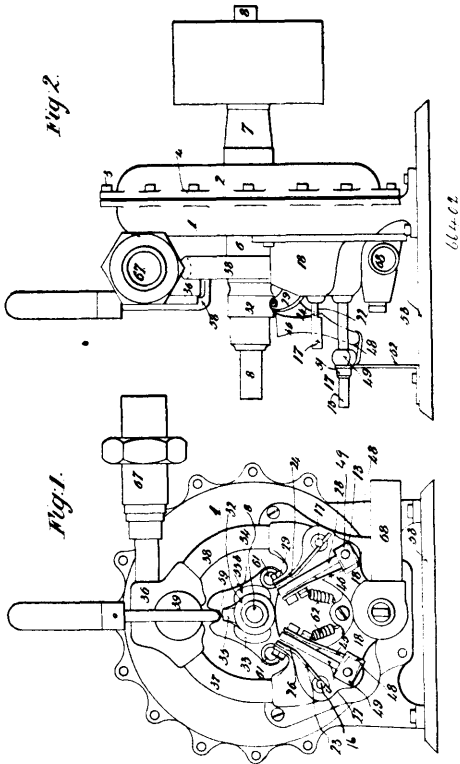
Claim.—1st. The combination with the neck of an oil can, of a disc suitably secured therein, a discharge tube connected to said disc, a valve operating against one end of said tube, and means arranged in the said spout and surrounding said tube for limiting the movement of said valve, substantially as set forth. 2nd. The combination with the neck of an oil can, of an apertured disc suitably secured therein, a discharge tube connected to said disc and having its upper end formed in a valve seat, a valve stem operating in said tube, a valve carried by said stem adapted to be brought into engagement with said seat of the tube, and a hood arranged in said spout and surrounding said tube, and provided with a series of outlet openings, substantially as set forth.

No. 66,402. Rotary Engine. (*Machine rotatoire.*)

Henry Alonzo Bueck, Russell Square, London, England, 26th February, 1900; 6 years. (Filed 18th January, 1900.)

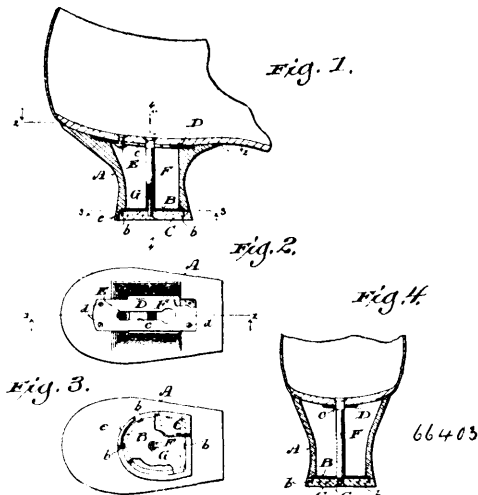
Claim.—1st. A rotary engine, consisting of an outer case provided with an annular channel or cylinder in which travels a piston under steam or other pressure, the admission of which to the said cylinder is governed by valves actuated by projections formed upon a collar or the like attached to the piston spindle or shaft, all acting and constructed, substantially as herein described and illustrated by the appended drawings. 2nd. In a rotary engine of the kind above specified, the combination of a piston 10, having its ends wedge-shaped, as shown by the drawings, with the traps or doors 12 and 13, adapted and operated by levers 45 and 46, so as to allow of the same beginning to close the bore of the cylinder as soon as the body of the piston has passed beyond said doors, thereby decreasing the amount of clearance behind the piston, substantially as herein described and illustrated by the appended drawings. 3rd. In a rotary engine of the class herein specified, a means for readily reversing the direction of the motion of the same, consisting of a plate 55^b, capable of being rocked to either right or left hand acting in conjunction with the steam cock or valve, so as to throw into action an admission valve and trap to cause steam to be admitted to the cylinder upon the opposite side of the piston, at the same time withdrawing the opposite trap and shutting off the steam supply upon that side, substantially as described and illustrated by the appended drawings. 4th. In a rotary engine, the combination of a cylinder 1, piston 10,

with admission valves 16, 17, with levers 23 and 24, doors 12 and 13, and their actuating levers 45 and 46, with the collar 32, upon the



shaft 8, and projections 33, 34 and 35, thereon, all acting and operated, substantially as herein described and illustrated by the appended drawings. 5th. The improved rotary engine, substantially as herein described and illustrated by the appended drawings.

No. 66,403. Boot and Shoe Heel. (Talon de chaussure.)

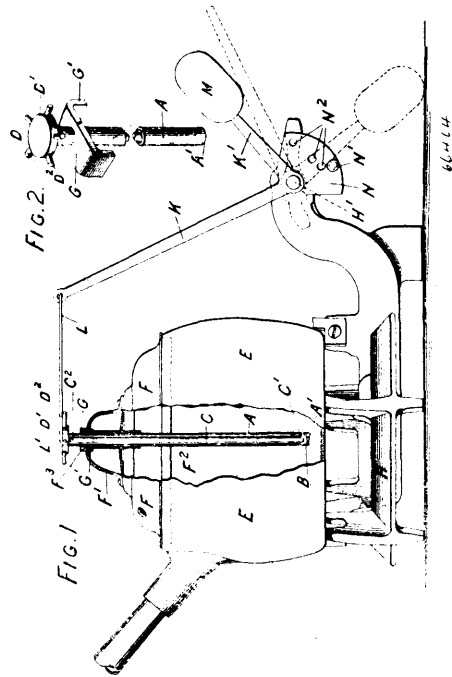


Frank Wiesen, Milwaukee, Wisconsin, U.S.A., 26th February, 1900; 6 years. (Filed 30th November, 1899.)

Claim.—1st. A heel comprising a metal shell provided with a central upper plate longitudinally thereof, another plate set in the lower portion of the shell and provided with out-turned prongs, means for connecting the upper plate with the sole portion of a boot or shoe, a sole engaging post extending down through said plates, a leather tread lift backed by the lower plate, and a post engaging screw extending up through the tread lift. 2nd. A heel comprising a closed bottom metal shell having a central upper plate extending in a direction from front to rear and provided with a key hole slot, a headed stud attachable to a boot or shoe sole for engagement with the plate slot, a post engageable with the sole to extend down

through said plate slot and the shell bottom, a leather tread lift backed by said shell bottom, and the post engaging screw extending up through the tread lift. 3rd. A heel comprising a closed bottom metal shell provided with a depending flange where the greatest wear comes upon said heel, and having a central upper plate longitudinally thereof, means for connecting the plate with the sole portion of a boot or shoe, a sole engaging post extending down through said plate and shell bottom, a leather tread lift notched to fit the aforesaid flange, and a post engaging screw extending up through the tread lift.

No. 66,404. Mechanism for Controlling and Indicating Temperature Limits. (Mecanisme pour controller et indiquer les limites de la temperature.)



Ernest Howard Griffiths, F.R.S., and William C. D. Whetham, both of Cambridge, England, 26th February, 1900; 6 years. (Filed 29th November, 1899.)

Claim.—1st. In an apparatus for controlling and indicating temperature limits the combination of a fixed member, a relatively movable member, a fusible lock between the fixed and movable members, mechanism tending to move the movable member and an operative connection which is between the movable member and the mechanism tending to actuate it and is so constructed that it can be reset without necessitating renewal or refusion of the fusible lock. 2nd. In an apparatus for controlling and indicating temperature limits the combination of a fixed member, a relatively movable member, a fusible lock between the fixed and movable members, mechanism tending to move the movable member and a ratchet and a pawl connection which is between the movable member and the mechanism tending to actuate it and enables the apparatus to be reset without necessitating the removal or refusion of the fusible lock. 3rd. In an apparatus for controlling and indicating temperature limits, the combination of a fixed member, a relatively movable member, a fusible lock between the fixed and movable members, an arm secured to said movable member, a pawl and ratchet mechanism carried by said movable member and adapted to normally retain said arm in its inoperative position, a spring connected to said arm and adapted to throw said arm into its operative position upon the breaking of the lock, substantially as described. 4th. In an apparatus for controlling and indicating temperature limits, the combination with a receptacle containing a fusible substance, of a rod rotatably sleeved in said receptacle and partially immersed in said fusible substance, an arm secured to said rod, a pawl and ratchet mechanism carried by said movable member and adapted to normally retain said arm in its inoperative position, a spring connected to said arm and adapted to throw said arm into its operative position upon the breaking of the lock, substantially as described.

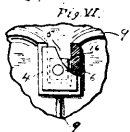
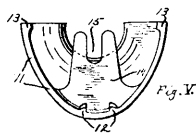
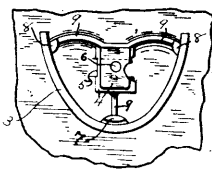
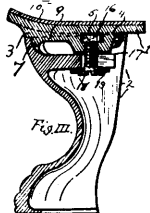
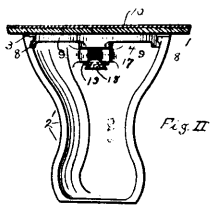
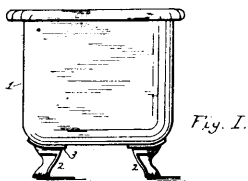
No. 66,405. Leg Fastening for Bath Tubs.

(Attache de pulte de bain.)

Alexander Ow, New Brighton, Pennsylvania, U.S.A., 27th February, 1900; 6 years. (Filed 12th February, 1900.)

Claim.—1st. In combination, in a bath tub, the body of the tub having at each of four suitable points an integral leg seat having a

continuous outline, downwardly projecting lugs or projections on the interior only of said leg seat, a projection integral with the tub

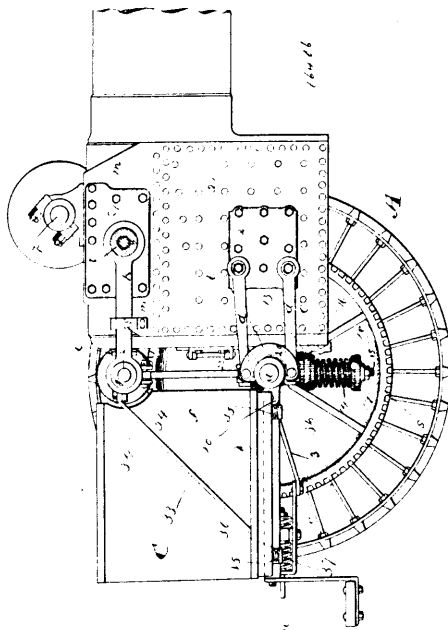


664 05

body arranged within said leg seat and provided with openings to receive a nut and screw, a leg having an upper margin the same in outline as said leg seat and adapted to be set in position thereon from directly above when the tub is in inverted position, inwardly projecting lugs within said leg margin for engaging with said leg seat lugs, an integral, inwardly projecting, slotted shank within said leg margin, and a screw engaging with said slot and said nut, for holding the leg against the tub bottom. 2nd. In combination, in a bath tub, the body having at each of four suitable points an integral leg seat having a continuous, substantially semi-circular outline slightly inclined from the horizontal to correspond to the bottom of the tub, downwardly projecting lugs or projections on the interior only of said leg seat, a projection integral with the tub body arranged centrally within said leg seat and provided with a recess opening laterally for receiving a nut, and a screw hole through its lower face into said recess, a leg having an upper margin the same in outline as said leg seat and adapted to be set in position thereon from directly above, when the tub is in inverted position, said upper margin being adapted to make continuous contact with said leg seat, inwardly projecting lugs within said leg margin for engaging with said leg seat lugs, and adapted to prevent the lateral motion of the leg with relation to the tub body, an integral, inwardly projecting slotted shank within said leg margin, and a screw engaging with said slot and with the nut in said recess, for holding the leg against the tub. 3rd. In combination in an enameled bath tub, the tub body formed with four integral leg seats, inclining slightly downwardly and inwardly, downwardly projecting lugs formed integral with each leg seat and on its inner margin, two at or near the ends, and one near the apex, and arranged centrally within each leg seat, a projection formed with a slot to receive a nut, and a screw hole through its lower wall communicating with said slot, reinforcing ribs for said lugs, legs having their upper margins substantially the same in outline as said leg seats and fitted thereto, integral lugs on the inner surface of said upper margin of each leg and integral therewith, two at or near the apex of the leg margin, and two at or near the ends of the said leg margin, adapted to engage with the corresponding lugs on the tub body, and an inwardly projecting shank integral with the outer and upper portion of said leg, formed with a slot slightly flaring and adapted to register with the screw hole in said tub projection, and a nut, screw and washer for securing the legs to the tub body. 4th. In combination in a bath tub, the tub body formed at four suitable points with integral leg seats substantially of semi circular form inclined downwardly and inwardly, downwardly projecting lugs integral with each leg seat and arranged on the inner surface thereof, one at or near the apex, and two at or near the ends of each, a projection arranged centrally within each leg seat and formed with a slot to receive a nut, and with a screw hole communicating with said slot, integral reinforcing ribs for said lugs extending from said central projection to the inner surface of each of said lugs, legs having upper margins substantially the same in outline as said leg seats and fitted thereto, integral lugs on the inner surface of each upper margin arranged in pairs, two at or near the apex

engaging on both sides of said apex lug on the tub, and two at or near the inner ends of said margin adapted to engage on the inner side of said inner lugs on the tub seat, a shank integral with the outer and upper projection of said leg extending inwardly from the apex thereof and provided with a slot adapted to register with the screw hole in said projection when the legs are set in position on the tub, and a nut and screw for securing the legs to the tub.

No. 66,106. Traction Engine. (Machine locomotive.)



George W Morris, Racine, Wisconsin, U.S.A., 27th February, 1900; 6 years. (Filed 24th March, 1898.)

Claim.—1st. In traction engines, the combination with the drive wheels and their cross axle, of the machine body and the intermediate hangers or bearings carried upon the axle to suspend the machine body, said hangers being radially sustained both cross and lengthwise in their relation to the machine body, substantially as described. 2nd. In traction engines, the combination with the drive wheels and their cross axle, of the machine body and the intermediate cannon box carried upon the axle to constitute connected hangers for suspension of the machine body, said cannon box being radially sustained both cross and lengthwise in their relation to the machine body, substantially as described. 3rd. In traction engines, the combination with the drive wheels and their cross axle, of the machine body, the intermediate hangers or bearings carried upon the axle and radially sustained both cross and lengthwise in their relation to the machine body and the yielding cushion springs interposed between said hangers and the machine body to absorb lost motion and shock, substantially as described. 4th. In traction engines, the combination with the drive wheels and their cross axle, of the machine body, the intermediate cannon box carried upon the axle and pivotally sustained both cross and lengthwise in relation to the machine body and the yielding cushion springs interposed between said cannon box and the machine body to absorb lost motion and shock, substantially as described. 5th. In traction engines, the combination with the drive wheels and their cross axle, of the intermediate hangers or bearings mounted upon the axle and pivotally sustained both cross and lengthwise in relation to the machine body, the suspension rods and coil springs carried from said hangers and the machine body having bracket extensions thereon to seat said springs, substantially as described. 6th. In traction engines, the combination with the drive wheels and their cross axle, of the intermediate cannon box mounted upon the axle and pivotally sustained both cross and lengthwise in relation to the machine body, the suspension rods and coil springs carried from said cannon box and the machine body having bracket extensions thereon to seat said springs, substantially as described. 7th. In traction engines, the combination with the drive wheels and their cross axle, of the intermediate cannon box carried upon the axle to constitute connected hangers for suspension of the machine body, the drag bars extended pivotally at each side between said box and body and the central sliding trunnion connection also extended between said parts, substantially as described. 8th. In traction engines, the combination with the drive wheels and their cross axle, of the intermediate cannon box carried upon the axle to constitute connected hangers for suspension of the machine body, the interposed cushion springs, the drag bars extended pivotally at each side between said box and the body and the central sliding trunnion connection also extended between said parts, substan-

tially as described. 9th. In traction engines, the combination with the drive wheels and their cross axle, of the intermediate cannon box mounted thereon to constitute connected hangers for suspension of the machine body, the interposed cushion springs and the drag bars pivotally extended between said cannon box and machine body in opposite pairs at each side, the separate drag bars of each pair being respectively joined to said box above and below the centre of the cross axle, substantially as described. 10th. In traction engines, the combination with the machine body, and with the ground wheels sustaining the main axle, of the cannon box mounted upon said axle, having yielding spring connection with the machine body and central sliding pivot bearing thereon to prevent side play, substantially as described. 11th. In traction engines, the combination with the ground wheels and the main axle, of the cannon box mounted thereon, the machine body carried by coil springs and swinging suspension rods from said box, the central sliding pivot extended between said box and body and the radial drag bars also extended between them, substantially as described. 12th. In traction engines, the combination with the drive wheels and their cross axle, of the machine body, the intermediate hangers carried upon the axle to suspend the machine body, the countershaft pivotally sustained at its bearings by distance links from said hangers in position parallel with the cross axle and suitable means connecting the countershaft and cross axle with the machine body whereby said parts may shift radially in unison both cross and length wise in their relation to the machine body, substantially as described. 13th. In traction engines, the combination with the drive wheels and their cross axle, of the machine body, the intermediate hangers carried upon the axle to suspend the machine body, the interposed cushion springs, the countershaft pivotally sustained at its bearings by distance links from said hangers in position parallel with the cross axle and suitable means connecting the countershaft and cross axle with the machine body whereby said parts may shift radially in unison both cross and length wise in their relation to the machine body, substantially as described. 14th. In traction engines, the combination with the main axle and the countershaft of the cannon boxes mounted respectively thereon and linked pivotally together, the machine body in yielding spring suspension from the main axle cannon box and suitable means extended between the boxes and the machine body to afford radial but not side play for said boxes across the machine, substantially as described. 15th. In traction engines, the combination with the main axle and countershaft and with the cannon boxes mounted respectively thereon and pivotally linked together, of the machine body suspended by coil springs on the main axle box and the radial drag bars and links extended pivotally between the cannon boxes and the machine body, substantially as described. 16th. In rear gear traction engines, the combination with the countershaft carrying the drive pinion and also the compensating gear, of the machine body and the gear wheel sustained at the machine body on the stud of said link and meshing respectively with the compensating gear and with the pinion of the engine crank shaft, substantially as described. 17th. In traction engines, the combination with the main axle and the countershaft, of the box bearings mounted respectively thereon and linked pivotally together and the platform frame hung from said bearings at the back of the machine body, substantially as described. 18th. In traction engines, the combination with the main axle and the countershaft of the cannon boxes mounted respectively thereon and linked pivotally together, the U-frame for the driver's platform secured by its free ends to the rear of the main axle cannon box and the diagonal side braces extended from the countershaft cannon box to said U-frame, substantially as described. 19th. In traction engines, the combination with the main axle and with the cannon box mounted thereon, of the platform frame secured centrally and at its free ends to the rear of said cannon box and the draw bar having yielding spring connection with said frame, substantially as described.

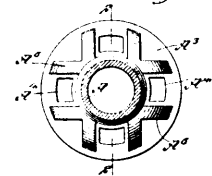
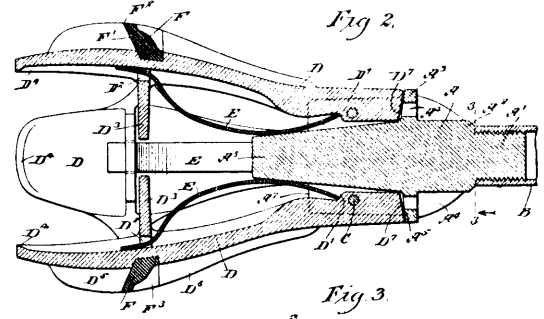
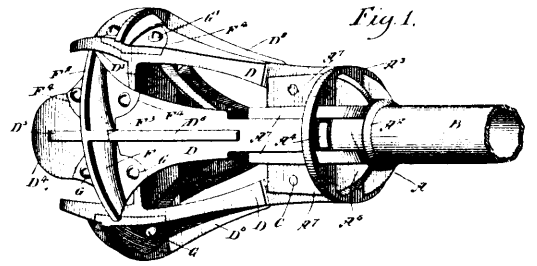
No. 66,107. Boiler Tube Scrapers.

(*Grattoir de tubes de chaudières.*)

Worthington Hooker Ingersoll, Hamburg, New Jersey, U.S.A., 27th February, 1900; 6 years. (Filed 15th February, 1900.)

Claim.—1st. A boiler tube scraper, comprising a shank provided with a disc having lugs on the front face thereof, and through apertures between the lugs, and scraping arms movably mounted between said lugs. 2nd. A boiler tube scraper, comprising a shank provided with a disc having lugs on the front face thereof, scraping arms movably mounted between said lugs, and ribs extending rearwardly from said disc along the shank in alignment with said lugs. 3rd. A boiler tube scraper, comprising a shank provided with a disc having lugs on the front face thereof, scraping arms movably mounted between said lugs, and ribs extending rearwardly from said disc along the shank in alignment with said lugs, each of said ribs consisting of two members arranged at an angle to each other and converging inwardly. 4th. A boiler tube scraper, comprising a shank provided with a disc having lugs on the front face thereof, said front face being inclined forwardly from its outer edge toward its centre, and scraping arms movably mounted between said lugs and having rear ends or heels arranged to lie flat against said inclined front face of the disc when the arms are close together at their front ends. 5th. A boiler tube scraper, comprising a shank, arms movably connected therewith, and blades secured to said arms and each provided

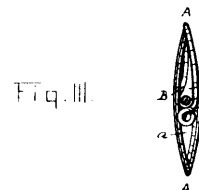
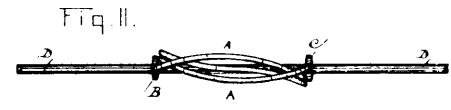
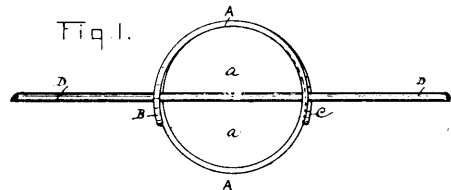
with a cutting edge inclined rearward and inward so that said edge is in advance of the point at which the blade is attached to the arm.



66407

6th. A boiler tube scraper, comprising a shank, arms movably connected therewith, and blades secured to said arms and each provided with a cutting edge inclined rearward and inward so that said edge is in advance of the point at which the blade is attached to the arm, each arm having in front of the blade a longitudinal rib, the rear end of which if inclined rearward from its outer edge, and is adapted to engage the blade, substantially as described. 6th. A boiler tube scraper, comprising a shank, arms movably connected therewith, and blades secured to said arms and each provided with a cutting edge, and also with at least four attaching lugs, two in front of the cutting edge and two in the rear thereof, these lugs and blades being countersunk in the outer surface of the arms, and fastening devices, such as screws passing through said lugs and into the arms.

No. 66,108. Clothes Pin. (*Épingle à linge.*)



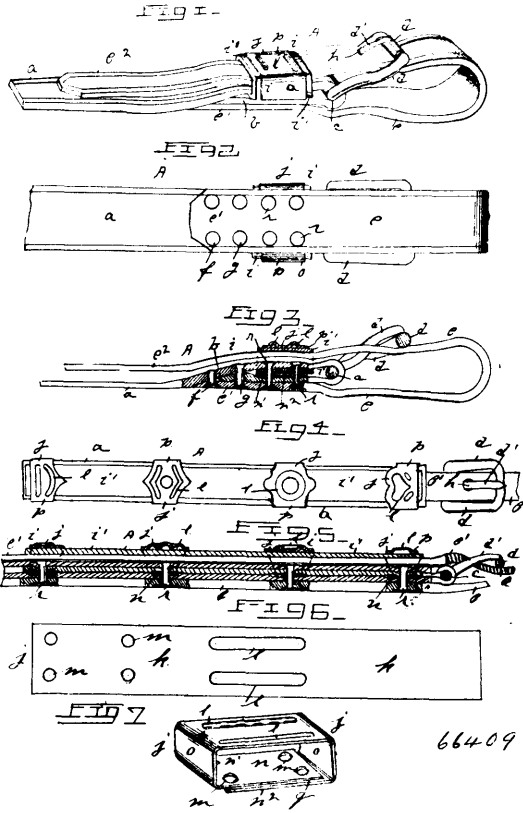
66408

Joe Jones, Summitt, Mississippi, U.S.A., 27th February, 1900; 6 years. (Filed 14th February, 1900.)

Claim.—A clothes line pin consisting of a continuous spring wire circular coil, outer ends of said coil extending below the horizontal

diametrical line of the coil, one said end extending from the reverse side to the obverse side and the other end extending from the obverse side to the reverse side of the coil and bent underneath the line which passes diametrically through the eye of the coil and between the bent ends and the said obverse parts and reverse parts of the coil to fasten the clothes on the line, as described.

No. 66,409. Strap Loop. (*Gause de bande.*)



66409

Amos Burson, Negley, Ohio, U.S.A., 27th February, 1900; 6 years (Filed 14th February, 1900.)

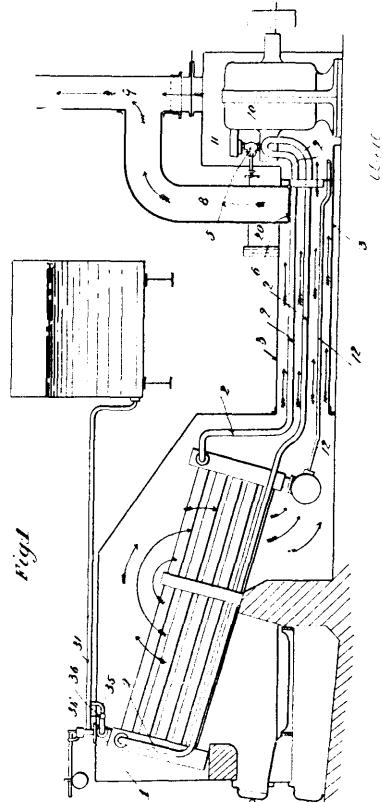
Claim.—1st. The combination with a strap, a loop or keeper confining the strap, and a thin metallic sheet band surrounding exterior of said loop or keeper and adapted to be secured to the strap and loop, substantially as and for the purpose set forth. 2nd. The combination with a strap, a loop or keeper for confining the strap, and a thin metallic sheet band surrounding exterior of said loop or keeper having overlapping ends to form a base adapted to be secured to said strap and loop or keeper, substantially as and for the purpose specified.

No. 66,410. Means of Generating Steam in Engines. (*Moyen de générer la vapeur dans les machines.*)

Henry Alonzo Buck, Russell Square, London, England, 27th February, 1900; 6 years. (Filed 18th January, 1900.)

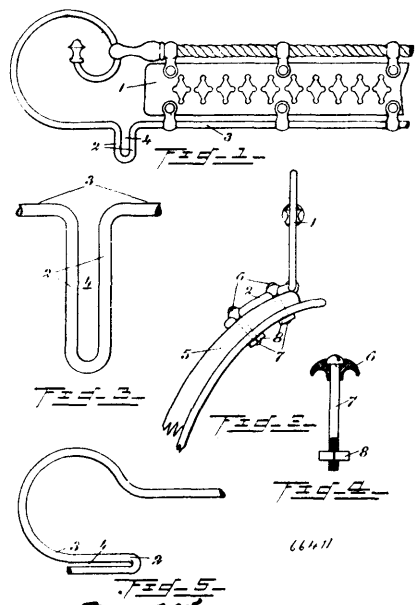
Claim.—1st. The hereinbefore described method of introducing water at a high temperature under pressure into the preferably heated cylinder of a steam engine for the purpose of conversion of the water into steam in the cylinder itself. 2nd. The combination of an hydraulic ram and feed pump for the purpose of automatically adjusting the feed and pressure of the water, substantially as described and shown. 3rd. In a steam engine working according to the general method described, the use of a measuring admission valve for regulating the charge of water introduced into the cylin-

der. 4th. The form of admission valve substantially as described, and shown more particularly in figure 4. 5th. The general combi-



nation and arrangement of parts hereinbefore described and shown in the appended drawings.

No. 66,411. Vehicle Dash Rail. (*Garde-crotte pour voitures.*)



66411

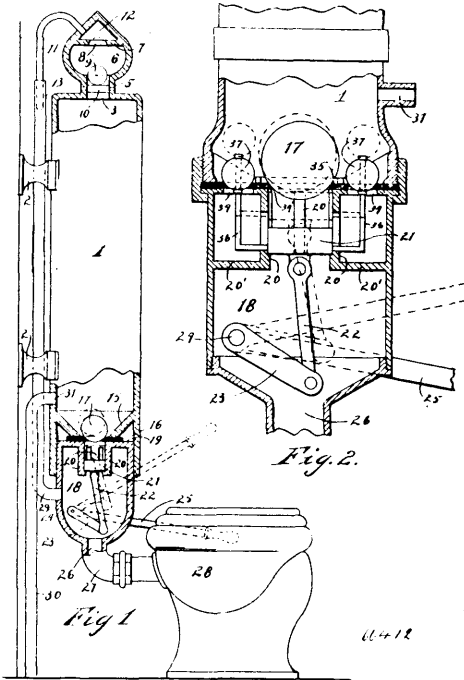
Arthur Clarence Kensinger, Toronto, Ontario, Canada, 27th February, 1900; 6 years. (Filed 26th August, 1899.)

Claim.—1st. A support for rails or screens formed out of and an integral part of the frame of said rail or screen, and consisting of two parallel bars enclosing an elongated opening, substantially as shown and described. 2nd. In a support for rails or screens, the combination of two parallel bars enclosing an elongated opening

said bars projecting from and formed out of and an integral part of the frame of said screen or rail, with cleats and retaining bolts for securing said support, said cleats straddling said parallel bars, substantially as shown and described.

No. 66,412. Flushing Apparatus.

(Appareil à nettoyer les égouts.)

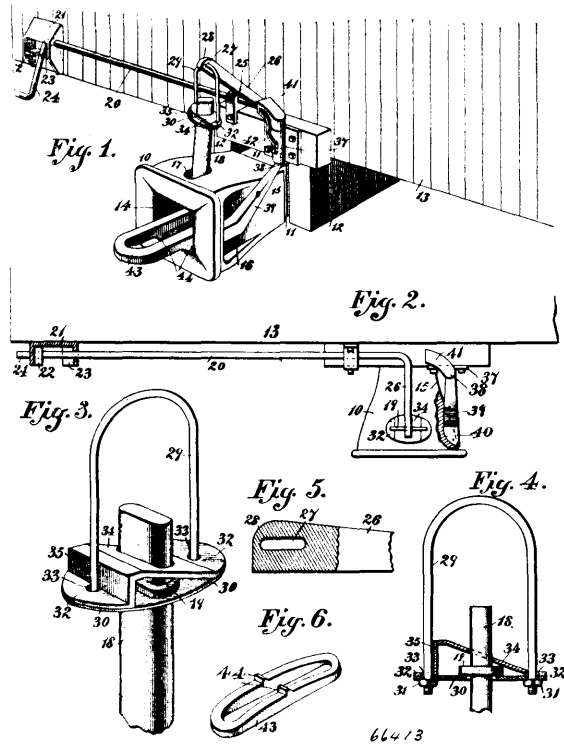


Abram N. Pasman, Jersey City, New Jersey, U.S.A., 27th February, 1900; 6 years. (Filed 10th July, 1899.)

Claim.—1st. An improved flushing apparatus for sanitary bowls, embodying a tank provided at its upper end with an air valve and at its lower end with a conical partition, a washer in contact with the edge of said partition, a floatable ball valve adapted to normally close the orifice of said washer, a secondary chamber adapted to telescope within the lower end of said tank and hold said washer in position, a series of downwardly projecting guide bars surrounding said orifice, a piston adapted to slide within said guide bars, a connecting rod pivoted thereto and to a crank fixed upon the shaft projecting through the said walls of said chamber and supplied with an operating handle, substantially as shown and described. 2nd. In an improved flushing apparatus for sanitary bowls, the combination of a tank provided at its lower end with a conical partition, a washer in contact with the edge of said partition, a floatable ball valve adapted to normally close the orifice of said washer, a secondary chamber adapted to telescope within the lower end of said tank and hold said washer in position, a concentric cylinder within said secondary chamber having a series of slots in the side thereof, a piston adapted to slide within said cylinder and start said ball valve from its seat holding the water within the tank until said ball valve has floated to the top, and to fall by gravity when the operating handle is released and permit the water within the tank to pass through the slots in the side of said cylinder, substantially as shown and described. 3rd. An improved flushing apparatus for sanitary bowls, embodying a tank provided at its upper end with a ball valve adapted to permit the ingress of air and prevent the egress of water, and at its lower end with a conical partition, the washer in contact with the edge of said partition, the floatable ball valve adapted to normally close the orifice of said washer, a secondary chamber telescoped within the lower end of said tank and holding said washer securely in position, a lever operated piston adapted to start said ball valve from its seat, an overflow pipe parallel to the tank, its lower end communicating with a secondary chamber and its upper end open to the air, and an air pipe communicating with the upper part of the tank and telescoping loosely within the overflow pipe, substantially as shown and described. 4th. In a flushing apparatus, the combination of an improved valve, an elongated cylindrical chamber, a buoyant ball held in an upper compartment of said elongated chamber and adapted to engage in an opening in the compartment to effectively stop the flow of water into the said elongated chamber, a secondary chamber attached to the lower end of the elongated chamber, a buoyant ball engaging in the opening in the partition separating the elongated and secondary chambers and employed as a valve to prevent the water from the elongated chamber flowing into the secondary chamber, thence cut into the sanitary bowl, and means

for raising said ball, thereby opening the valve and allowing water to flow, substantially as shown and described. 5th. In an improved valve for a flushing apparatus for sanitary bowls, of a secondary chamber attached to the lower end of an elongated cylindrical chamber, circular openings in the partition separating said elongated chamber from said secondary chamber, a buoyant ball engaging in the largest opening in said partition and adapted to act as a check to the flow of water into the secondary chamber, small balls engaging in smaller openings in said partition and mounted upon arms extending from a vertically moving piston, said piston being adapted by moving upward to release the aforesaid large ball, thereby admitting of the passage of water through the large opening, washers mounted around said openings in the partition and employed to insure a watertight joint, a vertically moving frame with arms having said small balls attached and working in suitable upright guides, an arm pivotally fastened to the lower portion of said movable frame, a secondary arm pivotally mounted in the secondary chamber and engaging with the lower end of said arm, and an operating arm concentrically fastened and employed as a means for raising the aforesaid balls, piston and large ball, thereby starting the action of the flushing apparatus, substantially as shown and described.

No. 66,413. Car Coupler. (Attelage de chars.)



Adolph F. Kuhlman, LaCrosse, Wisconsin, U.S.A., 27th February, 1900; 6 years. (Filed 15th February, 1900.)

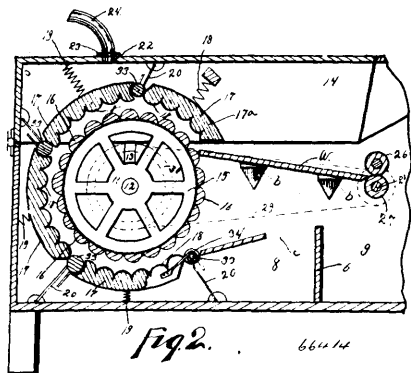
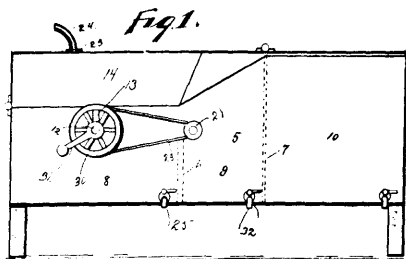
Claim.—1st. In a car coupler, the combination, with a drawhead, a shiftable rock shaft, and a pin, of means operable by the inward movement of the drawhead to release or drop said pin, substantially as described. 2nd. In a car coupler, the combination with a drawhead, of a shiftable rock shaft, a locking device therefor, a pin connected with said shaft, and means engaging with the drawhead and disposed operatively to the rock shaft, for the purpose described, substantially as set forth. 3rd. In a car coupler, the combination of a drawhead having a flared wall, a shiftable rock shaft, a pin connected thereto, and a spring actuated post having two arms, one of which engages with the flared drawhead and the other is arranged for engagement with said rock shaft, substantially as described. 4th. In a car coupler, the combination with a shouldered pin, and a lifter device, of a locking plate operatively disposed to the pin and the lifter, for the purpose described, substantially as set forth. 5th. In a car coupler, the combination with a shouldered pin, and a lifter therefor, of an offset plate slidably engaged with the lifter and having its offset portion disposed in the path of the shoulder, substantially as described.

No. 66,414. Washing Machine. (Machine à laver.)

James C. Fenimore, Newton, Kansas, U.S.A., 27th February 1900; 6 years. (Filed 15th February, 1900.)

Claim.—In a washing machine, the combination with a casing divided into compartments, of a drum journalled in one of said

compartments, a shell for the drum consisting of a plurality of arc shaped sections, swinging hangers for the said sections, slidable con-



nections between the hangers and sections, spring arranged to hold the sections yieldably at the limits of their movements in the direction of the drum, rollers arranged intermediate of the sections and means for revolving the drum.

No. 66,415. Shirt Waist and Skirt Support.
(Support de bande de chemise et jupes.)

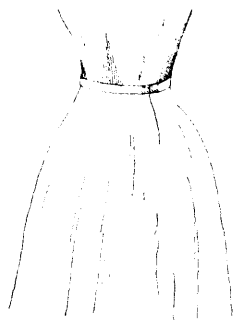


Fig. 1.

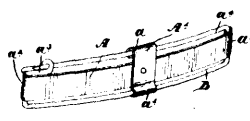


Fig. 2.

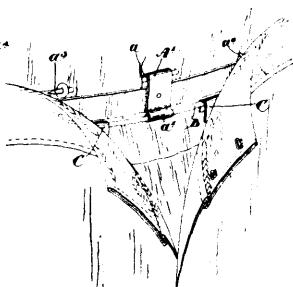


Fig. 3.

66415

James Sylvester Kenell, Toronto, Ontario, 27th February, 1900; 6 years. (Filed 14th February, 1900.)

Claim.—1st. The combination with a curved plate and a surrounding wire suitably held in the ends of the plate and formed with a partly detachable pin at the upper side and a fastening bar at the lower side, of the hooks fastened upon the skirt designed to be longitudinally adjustably supported upon the bar, as and for the purpose specified. 2nd. The combination with a curved plate and a

surrounding wire suitably held in the ends of the plate and formed with a partly detachable pin at the upper side and a fastening bar at the lower side and the central reinforcing plate suitably secured to the main plate and having a hooked upper end extending over the pin when closed and a bent lower end extending over the lower bar, of the hooks fastened upon the skirt designed to be longitudinally adjustably supported upon the bar to each side of the reinforcing plate as and for the purpose specified.

No. 66,416. Caster. (Roulette de meuble.)

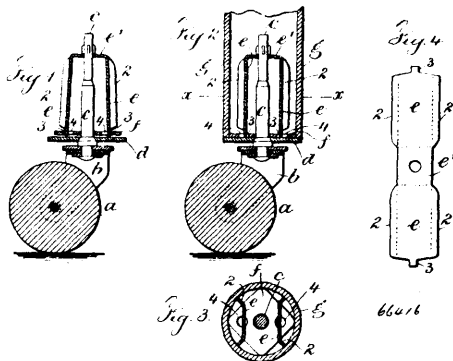


Fig. 1.

Fig. 2.

Fig. 3.

Fig. 4.

66416

Albert Benjamin Diss, Brooklyn, New York, U.S.A., 27th February, 1900; 6 years. (Filed 13th February, 1900.)

Claim.—1st. The combination with the castor wheel, jaws and pintle, a disc surrounding the pintle and upon which the tubular leg rests, and a spring frame spanning the pintle within the tubular leg and acting outwardly against the inner surface of the tubular leg to maintain the castor frictionally in position, and means for ensuring the central position of the pintle, and means acting in connection therewith and with the spring frame for limiting the movement of the spring frame, substantially as set forth. 2nd. The combination with the castor wheel, jaws and pintle, a disc surrounding the pintle and upon which the tubular leg rests, and a spring frame spanning the pintle within the tubular leg and acting outwardly against the inner surface of the tubular leg to maintain the castor frictionally in position, of a guide plate surrounding the pintle above the said disc and adapted to pass into the lower end of the tubular leg, said plate having perforations at opposite sides of the pintle, and tangs upon the free ends of the spring frame passing into the perforations of said plate, substantially as and for the purpose set forth. 3rd. The combination with the castor wheel, jaws and pintle, and a disc surrounding the pintle and upon which the tubular leg rests, of an inverted U-shaped spring frame spanning the pintle within the tubular leg and through which the pintle passes, and which frame acts outwardly against the inner surface of the tubular leg to maintain the castor frictionally in position, means for ensuring the central position of the pintle, and means acting in connection therewith and with the spring frame for limiting the movement of the spring frame, substantially as set forth.

No. 66,417. Button Fastening. (Attache de bouton.)

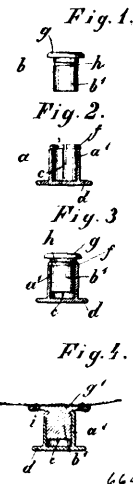


Fig. 1.

Fig. 2.

Fig. 3.

Fig. 4.

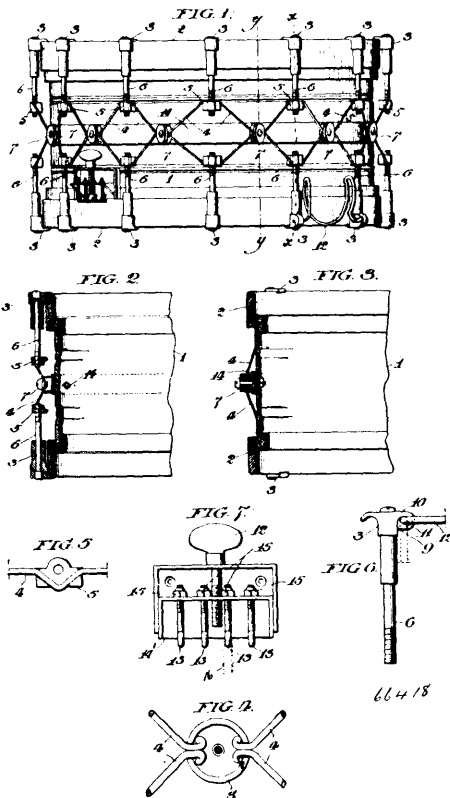
66417

Dr. Leo Huppert, Breslau, Prussia, 27th February, 1900; 6 years. (Filed 13th February, 1900.)

Claim.—A button or stud fastening for collars and the like, which consists of two parts, a and b, adapted to be connected together in

their closed condition so as to grip or catch into one another, constructed and arranged substantially as hereinbefore described.

No. 66,418. Drum. (Tambour.)



Adolph G. Soistmann, Philadelphia, Pennsylvania, U.S.A., 27th February, 1900; 6 years. (Filed 11th December, 1899.)

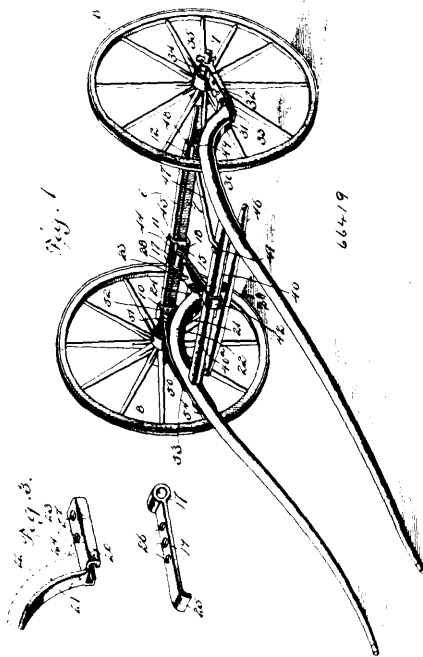
Claim.—1st. In combination with a drum, a straining cord, straining bolts and adjustable nuts thereon, as means for adjusting the tension of the head, slots in said adjustable nuts for receiving the straining cord semi-surrounding the bolts and delivering on diametrically opposite sides thereof. 2nd. In combination with a drum, a straining cord, a straining bolt and a nut threaded thereon, having a slot for the reception of the straining cord semi-surrounding the bolt and delivering upon diametrically opposite sides thereof. 3rd. In combination with a drum and adjusting means, a straining cord with knotted or enlarged ends and a hollow head secured to the body of the drum and adapted to receive and securely hold said knotted or enlarged ends of the straining cords. 4th. In a drum, the combination of a cylinder, heads and head hoops, straining bolts, cord buttons and a straining cord to co-operate therewith, and a hoop surrounding the cylinder as a brace for the same and as a support for the securing heads of the cord buttons. 5th. In combination with a drum having cords and straining hooks for tension adjustment, a folding knee rest and outwardly projecting apertured lugs upon two neighbouring straining hooks for rotatably securing the ends of the knee rest, having projections thereon for limiting the movement of the knee rest and for normally maintaining the same in an open or closed position as desired. 6th. In a snare drum, the combination with the snare of independently adjustable means for tightening each strand of the snare, substantially as described. 7th. In a snare drum, the combination with a snare of independent means for adjusting each strand of the snare, a yoke for securing the independently adjustable means and manually operative means for adjusting the yoke. 8th. In combination with a snare drum, means for the independent adjustment of the different strands of the snare and means for the adjustment of all the strands of the snare together.

No. 66,419. Shifting Thill for Vehicles.
(*Limonière de véhicules.*)

Dolor Brabant, Lewistown, Montana, U.S.A., 27th February, 1900; 6 years. (Filed 10th November, 1899.)

Claim.—1st. The combination with an axle having wheels thereon, said axle having an extension beyond one of the wheels, of thills, one of which is connected with the axle between the wheels and the other of which is connected with the extension of the axle, a lever pivotally connected with the thills, a rod connecting the free end of the lever with the axle, and a single tree pivoted to the lever. 2nd.

The combination with an axle and thills, of thill couplings comprising plates fixed to the thills, each of said plates having its sides



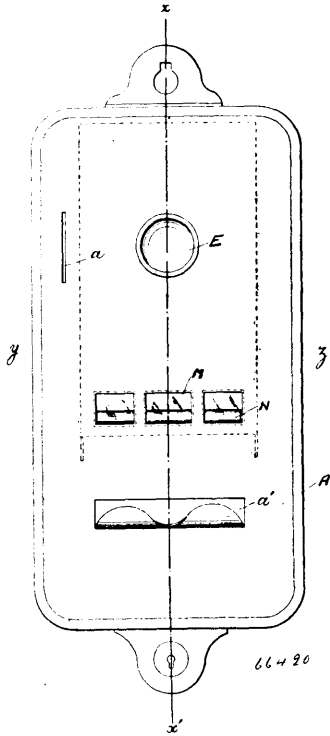
bent rearwardly and inwardly to lie parallel with the body portions of the plate and at the same side thereof to form a passage, and elements slidably disposed within the passages of the plates and adapted for connection with the axle, each of said elements having a down turned end to prevent its total displacement from its plate and being held against pivotal movement by the bent portion of the plate, and perforations in said plates and elements adapted to receive securing bolts for holding the elements at different points within the plates. 3rd. The combination with an axle having wheels thereon and an extension beyond one of the wheels, of clips upon the axle and adjacent the wheels, a third clip intermediate the first named clips, thrills connected with the intermediate clip and the extension of the axle, a lever pivotally connected with the thills, a rod connecting the intermediate clip with the free end of the lever, a single tree pivoted to the lever, and additional rods connecting the first named clips with the thills.

No. 66,420. Coin-Actuated Machine.
(*Machine actionnée par une pièce de monnaie.*)

William Luke Dennis, Birmingham, England, 27th February, 1900; 6 years. (Filed 28th August, 1899.)

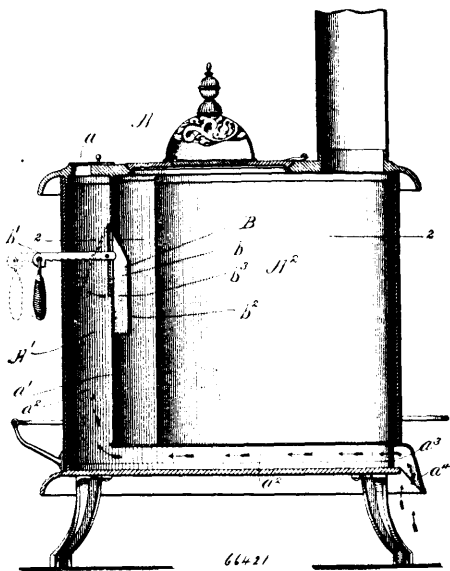
Claim.—1st. In pre-payment or coin in the slot machines for the delivery of cigarettes and other articles, the arrangement and combination within a casing A, suitable for suspending from a wall or to be otherwise supported, of a grooved barrel B intermittently rotatable beneath a supply hopper or magazine by the operation of a turning knob or handle E on the exterior of the casing, and of an adjustably weighted lever F provided with a coin catch and engaging a notched disc G until overbalanced by the weight of the coin, substantially as set forth. 2nd. In pre-payment or coin in the slot machines for the delivery of cigarettes and other articles, the combination of the locking lever F having a coin catch box J pivoted thereto, with the notched rotatable disc G having pins g projecting laterally therefrom, substantially as set forth. 3rd. In pre-payment or coin in the slot machines for the delivery of cigarettes and other articles, the combination with the hopper L of a hinged base piece L', having projecting stocks P, P', which abut against rotatable ratchet wheels O, O', substantially as set forth. 4th. A hopper for pre-payment or coin in the slot machine for the delivery of cigarettes and other articles, divided by internal partitions into a number of compartments and with each partition provided at its lower end with a sliding shutter Q retained in its closed position against the action of the spring R by lever bolts S, the said bolts

being withdrawn when the weight T bears upon them, substantially as set forth. 5th. In combination with the hopper of a coin in the



slot machine for the delivery of cigarettes and other articles, a weight T^a having ends projecting through slots *l* in the hopper slides, a lever U, and blind V, substantially as set forth.

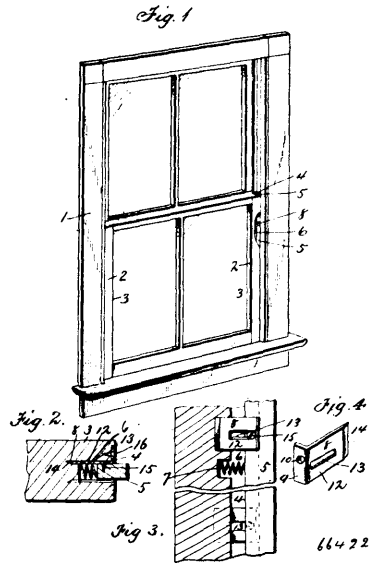
No. 66,421. Stove. (Poêle.)



Waverly Howey, Port Rowan, Ontario, Canada, 27th February, 1900; 6 years. (Filed 13th February, 1900.)

Claim.—1st. A stove, comprising a fire chamber and a draft chamber, the draft chamber communicating with the fire chamber at its upper portion and with the exterior of the stove through an opening in the rear portion of the stove, substantially as described. 2nd. A stove, having an inner casing forming a fire chamber and a draft chamber, an adjustable damper arranged in the upper portion of the inner casing, covering an opening leading to the draft chamber, the said draft chamber having a vertical portion located in front of the fire chamber and a horizontal portion located beneath the fire chamber and communicating with the exterior of the stove through an opening in the rear of said stove, substantially as described.

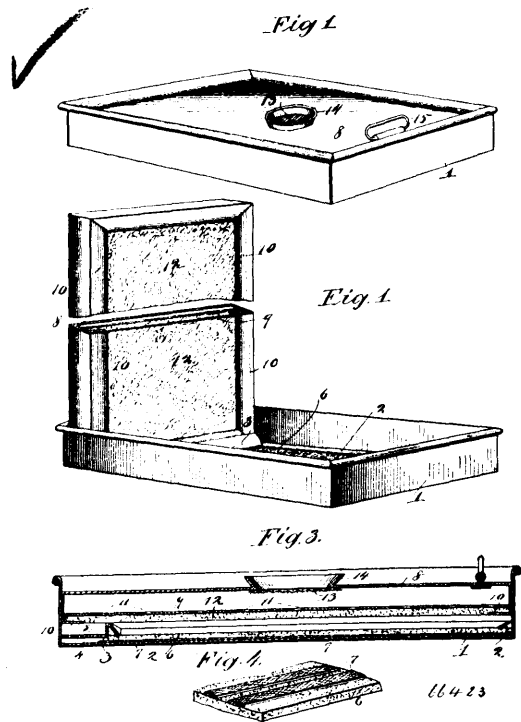
No. 66,422. Weather Strip. (Bourrelet de port.)



David B. Bander, Abrans, Wisconsin, and Charles L. Warner, Rockford, Illinois, both in the U.S.A., 27th February, 1900; 6 years. (Filed 12th February, 1900.)

Claim.—The combination with a window sash, the side rail of which is formed with a vertical groove, of the weather strip located in said groove, the coiled springs also located in said groove and bearing against said strip, the stirrup comprising the angle plate, one portion of which is formed with a screw hole and the other portion with a slot, and said slotted portion being of a length greater than the depth of the groove and having its end sharpened and driven into the said rail back of the groove, the headed pin secured to said strip and the fastening screw, substantially as described.

No. 66,423. Copying Bath. (Bain à copier.)

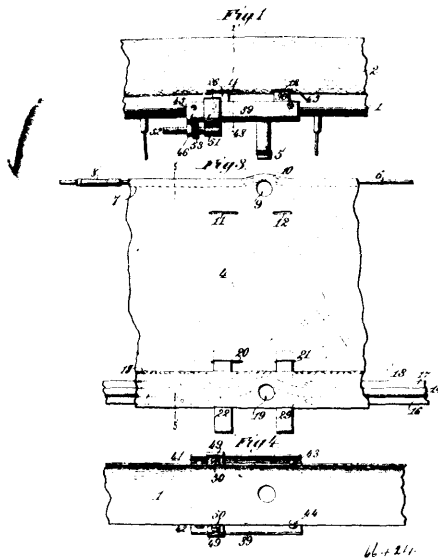


George H. Canniff, assignee of George R. Doughty, both of Cleveland Ohio, U.S.A., 27th February, 1900; 6 years. (Filed 20th August, 1899.)

Claim.—1st. In a copying bath, the combination of a receptacle having a moistening pad therein and a supplemental bottom, and a lid or cover removably fitting the said receptacle and also provided

with a moistening pad, whereby copying cloths or blotters may be moistened simultaneously from above and below. 2nd. In a copying bath, the combination of a receptacle having a water or liquid feed at one end, a pad in the lower portion thereof a supplemental bottom, a lid or cover provided with an upper opening and a perforated water distributor, and a pad on the lower part of the lid or cover. 3rd. In a copying bath, the combination of a receptacle having a supplemental bottom, and an abutment adjacent to one end, and a lid or cover adapted to be held elevated by the said abutment and provided with a perforated water distributor and a pad. 4th. In a copying bath, the combination of a receptacle having a water or liquid feed at one end, comprising a supplemental bottom and an abutment, and a lid or cover having a handle near one end and adapted to rest at the opposite end upon the said supplemental bottom between said abutment and end wall of the receptacle. 5th. In a copying bath, the combination of a receptacle having an absorbent pad therein, a supplemental bottom, and a lid or cover having an opening with a reticulated covering in the upper portion thereof, a perforated water distributor, and an absorbent pad under the latter the two pads being arranged to receive blotters or cloths therebetween whereby they may be simultaneously moistened from above and below. 6th. In a copying bath, the combination of a receptacle having a supplemental bottom and an absorbent pad in the lower portion thereof, and a removable lid or cover also carrying an absorbent pad. 7th. In a copying bath, the combination of a receptacle having a perforated supplemental bottom near one end and a transverse ledge or abutment an absorbent pad held against the bottom, and a lid or cover provided with a perforated water distributor and an opening for the admission of water, and also provided with an absorbent pad next to the distributor. 8th. In a copying bath, the combination with a receptacle having a supplemental bottom, of a pad of absorbent material, a water reservoir in said receptacle and a capillary feeding device leading from said receptacle to said absorbent pad and a cover having a water distributor and a pad. 9th. In a copying bath, the combination with a receptacle provided with a water reservoir, a perforated supplemental bottom and an abutment, an absorbent pad and a capillary feeding device, of a cover provided with an absorbent pad forming the bottom, and a water distributing device.

No. 66,424. Vehicle Tire. (Bandage de vehicule.)

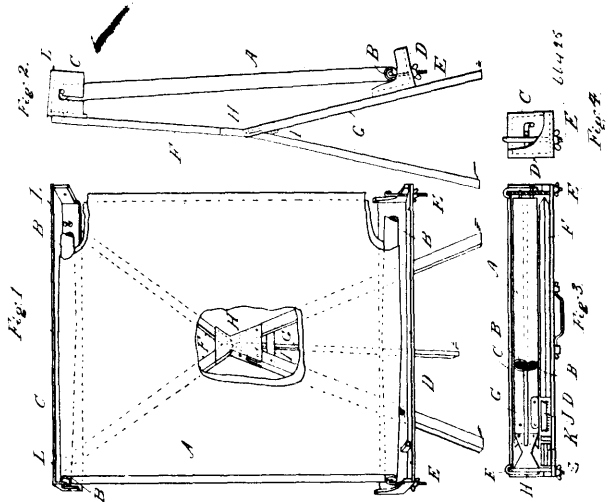


Uzziel Putnam Smith and Thomas Kane, both of Chicago, Illinois, U.S.A., 27th February, 1900; 6 years. (Filed 10th August, 1899.)

Claim.—1st. In a pneumatic tire, an outer casing having a ring secured in one edge and an adjustable retaining band secured in its opposite edge, said band a longitudinal seat or concave extending throughout its length and adapted to receive said ring, substantially as described. 2nd. In a pneumatic tire, an outer casing having a ring secured in one edge and an adjustable retaining band secured in its opposite edge, said band having a longitudinal seat or concave extending throughout its length and adapted to receive said ring and side extensions forming bearing surfaces, substantially as described. 3rd. In a pneumatic tire, an outer casing having an extensible ring secured in one edge and an adjustable retaining band secured in its opposite edge, said band having a longitudinal seat or concave extending throughout its length and adapted to receive said ring, and means for adjusting said band, substantially as described. 4th. In a pneumatic tire, in combination with a rim having a tire seat, an outer casing having in one edge a ring adapted to seat therein and in its opposite edge a retaining band having a central longitudinal seat or concave adapted to receive said ring when the

band is placed over the same, and means for clamping said band upon the rim to hold said ring securely within said concave, substantially as described. 5th. In a pneumatic tire, in combination with a rim having a tire seat, an outer casing having in one edge a ring adapted to seat therein and in its opposite edge a retaining band having a central longitudinal seat or concave adapted to receive said ring when the band is placed over the same and side extensions forming bearing surfaces, and means for clamping said band upon the rim to hold said ring securely within said concave and to hold the tire to the rim firmly at each side of the seat, substantially as described. 6th. In a pneumatic clincher tire, in combination with a rim, a retaining band having at its meeting ends arms projecting over the rim at each side thereof, means for holding one set of arms stationary, and means for adjusting the other set of arms relative to the first, substantially as described. 7th. In a pneumatic clincher tire, in combination with a rim, a plate secured thereon having stops, a retaining band having at its meeting ends arms projecting over the rim at each side thereof, one set of arms engaging said stops, a slide mounted on said plate and engaging the other set of arms, and means for adjusting said slide. 8th. In a pneumatic clincher tire, in combination with a rim, a plate secured thereon having stops and provided at one end with a recessed lug, a retaining band having at its meeting ends arms projecting over the rim at each side thereof and recessed on their inner sides, the recesses in one set of arms engaging said stops, a slide mounted on said plate and having its ends curved over opposite side edges thereof and provided with stops engaging the recesses in the other set of arms, a screw carried by said slide and working in the recess of said lug, and a nut on said screw engaging with said lugs, substantially as described. 9th. In a pneumatic clincher tire, in combination with a rim, a plate secured thereon having stops and provided at one end with a recessed lug, a retaining band having at its meeting ends arms projecting over the rim at each side thereof and recessed on their inner sides, the recesses in one set of arms engaging said stops, a slide mounted on said plate and having its ends curved over opposite side edges thereof and provided with stops engaging the recesses in the other set of arms, a screw carried by said slide and working in the recess of said lug, and a nut on said screw engaging with said lugs, substantially as described. 10th. In a clincher tire, an outer casing having a ring secured in one edge and an adjustable retaining band provided in its opposite edge, said band having a flexible longitudinal seat or concave extending throughout its length and adapted to receive said ring, substantially as described. 11th. In a clincher tire, an outer casing having an extensible ring secured in one edge and an adjustable retaining band provided in its opposite edge, said band having a flexible longitudinal seat or concave extending throughout its length and adapted to receive said ring, substantially as described. 12th. In a clincher tire, an outer casing having a ring secured in one edge and an adjustable retaining band provided in its opposite edge, said band having a flexible longitudinal seat or concave extending throughout its length and adapted to receive said ring, and means for adjusting said band, substantially as described. 13th. In a clincher tire, in combination with a rim having a tire seat, an outer casing having in one edge a ring adapted to seat therein and in its opposite edge a retaining band having a flexible longitudinal seat or concave adapted to receive said ring when the band is placed over the same, and means for clamping said band upon the rim to hold said ring securely within said concave, substantially as described.

No. 66,425. Blackboard. (Tableau.)



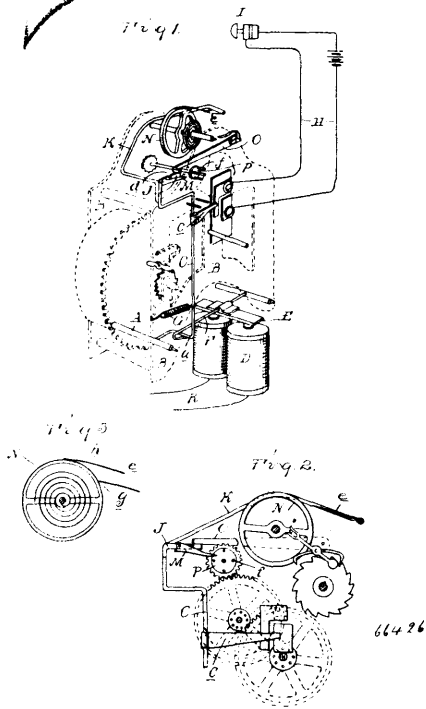
William James Semebroth and William Henry Herrick, both of St. Louis, Missouri, U.S.A., 27th February, 1900; 6 years. (Filed 29th December, 1899.)

Claim.—1st. The combination with a flexible endless web having a surface prepared for blackboard use, and end sticks or rollers sup-

porting said web at the top and bottom of end supports at top and bottom for said sticks or rollers, and screw adjustments to vary the tension on said web. 2nd. The combination with a flexible prepared endless web, and end sticks or rollers swelled in the middle and supporting said web at top and bottom, of a cap and base for said sticks or rollers respectively, a frame work adapted to support said cap and base, and screw adjustments for varying the located position of said cap and base in said frame. 3rd. The combination with a flexible prepared web, rollers for said web, a cap and a base supporting said rollers, adapted to form a packing case, a skeleton frame-work consisting of a central socket piece, arms and legs diverging above and below said socket piece, of lesser length than said packing case, means for securing said cap and base to said frame work, and means for adjusting the tension of said web. 4th. The combination with a prepared endless web, top and bottom rollers for said web, and a top and a base in which said rollers are respectively mounted and adapted to form a case for packing the dismembered blackboard of a frame work consisting of a central socket piece, a set of diverging arms and a set of diverging legs for said socket piece, adapted to carry said top and base, one set being pivoted in said socket piece, and means to adjust the tension on said web.

No. 66,126. Circuit Breaker and Closer.

(*Fermeture de circuits.*)



Warren J. Willits, Three Rivers, assignee of A. F. Hill, Detroit, both in Michigan, U.S.A., 27th February, 1900; 6 years. (Filed 5th February, 1900.)

Claim.—1st. The combination with a track circuit and an independent signal circuit both normally open, of an electro-magnet arranged in the track circuit, an independently operating motor, a circuit closing device actuated and controlled by the magnet, said device being adapted to be driven positively by the magnet, upon the closing of the track circuit, into the signal circuit to close the latter, means for automatically and positively locking and closing device, in the signal circuit, means, operating independently of the magnet, for withdrawing the closing device from said circuit when unlocked, a tripping device operated and controlled by the motor, adapted to release the closing device, and an automatically operating starting and stopping device for said motor. 2nd. The combination with a track circuit and an independent signal circuit both normally open, of an electro-magnet arranged in the track circuit, an independently operating clock movement, a circuit closing device actuated and controlled by the magnet, said device being adapted to be driven positively by the magnet, upon the closing of the track circuit, into the signal circuit to close the latter, a catch constructed to automatically engage with and lock the closing device in the signal circuit, a retracting spring for withdrawing the closing device from said circuit when unlocked, a tripping device operated at intervals by the clock movement, constructed to actuate the catch and release the closing device, and an automatically operating starting and stopping device for the clock movement. 3rd. The combination with a track circuit and a signal circuit both normally open, of an electro-magnet arranged in the track circuit, and independently operating clock movement provided with a balance wheel,

a circuit closing device, actuated and controlled by the magnet, said device being adapted to be driven positively by the magnet, upon the closing of the track circuit, into the signal circuit to close the latter, means for automatically and positively locking the closing device in the signal circuit, a retracting spring for withdrawing the closing device from said circuit when unlocked, a tripping device operated by the clock movement adapted to release the closing device, and a combined brake and impelling device, secured to said closing device, carried by the latter into frictional engagement with the balance wheel by the action of the spring to form a stop for the clock movement, and out of frictional engagement with the wheel by the magnet, to rotate the balance wheel and start the movement. 4th. The combination with a track circuit and a signal circuit both normally open, of an independently operating clock movement, an electro-magnet arranged in the track circuit, an oscillating arm operated in one direction by the magnet, a circuit closing device secured to said arm and adapted to be carried by the latter, when actuated by the magnet, into the signal circuit to close the same, a catch receiving device upon the arm, a spring actuated catch adapted to engage with said device, upon the movement of the arm in one direction and positively lock said arm from the further movement, a releasing device operated by the clock movement for unlocking the arm, a retracting spring for returning the said arm to its initial position, and means for automatically starting and stopping the clock movement. 5th. The combination with a track circuit and a signal circuit, both normally open, of an independent clock movement, an electro-magnet arranged in the track circuit, an oscillating arm operated in one direction by the magnet, a circuit closing device secured to said arm and adapted to be carried by the latter when actuated by the magnet, into the signal circuit to close the same, a catch receiving device upon the arm, a spring actuated catch adapted to engage with said device, upon the movement of the arm in one direction and positively lock said arm from further movement, means for releasing the arm comprising a trip lever pivoted to the arm and a pin wheel, operated by the clock movement, with which said lever engages, the parts being arranged and adapted to operate as described, a retracting spring for returning the arm to its initial position and means for automatically starting and stopping the clock movement. 6th. The combination with a track circuit and a signal circuit both normally open, an electro-magnet and its armature, an oscillating arm secured to said armature carrying at its free end the spring brake *e*, a clock movement provided with the balance wheel *N* and pin wheel *P*, the circuit closing device *c* secured to the arm and adapted to be driven by the latter into the signal circuit to close the same, the spring catch *o* constructed to engage with and lock the arm when in its extreme forward position, the trip lever *H* pivoted to the arm and adapted to engage with and be operated by the pin wheel, in the manner set forth, and a retracting spring for returning the arm to its initial position after its actuation by the magnet. 7th. The combination with a track circuit, and a signal circuit normally open, of an electro-magnet arranged in the track circuit, a circuit closing device for the signal circuit controlled by the magnet, means for automatically locking the closing device in the signal circuit, a tripping device for releasing the closing device, an independent motor operating the tripping device, and means for automatically starting and stopping the motor. 8th. The combination with a track circuit, and a signal circuit normally open, of an electro-magnet arranged in the track circuit, a circuit closing device for the signal circuit controlled by the magnet, and means for automatically locking the closing device in said signal circuit, an independent motor for releasing the closing device, and a combined brake and impelling device for stopping and starting the motor. 9th. The combination with a track circuit, and a signal circuit normally open, of an electro-magnet arranged in the track circuit, a circuit closing device for the signal circuit controlled by the magnet, means for automatically locking the closing device in said signal circuit, an independent clock movement for releasing the closing device, and a spring arm operating as a brake and impelling device to stop and start the escapement of the clock movement.

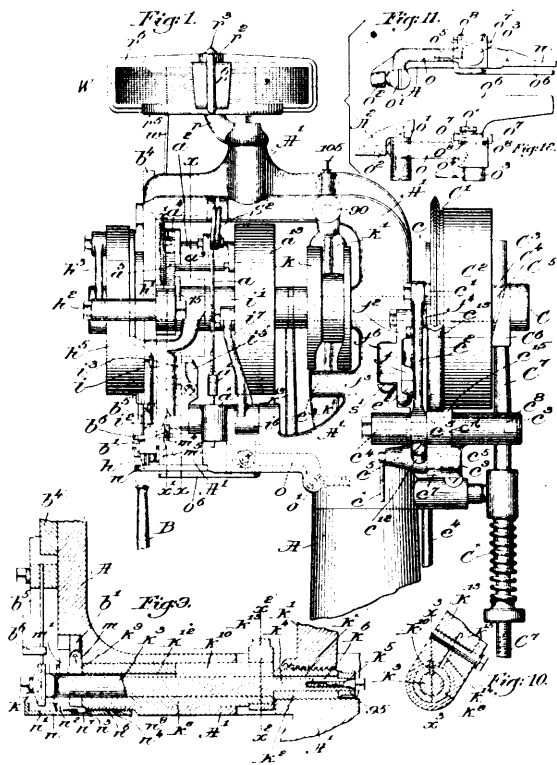
No. 66,127. Shoe and Boot Nailing Machine.

(*Machine à cheviller les chaussures.*)

United Shoe Machinery Co., Boston, Massachusetts, assignee of Louis Amedée Casgrain, Winchester, Massachusetts, both in the U.S.A., 27th February, 1900; 6 years. (Filed 5th February, 1900.)

Claim.—1st. In a nailing machine, a main shaft, a clutch therefor and a brake, controlling means governed by the rotation of said shaft to release the clutch, nail driving devices to derive their final movement from the main shaft after release of the clutch, whereby the momentum of said shaft is taken up and utilized prior to application of the brake, and means to maintain the brake inoperative until after such utilization of the momentum, to prevent shock as the machine is stopped, substantially as described. 2nd. In a nailing machine, a fixed support having a bearing, and a reel suspended at its upper part from and to rotate freely upon said bearing in a horizontal plane, and adapted to receive a coil of wire-like material, whereby the reel is rotated by said material as it is drawn off, to prevent twisting of the material, substantially as described. 3rd. In a nailing machine, a fixed support, a reel freely rotatable in a horizontal plane and suspended by a bearing between its top and

the said support, said reel being adapted to receive a coil of wire-like material and to be rotated thereby as it is drawn off, to prevent



66427

twisting of the latter, substantially as described. 4th. In a nailing machine, an upturned fixed support, a reel adapted to receive a coil of wire-like material and to rotate freely in a horizontal plane, and a bearing between the support and the underside of the reel top, to suspend the latter, the bottom of the reel having a central opening through which said support is extended and the wire-like material drawn from the interior of the coil, substantially as described. 5th. In a nailing machine, a horn, a main shaft, means, including a governing member, operated by said shaft, to periodically depress the horn for feeding the work, and a device between said shaft and said governing member, to give to the latter an additional movement, and thereby impart to the said horn a final depression when the machine is stopped, substantially as described. 6th. In a nailing machine, a horn, a main shaft, means, including a rocking lever, operated thereby periodically depress said horn for feeding the work, and devices between said shaft and said rocking lever, to give to the latter an additional rocking movement to impart to said horn a final depression and leave it down for the removal or application of the work, substantially as described. 7th. In a nailing machine, a horn, a main shaft, means operated thereby to periodically depress said horn for feeding the work, and devices between said shaft and said means, to give the latter an additional movement to impart to said horn a final depression and leave it down for the removal or application of the work, combined with a brake, and a brake controller to put into or out of operative position the said devices located between the main shaft and means for periodically depressing the horn, whereby the brake is also applied to the main shaft to restrain its rotation, substantially as described. 8th. In a nailing machine, the following instrumentalities, viz., a horn, a main shaft, a cam and a clutch thereon, a clutch rod, a brake, and a brake controller co-operating with the cam, and means operated by the cam to periodically depress the horn for feeding the work, combined with devices governed by said brake controller, and located between the cam and the means for periodically depressing the horn to finally depress the latter, a starting and stopping lever, adapted when operating to stop the machine to cause the brake controller to put into operation the said devices located between the cam and the means for periodically depressing the horn, to thereby impart an additional final movement to said horn to leave it down, substantially as described. 9th. In a nailing machine, a controller lever, connections between said lever and horn, and a cam to act on said lever at one side of its fulcrum, combined with a pawl carrier having a pawl, means to move said pawl carrier, and means to move the pawl on the said carrier, whereby it may at times engage the opposite end of said lever and impart to it an additional movement in a direction to finally depress the horn and leave it down for the removal of the work, substan-

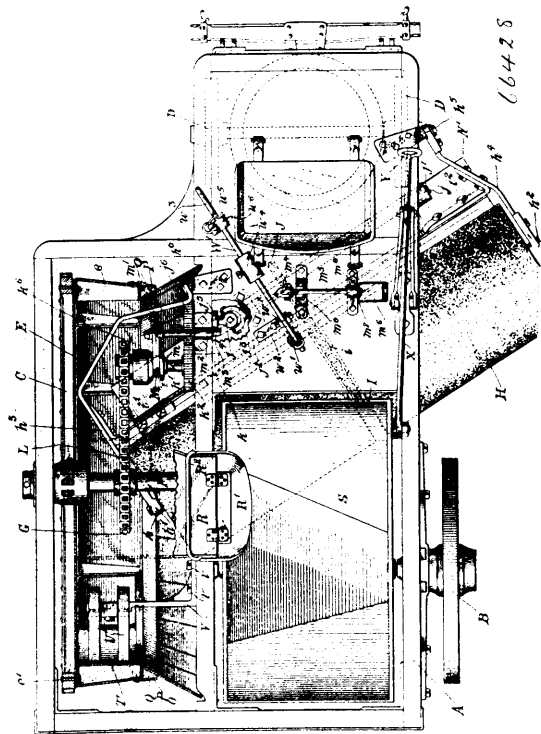
tially as described. 10th. A hollow sleeve, a movable cutter connected therewith, a fixed co-operating cutter, a shaft longitudinally movable within said sleeve and provided with a nail receiving throat, an arm to lock said sleeve, a spline connecting said shaft sleeve and arm, and means to clamp the arm upon the sleeve and thereby clamp the spline, substantially as described. 11th. A cutter carrying shaft, a toothed block to receive the end of the shaft and leave a clearance between the upper part of the shaft and the block, clamping devices to hold said block in adjusted position upon the shaft, and a toothed actuating lever for said block mounted upon an adjustable stud whereby wear of the block may be taken up by adjustment of said lever and clamping devices, substantially as described. 12th. In a nailing machine, a main shaft, a clutch therefor, means to operate it, nail driving devices, connections between said shaft and nail driving devices to actuate the latter, and a manually operated throw-off to render the machine inoperative, substantially as described. 13th. A swinging support or arm, an edge gage mounted thereon, a rotatable adjusting stud, and a slot and pin connection between said stud and the gage to move the latter longitudinally by rotation of the stud, substantially as described. 14th. A swinging support, an edge gage mounted thereon, a rotatable adjusting stud, a slot and pin connection between the stud and the gage to move the latter longitudinally by rotation of the stud, and a friction holder to retain the gage in adjusted position, substantially as described. 15th. In a nailing machine, wire receiving devices, a movable nail receiving throat therebelow, a presser or foot upon which the lower end of a nail loose in said throat rests during movement of the latter, said presser having a nail discharge opening, and an auxiliary opening below the wire guide, and means to normally bar the passage of a nail through the auxiliary opening, substantially as described. 16th. A presser for nailing machines having a passage for the nail and an auxiliary passage, and a cover plate mounted to swing laterally upon the presser to normally cover the auxiliary passage, substantially as described. 17th. In a nailing machine, a horn, mechanism, including a lever, to depress the horn, a cam to rock said lever periodically to depress the horn and permit feed of the work, a pawl to co-operate with and rock said lever when the machine is stopped to finally depress the horn, a pawl carrier and means to move it, and a pawl controller to disengage the pawl and lever when the machine is running continuously, substantially as described. 18th. In a nailing machine, feeding mechanism for the wire, comprising a feed wheel, its actuating pawl and pawl carrier, a feed cam having a feed releasing portion, connections between said cam and pawl carrier to actuate the latter, cutting devices to sever a nail or fastener from the wire and actuating mechanism therefor, the feed releasing portion of the cam permitting slight retrograde movement of the wire and feed wheel when the cutters operate to release the latter and the cutter actuating mechanism from the strain, substantially as described. 19th. In a machine for inserting nails into boots and shoes, the combination of the following instrumentalities, viz., a vertically movable horn or work support, a rotatable shaft, a cam on said shaft to effect movement of the horn downward sufficiently to permit the work thereon to be fed or moved over the said horn, intermediate mechanism connecting said horn with said cam, and a brake mechanism to stop the rotation of the cam shaft, and adjusted with relation to the said cam to operate to stop rotation of the said shaft when the point of greatest throw of the horn lowering cam is acting upon the said intermediate mechanism to lower the horn sufficiently to permit the work to be fed on the horn, whereby the work may be taken off and placed on the horn, substantially as described. 20th. In a machine for inserting nails into boots and shoes, a horn or work support, a lever, means to connect said horn with one arm of said lever, a pivoted cam operated lever, means to connect one arm of the cam operated lever with the lever to which the horn is connected, and a rotatable shaft, a cam mounted on said shaft and provided with a cam surface of a throw sufficient to lower the horn a distance greater than that necessary to permit the work to be fed on the horn, a stud or roller located at one side of the fulcrum of and to actuate the cam operated lever and acted upon by said cam surface to positively lower the said horn a uniform distance, and a brake mechanism to stop the rotation of the cam shaft and adjusted to operate with relation to the said cam surface to stop rotation of the said shaft when the greatest throw of the cam surface is in engagement with said stud or roller and the horn is in its lowered position beyond what is necessary to permit the work to be fed on the horn, whereby the work may be taken off and placed on the horn, substantially as described.

No. 66,128. Street Cleaning Machine. (Balayouse de rue.)

Gordon William Brady and George Manning Rittenhouse, both of New York City, New York, U.S.A., 27th February, 1900; 6 years. (Filed 12th February, 1900.)

Claim.—1st. In a street sweeping machine, a hollow wheel open at one side to receive sweepings and a flaring flange therefor attached to the open side, said flange consisting of a series of thin metal plates connected in annular form. 2nd. In a street sweeping machine a hollow wheel open at one side to receive sweepings, an outwardly extending flaring flange therefor to flatten as a scoop by contact with the road, said flange comprising a series of sheet metal plates connected together and arranged in circular, inclined form,

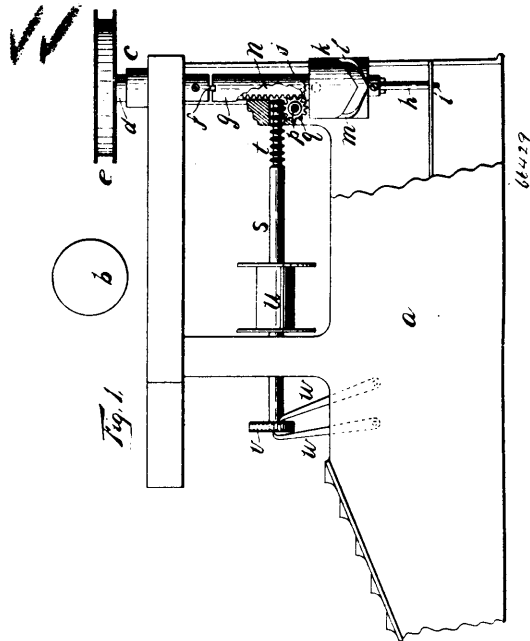
and connected to said wheel to direct sweepings therein. 3rd. In a street sweeping machine having a hollow bucketed wheel to receive



and raise sweepings to an uppermost point of discharge, a stationary guard plate covering said buckets whilst being raised, and a flexible support mounted upon the frame of the machine and arranged to hold said guard yieldingly against the moving buckets. 4th. In a street sweeping machine, a frame, a hollow bucketed wheel rotatably connected to said frame, a bracket connected to said frame, a pair of spring arms adjustably clamped to said spring arms in position to cover the ascending buckets. 5th. In a street sweeping machine, a frame, an axle rotatably supported therein, and a hollow bucketed wheel mounted upon said axle and arranged to receive and raise sweepings, together with a brush to drive the sweepings into said hollow wheel, said brush being rotatably supported in hangers attached to the frame, a sprocket wheel mounted upon a shaft journaled in the frame in advance of the first named sprocket wheel, a chain connecting said sprockets, said shaft bearing a straight gear wheel, which it rotates, a pinion mounted upon a rotating rod and meshing with said gear wheel, another rod connected with said rotating rod by a swivel joint and extending transversely across the frame in parallelism with the brush, and bearing a sprocket wheel from which extends a sprocket chain connecting it with a sprocket wheel upon the shaft to rotate said brush. 6th. In a street sweeping machine, a frame, a hollow bucketed wheel C, an axle F therefor, a sprocket G upon said axle, a shaft K, a sprocket K⁶ thereon, a chain connecting sprockets G and K⁶, a clutch portion K⁴, a sliding sleeve K¹, bearing collar l and clutch portion K², a gear K² upon shaft K a pinion j⁶ meshing therewith and supported upon shaft j⁴, a rotating rod j connecting with shaft j⁴ by a universal joint, a sprocket J upon j, a circular brush H mounted diagonally in frame A upon shaft u by hangers B³, h⁴ a sprocket I upon said shaft h, and a chain i connecting sprockets J and I, together with a yoke M and straddling sleeve k¹, a rod m¹ supporting said yoke, and a bell crank lever m² to operate said rod and yoke to engage or disengage the clutches. 7th. A T-shaped dash board for a street sweeping machine consisting of a vertical strip and a horizontal strip adjustably secured thereon, said dash board being supported clear of the road in advance of the brush, together with a bucketed wheel, to receive sweepings, said wheel having a flaring flexible flange, and a piece of flexible material depending from the dash board, having its lower edge trailing the road and lying snugly against the aforesaid flange. 8th. In a street sweeping machine, a hollow wheel open at one side to receive sweepings and comprising a circular plate and series of buckets arranged and secured side by side and opening centrally of the wheel, the bases of said buckets forming the wheel perimeter being transversely inclined to provide their deepest and most capacious portion at the outer wall. 9th. In a street sweeping machine, in combination, a hollow wheel, open at one side to receive sweepings and comprising a circular plate and a series of buckets arranged side by side and secured together, to receive, elevate and discharge sweepings, the said buckets opening centrally of the wheel and having their meeting walls arranged at inclines trans-

versely of the wheel perimeter, to form a lowermost pocket against the outer wall of the buckets at the upwardly turning portion of the wheel.

No. 66,429. Type Writing Machine. (Clavigraphic.)



The Duplex Typewriter Co., assignee of Robert Turner, all of Des Moines, Iowa, U.S.A., 27th February, 1900; 6 years. Filed 23rd November, 1899.)

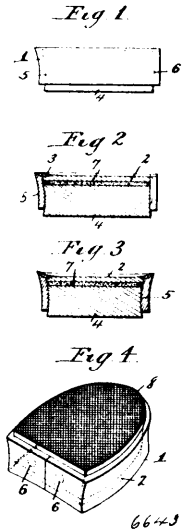
Claim.—1st. The combination with a ribbon spool shaft provided with gear teeth and a spool thereon, of a cam, a rack bar actuated thereby, a pinion driven by said rack bar, a gear driven with said pinion and engaging with said spool shaft to shift it longitudinally, and means to drive said cam. 2nd. The combination with a cam propelled rack bar, and a shaft driven by said rack bar, of a pair of spool shafts, each provided with gear teeth, and gears upon the first mentioned shaft engaging with the respective spool shafts to simultaneously shift them longitudinally, and means to drive said cam. 3rd. The combination with a cylinder provided with intersecting spiral cam ways and means to rotate it, of a rack bar engaging with said cam ways alternately and reciprocated vertically, thereby changing its direction of movement, as it shifts from one cam way to the other, a shaft having a pinion engaging with, and driven first one way and then the other, by said rack bar, a ribbon spool shaft provided with gear teeth, and a gear on the first mentioned shaft engaging therewith, whereby said spool shaft is reciprocated longitudinally. 4th. The combination with a spring wheel, a cam driven thereby and provided with oppositely arranged intersecting cam ways, and a rack bar reciprocated by said cam ways, of a shaft driven by said rack bar, a gear on said shaft, a spool shaft provided with gear teeth, whereby it is reciprocated longitudinally by said gear, and a ribbon spool upon said spool shaft. 5th. The combination with a spring wheel, a cam driven thereby and provided with oppositely arranged intersecting cam ways, and a rack bar reciprocated by said cam ways, of a shaft driven by said rack bar, a gear on said shaft, a spool shaft provided with gear teeth whereby it is reciprocated longitudinally by said gear, a ribbon spool upon said shaft, a disc having ratchet teeth on said spool shaft, and means to revolve said spool shaft simultaneously with its lengthwise movement. 6th. The combination with a ribbon spool reciprocatory and a shaft therefor provided with gear teeth, of a gear directly engaging with said spool shaft and its gear teeth, and means to drive said gear to bodily shift said staff and spool lengthwise. 7th. The combination with a ribbon spool, and a rotatable shaft therefor provided with gear teeth, of a gear engaging with said spool shaft and gear teeth, and means to drive said gear intermittently in opposite directions whereby said spool shaft is reciprocated lengthwise in its bearings.

No. 66,430. Heel. (Talon.)

Charles Blackadar, Lynn, Massachusetts, U.S.A., 27th February, 1900; 6 years. (Filed 17th February, 1900.)

Claim.—1st. An article of manufacture, a heel for boot or shoes having an outer shell of leather and a tread portion of rubber and a washer of suitable material interposed between the top of the shell and the upper side of the tread portion, substantially as described. 2nd. A heel for boots or shoes, having a shell of hard material pro-

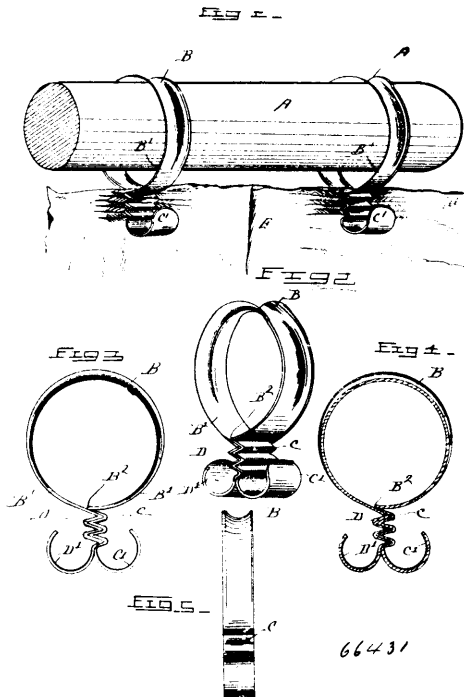
vided with a small cavity in the inside of the body of the breast thereof, and a removable, reversible tread portion of rubber provided



66430

on its breast with a projection complementary to the cavity on the inside of the breast of the shell and adapted to engage with and fit in said cavity to assist in holding the tread portion in the shell, substantially as described. 3rd. A heel for boots and shoes, having an outer shell of hard material, the sides and rear of the shell being convex on their inner sides, a removable, reversible, and imperforate tread portion of rubber having its sides and rear concave and complementary in shape to the inside of the sides and rear of the shell, and having its upper and lower faces of the same size, whereby the tread portion is adapted to be held either side up by the shell and with its upper face at varying heights therein, so that the tread face is always projected from the shell the same distance although worn thinner by use, and a washer, said tread portion being adapted to be maintained in position by means of said washer interposed between the upper face of the tread portion and the lower side of the top of the shell, substantially as described.

No. 66,431. Curtain Ring. (*Anneau de rideaux.*)



66431

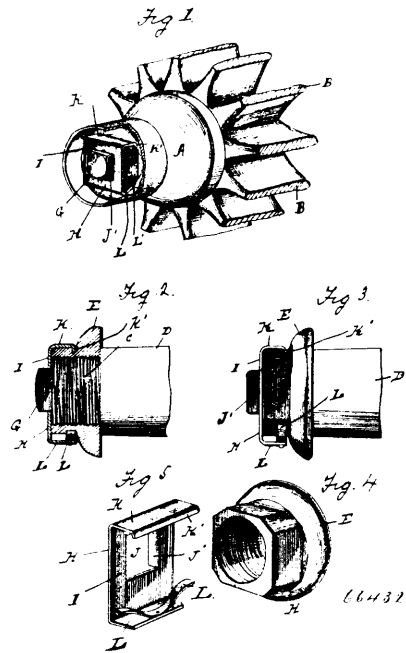
Samuel Orson Brown, Rexville, New York, U.S.A., 27th February, 1900; 6 years. (Filed 17th February, 1900.)

Claim.—A curtain ring composed of a single piece of metal bent to ring form, curved in cross section for about one half the circumference thereof, and open at the bottom, of the two strips bent out-

ward and formed into V-shaped corrugations adapted to register with each other, the extreme outer ends of said strips being curved to form finger holds, substantially as described.

No. 66,432. Axle Skein Nut Lock.

(*Arrête-écrou pour fusés d'essieu.*)



66432

August Brockschmidt and Clement L Stuckey, Pierce City, Missouri, U.S.A., 27th February, 1900; 6 years. (Filed 17th February, 1900.)

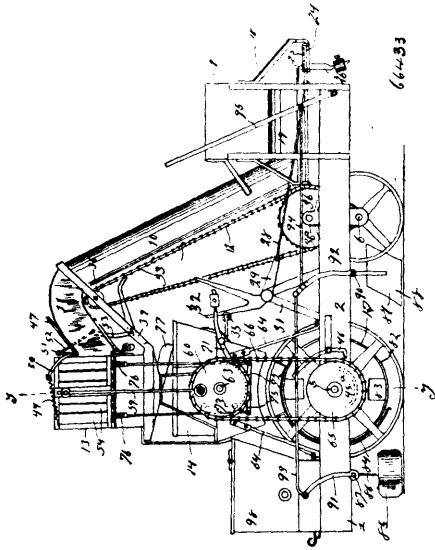
Claim.—1st. A locking device for nuts or axle skeins, comprising a metallic plate or sheet having a rectangular opening to engage the reduced square end of an axle, top and bottom flanges to engage over the top and bottom sides of the nut, a vertical inwardly turned flange at the inner end of the top flange to engage in a groove in the top of the nut, and a plate spring secured to the inside of the bottom flange to engage in a groove in the bottom side of the nut, substantially as described. 2nd. The combination with an axle having a threaded portion and a reduced square end, of a nut threaded on the axle having grooves in its top and bottom sides, and a locking attachment consisting of a plate having a rectangular opening fitting over the reduced square end of the axle, top and bottom flanges embracing the nut, an inward flange at the inner end of the top flange engaging in the groove in the top of the nut, and a plate spring secured to the inside of the bottom flange and engaging in the groove in the bottom of the nut, substantially as described. 3rd. In a nut lock, the combination with a bolt, and a nut having grooves formed in its opposite edges, of a locking plate having a bolt opening formed with flanges adapted to engage upon opposite sides of the bolt, and formed on opposite edges with flanges, one of said flanges having an inwardly turned edge adapted to engage the groove formed in the opposite edge of the nut, substantially as described.

No. 66,433. Potato Planter. (*Sénoir à patates.*)

Wesley O'Neill, Russellville, Pennsylvania, U.S.A., 27th February, 1900; 6 years. (Filed 17th February, 1900.)

Claim.—1st. The combination with the hopper having an open tapering or inclined bottom, of an inverted V-shaped partition in said hopper, and slides fitted to guides in the respective walls of said partition and independently movable toward and from said bottom. 2nd. The combination with the hopper having an open tapering or inclined bottom, an inverted V-shaped partition in said hopper, and independently movable slides in the respective walls of said partition, of a longitudinally reciprocative cross head below the opening in said bottom, a guide for said cross head, and means on said cross head extending into the hopper and adapted to expel the contents thereof. 3rd. The combination with the supply hopper, of an underlying cross head, a guide therefor, a counterpoised lever in said head adapted to expel the contents of the hopper, and means for reciprocating said cross head. 4th. The combination with a supply hopper, of an underlying cross head, a guide therefor, a counterpoised lever in said head adapted to expel the contents of the hopper, a rock shaft, an arm thereon, connections between said arm and the cross head, and means for actuating said shaft. 5th. The combination with a supply hopper, of an underlying cross head, a guide therefor, a counterpoised lever in said head adapted to expel

the contents of the hopper, a rock shaft, a spring to maintain it in normal position, operative connections between said shaft and the

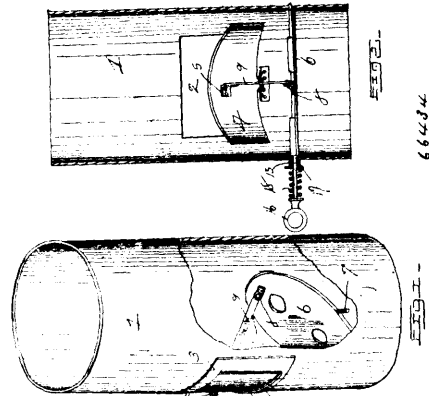


cross head, and means for actuating said shaft. 6th. The combination with the supply hopper, the cutter box, the cutter head therein and means for actuating said head, of conveyer mechanism between said hopper and box, and means for feeding potatoes from the hopper to said mechanism. 7th. The combination with the supply hopper, the casing, the chute, and the cutter mechanism, of means for feeding the contents of the hopper to the casing, a conveyer to carry such contents to the chute, and means for operating said conveyer. 8th. The combination with the supply hopper, the casing, the chute, and the cutter mechanism, of means for feeding the contents of the hopper to the casing, a conveyer to carry such contents to the chute, means for operating said conveyer, and striker devices at the entrance to the cutter mechanism. 9th. The combination with the supply hopper and the casing, of a reciprocating transfer device adjacent to the hopper, a rock shaft, connections between said shaft and the transfer device, a conveyer having lifting means adapted to travel within the casing, and co-acting means on said rock shaft and conveyer. 10th. The combination with the supply hopper, the casing, the chute, and the cutter mechanism, of a reciprocating transfer device adjacent to the hopper, a rock shaft, connections between said shaft and the transfer device, a conveyer having lifting means adapted to travel within the casing, and co-acting means on said rock shaft and conveyer. 11th. The combination with the supply hopper, the casing, the chute, and the cutter mechanism, of a reciprocating transfer device adjacent to the hopper, a rock shaft, connections between said shaft and the transfer device, a conveyer having lifting means adapted to travel within the casing, co-acting means on said rock shaft and conveyer, a striker device at the entrance to the cutter mechanism, and a lever connected with said device and adapted to be actuated by the conveyer. 12th. The combination with the supply hopper, the casing, the chute, and the cutter mechanism, of a conveyer having lifting means adapted to travel within the casing, a hinged striker at the entrance to the cutter mechanism, a spring to maintain said striker normally raised, a lever connected with said striker, and means on the conveyer to actuate said lever. 13th. The combination with the cutter box provided with parallel vertical plates between the adjacent edges of which are formed lateral guideways, of a cutter head contained within said box and comprising a series of transverse knives bevelled on their lower edges and fitted to said ways, a longitudinal knife connecting said transverse knives, one of said latter knives being provided with studs which extend through the adjacent guideways, and means for reciprocating said cutter head. 14th. The combination with the cutter box, the cutter head therein, and means for reciprocating said head, of the trippers adjacent to the path of said head. 15th. The combination with the cutter box, the cutter head therein comprising transverse and longitudinal knives, and means for reciprocating said head, of the fixed U-shaped strippers between the limbs of which said knives reciprocate. 16th. The combination with the cutter box, its cutters, and means for reciprocating the same, of the hinged floor section, and means for swinging said section. 17th. The combination with the cutter box, its cutters, and means for reciprocating said cutters, of the hinged floor section, the counterpoised arm thereon, the cam lever, means for operating the same, and connections between said lever and the floor section. 18th. The combination with the cutter box, its cutters, means, including a crank wheel, for reciprocating said cutters, means for driving said wheel, a hinged floor in said box, means to

maintain it in a normal position, a cam lever, tappets on said wheel adapted to co-act with said lever, and connections between said lever and the hinged floor. 19th. The combination with the supporting frame and its carrying wheels, of the pocketed feed wheel, the overlying hopper, the chamber therein, the rotatable transfer device in said hopper adapted to enter said chamber, cutter mechanism, and connections between the same and said chamber. 20th. The combination with the supporting frame, and its carrying wheels, of the pocketed feed wheel, the overlying hopper, the chamber therein, the rotatable transfer device in said hopper adapted to enter said chamber, a cutter box, cutters therein, means for operating said cutters, a movable floor in said box, means for moving the same, and means affording communication between said box and the chamber. 21st. The combination with the supporting frame and its carrying wheels, of the pocketed feed wheel, the overlying hopper, the chamber therein, the rotatable transfer device mounted in said hopper above the pocketed feed wheel and adapted to enter said chamber and transfer the contents thereof to said hopper, the gearing between said device and the carrying wheels, and means for throwing said gearing into and out of action. 22nd. The combination with the supporting frame and its carrying wheels, of the pocketed feed wheel, the overlying hopper, the chamber therein, the rotatable transfer device mounted in said hopper above the pocketed feed wheel and adapted to enter said chamber and transfer the contents thereof to said hopper, the gearing between said and the carrying wheels, the furrow opener and coverer devices for throwing them into and out of action, and means co-acting with said devices for throwing said gearing into and out of action. 23rd. The combination with the supporting frame and its carrying wheels, of the supply hopper, the cutter box, the cutter head, and means for actuating said head, of an endless conveyer between said hopper and box, gearing between said conveyer and the carrying wheels and means for throwing said gearing into and out of action. 24th. The combination with the supporting frame and its carrying wheels, of the pocketed feed wheel, the hopper adjacent thereto, the chamber in said hopper, the rotatable transfer devices in said hopper adapted to enter said chamber, the fertilizer box, the feed wheel therein, gearing between said wheel and the carrying wheels, and means for throwing said gearing into and out of action.

No. 66,434. Damper Regulator.

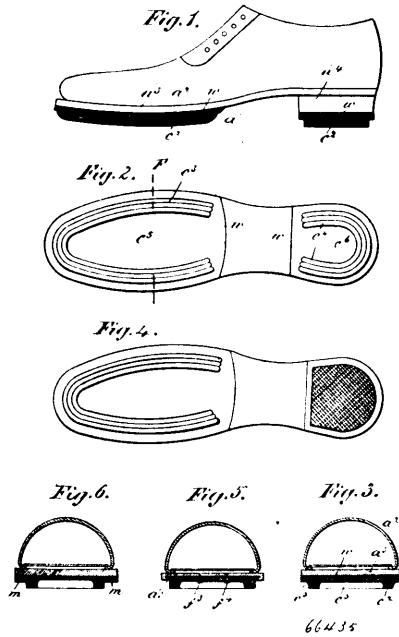
(Régulateur pour registres de tuyaux.)



Lewis Reaser, Reading, Pennsylvania, U.S.A., 27th February, 1900; 6 years. (Filed 17th February, 1900.)

Claim.—The combination with a stove pipe having an opening in one side, and the circular rotatable damper located below said opening, of the approximately rectangular inwardly opening plate hinged at its lower end to the lower edge of said opening and curved to conform to the contour of the pipe, and the connecting bar pivoted to said damper and plate, the construction being such that as the damper is being closed it will occupy an inclined position so as to deflect the products of combustion to the opposite side of said opening while the plate will be correspondingly inclined so as to deflect any of the products of combustion escaping above the lower end of the damper away from said opening, substantially as described.

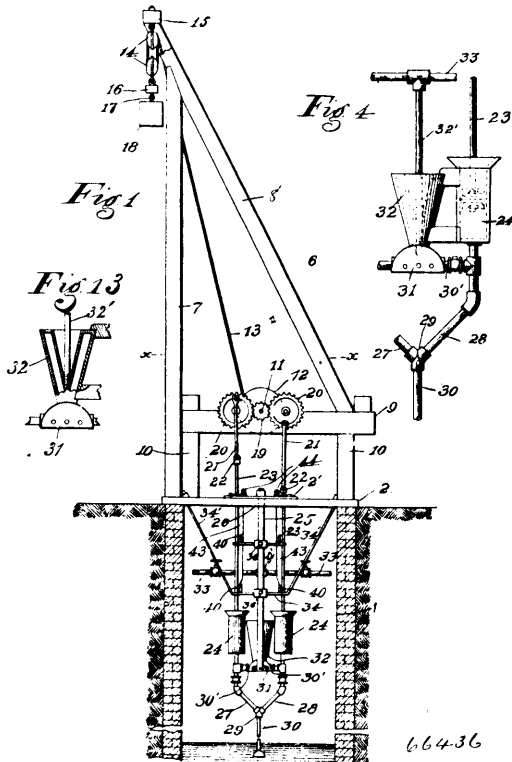
No. 66,435. Boot, Shoe and Slipper. (Chaussure.)



Joseph Newton, Longton, Stafford, England, 27th February, 1900 ; 6 years. (Filed 17th February, 1900.)

Claim.—A boot or shoe having an elastic rubber outer sole or lift extending entirely over a leather inner sole and formed integral with an outstanding boundary rib extending round near and parallel with its edges and constituting the tread, substantially as described and set forth.

No. 66,436. Pump. (Pompe.)

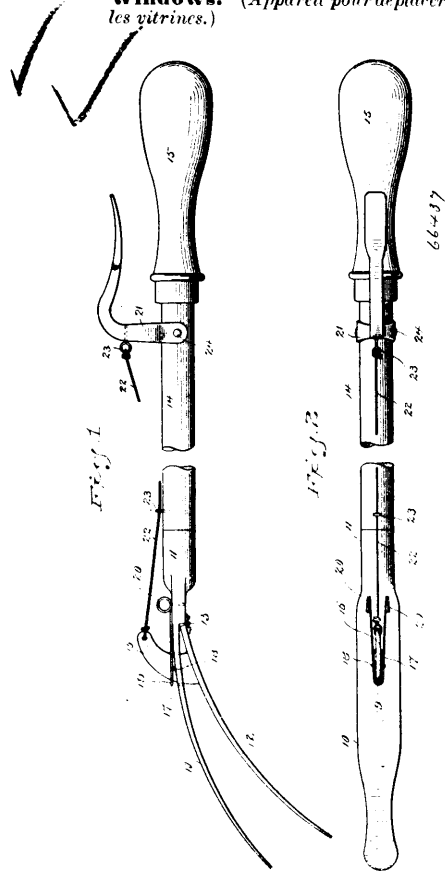


Arthur E. Whiting, Ashtabula, Ohio, U.S.A., 27th February, 1900 ; 6 years. (Filed 17th June, 1899.)

Claim.—1st. In a pump, a brass plate having a vertical slotted tube and recesses, a device closing and unclosing said recesses, a bolt working in said tube and having a pin working in said slot, all arranged

as set forth. 2nd. In pumps, a brass plate having a recess to receive a pump rod, said plate carrying a pivoted member for opening and closing said recess, a vertical tube on said plate and a bolt working in said tube to lock and unlock said movable member, all arranged as set forth. 3rd. In a pump, a brace plate having slots for the rods supporting the pump, also having semi-circular recesses for the plunger rods, perforated pivoted members carried by said plate to retain the plunger rods in place, and tubes having plungers working therein and registering with the perforations in said members, thereby locking the plunger rods in position, all arranged as set forth. 4th. In a pump, a perforated brass plate having a semi-circular recess, a pivoted member having a perforation carried by said plate, a slotted tube attached to said plate and having a bolt with a pin working in said slot and registering with said perforation, all arranged as set forth. 5th. The herein described force pump consisting of a pair of cylinders, a discharge chamber, pipes and suitable valves connecting said cylinders and discharge chamber, a supply pipe and valves therefor extending and uniting below said cylinders, pistons fitting said cylinders and having pump rods attached thereto extending to the top of the well and suitable driving mechanism for reciprocating said rods, in combination with a pivoted locking member adapted to encircle said rods and hold the same in their operative positions and having a stop pin to lock said members in engagement with said rods and suitable means to control said rods from a position at the top of the well, substantially as described and for the purpose set forth.

No. 66,437. Device for Removing Articles from Show Windows. (Appareil pour déplacer les objets dans les vitrines.)

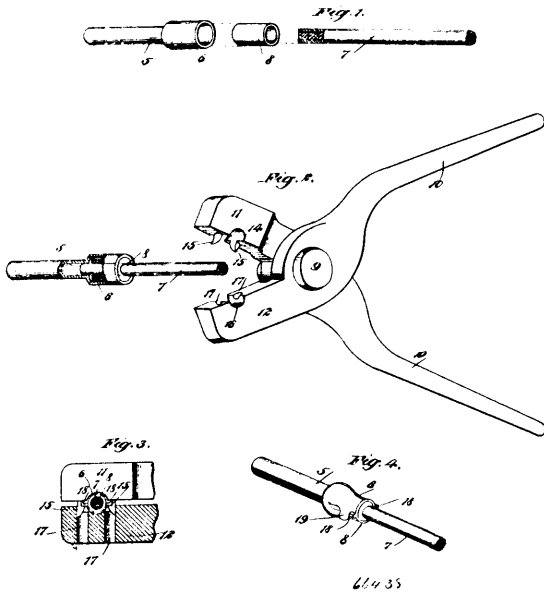


John C. Ernst, Ansonia, Connecticut, U.S.A., 27th February, 1900 ; 6 years. (Filed 7th February, 1900.)

Claim.—1st. A device of the character described, comprising jaws hinged together, one of said jaws having a slot and the other an arm passing through said slot, a pin passing through said arm and adapted to engage the outer face of one jaw to limit the movement of the other jaw in opening, and a spring engaging said pin and acting to normally hold the jaws in the open position. 2nd. A device of the character described, comprising a fixed jaw having a slot, a ferule by which it is carried, a hinged jaw having an arm passing through the slot, a pin passing through the arm and engaging the back of one jaw to limit the movement of the other jaw in opening, a spring engaging the pin and acting to hold the hinged jaw in the open position, a rod by which the ferule is carried, an operating lever pivoted to the rod, and a wire extending from said lever to the arm whereby the hinged jaw may be operated against the power of the spring.

No. 66,438. Fuse Waterproof Detonator.

(Amorce à l'épreuve de l'eau.)



Arthur S. Williamson, Niagara, British Columbia, Canada, 27th February, 1900; 6 years. (Filed 17th July, 1899.)

Claim.—1st. The union with a fuse, of a fuse cap, comprising a body portion and an enlarged thimble at one end thereof, the end of the fuse being projected through the thimble into the body of the cap, and a gasket fitted in the thimble around the fuse, the thimble being pressed upon the gasket to seal the cap. 2nd. A fuse cap having a body portion and a thimble at one end thereof, through which thimble the fuse may be projected into the body of the cap, and a gasket fitted in the thimble and adapted to encircle the fuse, the thimble being capable of being crimped or compressed to hold the gasket securely in place and to seal the cap. 3rd. A fuse cap, having a body portion and a thimble at one end thereof, the thimble being capable of being crimped or compressed to seal the cap. 4th. The union of a fuse, and a cap into one end of which the fuse is projected, the cap having a portion compressed or crimped around the fuse to hold the cap on the fuse and to seal the cap. 5th. The union of a fuse, and a cap, the cap having a body portion and a thimble, and the fuse being projected through the thimble and into the body of the cap, the thimble being crimped or compressed around the fuse to seal the cap. 6th. In a tool for sealing fuse caps, the union of two members having jaws, the members being mounted to move toward and from each other, and the jaws being provided with matching cavities, and one of the jaws having openings on each side of the cavity therein, and studs secured to the other jaw and adapted respectively to enter the openings in the first named jaw. 7th. The union of two members having jaws mounted to move toward and from each other, the jaws being provided with matching cavities and one of the jaws being also provided with openings respectively on the sides of the cavity therein, the other jaw having studs adapted respectively to enter the openings in the first named jaw. 8th. The union of two members having jaws mounted to move toward and from each other, one of the jaws having two openings therein, and the other of the jaws having two studs adapted respectively to enter the openings, whereby to compress or crimp an article between the jaws and studs.

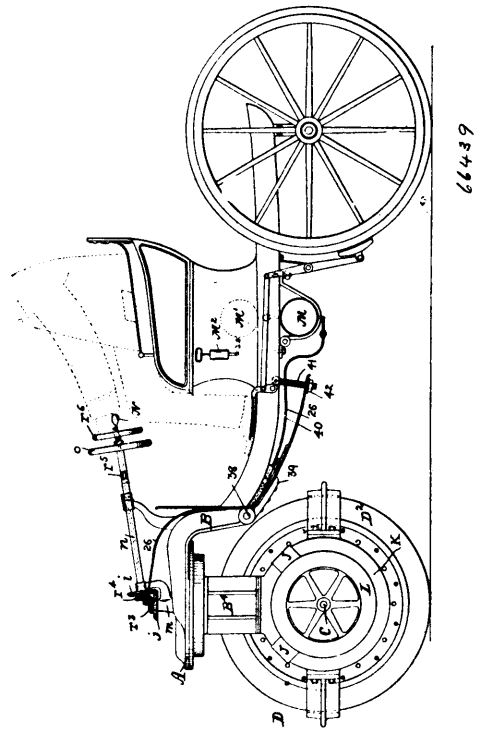
No. 66,439. Motor Wheel for Vehicles.

(Roue motrice pour véhicules.)

Julius William Walters, New York City, New York, U.S.A., 27th February, 1900; 6 years. (Filed 24th October, 1899.)

Claim.—1st. The combination in a vehicle wheel having a motor thereon, a hanger for suspending said motor and said motor having its crank shaft extending through the bearings of said wheel and made hollow, of a pinion mounted loosely upon said crank shaft, and means within the crank shaft for clutching said loosely mounted pinion to the said crank shaft, substantially as described. 2nd. The combination of a vehicle wheel comprising a rim, a hub and spokes or a web for connecting the hub to the rim, and a circular rack, a motor placed on said wheel, hangers for supporting the wheel in one of which the crank shaft of the motor is mounted, one end of said crank shaft being hollow, a clutch mechanism, and an operative connection between the clutch mechanism and the means within the reach of the operator for operating the clutch, substantially as described. 3rd. The combination with a vehicle wheel supported by hangers, of

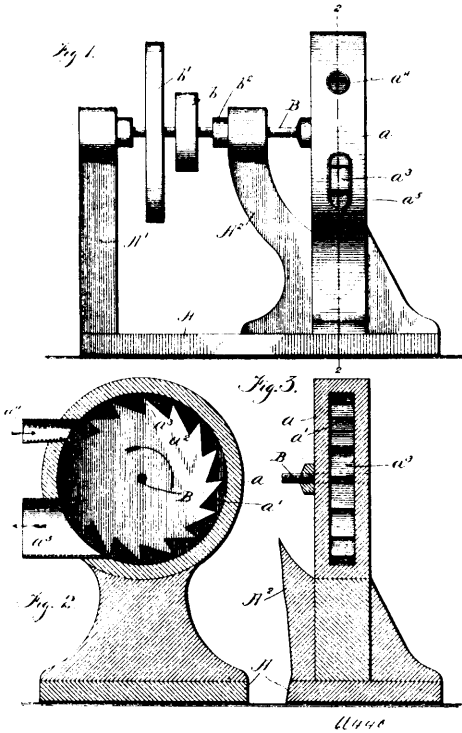
a motor on said wheel suspended by one of the hangers and said motor having its crank shaft extending through the hubs of said



wheel, a pinion mounted loosely upon said crank shaft, a clutch mechanism located exterior to the crank shaft, means placed within reach of the driver or operator, and an operative connection between said clutch mechanism and the means within reach of the driver or operator, substantially as described. 4th. The combination with a vehicle wheel having a motor thereon, of a plate provided with hangers from which the wheel and motor are suspended so as to be free to rotate, a crank shaft for said motor suitably mounted, and means for coupling said crank shaft with said wheel, and said plate, hangers, wheel and motor being arranged so as to be capable of turning as a whole completely about a vertical axis, substantially as described. 5th. The combination with a vehicle wheel having a motor thereon, of a plate mounted to turn about a vertical axis through a complete turn, hangers attached to said plate and supporting said wheel and motor, a bearing plate. A provided with hinge connections, cushion springs attached to said plate and to the body of the vehicle, and operative means for starting, stopping and completely revolving said wheel about its vertical axis placed within reach of the driver or operator, substantially as described. 6th. A motor wheel comprising a wheel mounted to rotate about a horizontal axis, and provided with a circular rack, a motor provided with a crank shaft extending through the bearing of said wheel, a clutch having one of its parts affixed exterior to said crank shaft and its other part mounted loosely on said shaft and placed in operative connection with the circular rack on said wheel, and means for coupling and uncoupling said clutch adapted to be operated by the driver or attendant, substantially as described. 7th. A motor wheel comprising a wheel mounted to rotate about a horizontal axis, a motor provided with a crank shaft extending through the bearing of said wheel, a clutch having one of its parts affixed exterior to said crank shaft and its other parts mounted loosely on said shaft and placed in operative connection with the said wheel, and means for coupling and uncoupling said clutch adapted to be operated by the driver or attendant, substantially as described. 8th. The combination with a vehicle, of a motor wheel having its frame in hinged connection with the body or frame of the vehicle, a spring cushion interposed between said motor wheel and the body or frame of the vehicle, and means for starting, stopping and rotating said wheel attached to the hinged frame of said wheel, substantially as described. 9th. The combination with a vehicle, of a motor wheel supported in a frame adapted to be turned about a vertical axis, and a supporting plate to which said frame is attached, said supporting plate being hinged to the body of the vehicle and provided with a spring cushion and carrying means for starting, stopping and turning the wheel, substantially as described. 10th. The combination of vehicle of a bracket hinged to said vehicle and supporting a bearing plate, a plate B¹ mounted to rotate on said bearing plate and provided with means for supporting the wheel and the motor, means for starting, stopping and rotating said wheel, and a spring cushion interposed between said brackets and the body of the

vehicle, substantially as described. 11th. In combination with a propelling device for vehicles comprising a wheel having self-contained motive means, and said wheel being adapted to form part of the supporting means for vehicles, a plate or web for supporting said wheel, and means on said plate or web for operating said motive means placed within the reach of the driver, of vehicles provided with hinge straps or brackets adapted to receive a hinge connection on the plate or web of the propelling device so as to quickly attach and detach said propelling device to and from the said vehicles, as and for the purpose set forth. 12th. The combination with a vehicle wheel having a gas motor thereon, of a generator of electricity actuated from the motor shaft, an igniter for the motor, and electrical connections between said igniter and the generator, all such parts being adapted to travel in a parallel plane with the wheel, substantially as described. 13th. The combination with a motor wheel, of a generator of electricity actuated from the engine shaft, an igniter for the motor, and electrical connections between said igniter and the generator, all such parts being adapted to travel longitudinally with the wheel, substantially as described. 14th. The combination with a vehicle, of hinges fastened to its frame or body, spring cushions connected with the bearing plate from which the wheel and motor are supported and said bearing plate being connected with said hinges, means attached to the wheel for starting, stopping and completely revolving said wheel about a vertical axis without stopping the motor placed within reach of the driver, and said wheel being provided with means for producing a current of electricity for the purpose of igniting the charges of gaseous fuel and also with a pneumatic device for controlling the admission of fuel to the engine, all within reach of the driver or operator, thus forming a complete power wheel for the propulsion of the vehicle, substantially as described.

No. 66,410. Rotary Engine (Machine rotatoire.)



Ephrem Lizée, Marbleton, Quebec, Canada, 27th February, 1900; 6 years. (Filed 25th November, 1899.)

Claim.—A rotary engine, comprising a suitable frame, a casing mounted thereon and provided with a steam chamber, a steam wheel rotatably mounted in said chamber and provided with suitable steam buckets, a steam inlet and outlet communicating with said chamber, a shaft journaled in suitable bearings formed in said frame, upon which said steam wheel is fixed, and suitable pulleys fixed upon said shaft, substantially as described.

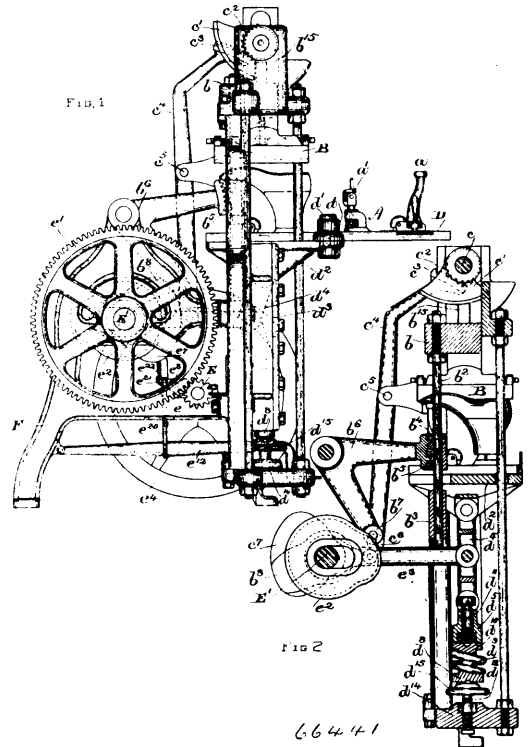
No. 66,441. Sole Pressing Machine.

(Machine à presser les semelles.)

Erastus E. Winkley, Lynn, Massachusetts, U.S.A., 27th February, 1900; 6 years. (Filed 12th February, 1900.)

Claim.—1st. In a sole pressing machine, the combination with a jack and form, of independent mechanisms operating automatically and successively to seat the form and to bring the form and jack into a position of pressure, substantially as described. 2nd. In a

sole pressing machine, the combination with a form member and a jack member, of mechanism to relatively actuate said members to



seat the form member, automatic means to lock one of said members, and mechanism to actuate the other member to secure pressure, substantially as described. 3rd. In a sole pressing machine, the combination with a pair of pressing forms and a pair of jacks, of a jack carrier capable of rotation about a centre located in line with a point between the jacks, and to one side of the jack carrier, substantially as described. 4th. In a sole pressing machine, the combination with complementary pressing members, of means to impart to one of said members a movement toward the other member to cause both members to engage the sole, means to lock one of the pressing members against a return movement, and independent mechanism to move the other pressing member towards the member which is locked to press and shape the sole, substantially as described. 5th. In a sole pressing machine, the combination with a sole pressing form and shoe supporting jack, of means to move the form towards the jack to place the form in contact with the sole of the shoe, means to lock the form from movement in the reverse direction, and independent mechanism to move the jack towards the form while the form is locked, to apply pressure to the sole, substantially as described. 6th. In a sole pressing machine, the combination with a pair of pressing forms, of a jack carrier carrying a pair of jacks arranged in longitudinal alignment with each other, the said carrier being pivotally supported to turn about a centre at one side of the jacks, substantially as described.

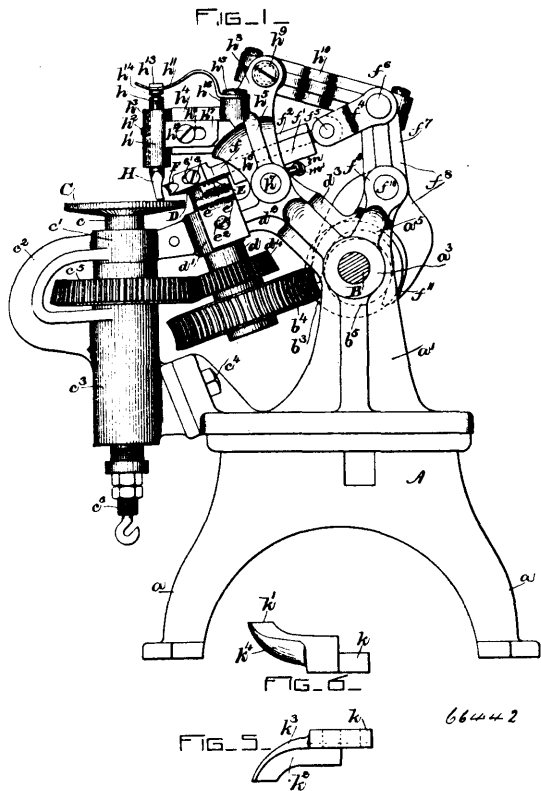
No. 66,442. Lip Setting and Slitting Machine.

(Machine à fendre et dresser les semelles.)

John B. Hadaway, Brockton, Massachusetts, U.S.A., 27th February, 1900; 6 years. (Filed 12th February, 1900.)

Claim.—1st. In a lip turning machine, the combination with a reciprocating lip setting tool, of means to so actuate said tool and to support the work so as to cause said tool to strike and act upon the lip at the base thereof within the angle formed by the lip and feather of the insole, substantially as described. 2nd. In a lip turning machine, the combination with a work support, of a reciprocating lip setting tool movable in a plane inclined to the surface of the work support, substantially as described. 3rd. In a lip turning machine, the combination with a reciprocating lip setting tool, of clamping means arranged to hold the insole against the action of said tool, substantially as described. 4th. In a lip turning machine, the combination with a reciprocating lip setting tool, of a presser foot arranged to hold the insole during the operation of said tool, substantially as described. 5th. In a lip turning machine, the combination with a reciprocating lip setting tool, of a work support and means to clamp the insole against said work support during the operation of said tool, substantially as described. 6th. In a lip turning machine, the combination with a reciprocating lip setting tool, of a clamping device and connected mechanism for actuating

said tool and clamping device, substantially as described. 7th. In a lip turning machine, the combination with a reciprocating lip



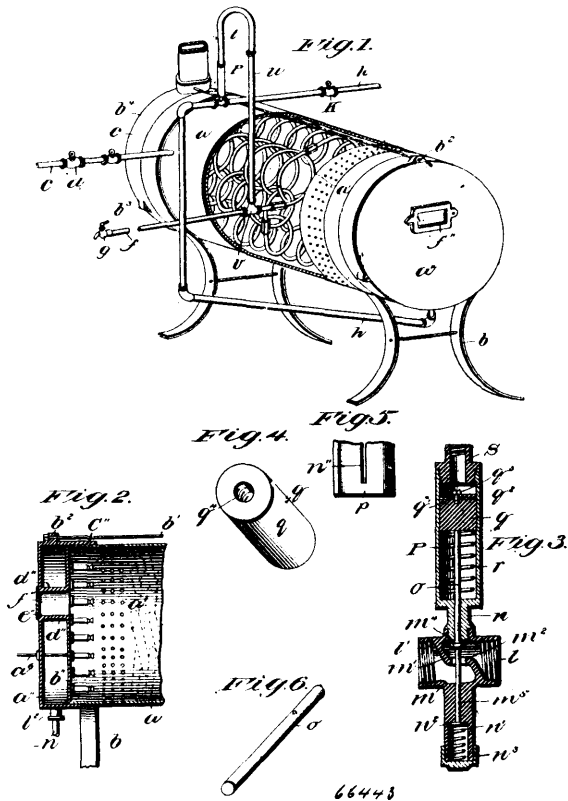
setting tool, of a clamping presser foot and connected mechanism for actuating said tool and foot, substantially as described. 8th. In a lip turning machine, the combination with a reciprocating lip setting tool, of a clamping presser foot and means for simultaneously actuating said tool and presser foot, substantially as described. 9th. In a lip turning machine, the combination with lip turning mechanism, of a rotating work support and means to actuate the same, a clamping presser foot arranged to clamp the work against said work support, and means to permit a limited lateral movement of the presser foot, substantially as described. 10th. In a lip turning machine, the combination with lip turning mechanism, of a rotating work support and means to actuate the same, a clamping presser foot, means to permit a limited lateral movement of said presser foot, and a spring to return said presser foot, substantially as described. 11th. In a lip turning machine, the combination with a lip setting tool and means to reciprocate said tool, of a presser foot and means to reciprocate said presser foot, said tool and presser foot movable at an angle toward and from each other, and means to adjust the relative positions of the tool and presser foot, substantially as described. 12th. In a lip turning machine, the combination with a work support, of a feed wheel inclined relatively to said work support, arranged to engage the angle between the lip and feather of the insole, and a lip setting tool movable in a plane parallel to the feed wheel and arranged to act upon the lip at the base thereof, substantially as described. 13th. In a lip turning machine, the combination with a lip turning device and a lip setting device, of a clamping device and actuating mechanism therefor arranged to alternately clamp and release the work, substantially as described. 14th. In a lip turning machine, the combination with a reciprocating lip setting tool, of clamping means engaging the sole surface within the lip to hold the sole against the action of said tool, substantially as described. 15th. In a lip slitting machine, the combination with a work support, of lip slitting mechanism, substantially as described. 16th. In a lip turning and slitting machine, the combination with a work support, of lip turning means and lip slitting mechanism, substantially as described.

No. 66,443. Water Heater. (Chaufeur d'eau.)

Robert Schlumberger, Allegheny, Pennsylvania, U.S.A., 27th February, 1900; 6 years. (Filed 12th February, 1900.)

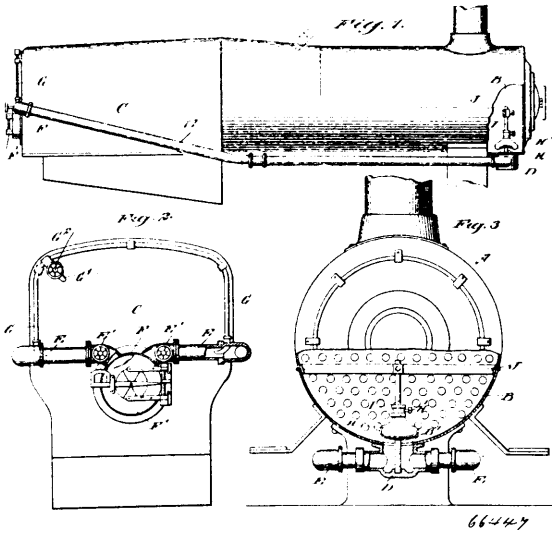
Claim.—1st. In an automatic water heater, the combination of a water heating receptacle having suitable supply and delivery connections, a gas burner adapted to heat said receptacle and having a suitable supply pipe, a valve in the gas supply pipe, a spring for holding the said valve normally opened, a piston casing in close proximity to the gas valve and in communication with the delivery

connection of the water receptacle, a piston in said casing, and connections between the said piston and gas valve, the arrangement of



the parts being such that the piston is operated by pressure of the water in the receptacle to seat the valve, substantially as described. 2nd. In an automatic water heater, an automatic valve mechanism, comprising in combination, a gas valve chamber having suitable inlet and outlet ports, a valve operating therein, a piston or motor casing connected to the gas valve chamber, water inlet and outlet openings for said casing, a piston or motor arranged in the said casing, connections between the said piston or motor and gas valve, a piston chamber connected to the said piston or motor casing, a piston arranged in said piston chamber, a passage arranged in the casing of said piston chamber for establishing communication between the same and the interior of the piston or motor casing, and a piston rod arranged between the said piston and piston or motor for transmitting motion to the same, substantially as described. 3rd. In a water heater, an automatic valve mechanism having in combination, a gas valve casing provided with a valve, a piston or motor casing, water inlet and outlet openings therefor, a piston or motor arranged between the said openings, means for transmitting motion from the piston or motor to the valve in the gas valve casing, a piston chamber, a piston therein, means for transmitting motion between the two pistons, and a suitable communication between the water conduit on the outlet side of the piston or motor and the piston chamber at the further end thereof, substantially as described. 4th. In an automatic water heater, a gas burner therefor having a gas chamber with which the gas supply pipe communicates, and a series of gas tips communicating with said chamber and each provided with a central orifice which is tapered towards the outer end of the gas tips, each of said gas tips being further provided at their outer end with a transverse slot which registers with the central orifice of the gas tip and admits the air into contact with the gas previous to the arrival of the gas at the point of ignition, substantially as described. 5th. In an automatic water heater, a gas burner having in combination the circular plates and the time forming a gas chamber with which the gas supply communicates, a series of gas tips secured in the inner plate and communicating with the said gas chamber, a pilot light connection with one of said gas tips, each of said gas tips being provided with a central orifice and at their outer end with a transverse slot communicating with said orifice, and means for binding the burner in position on the water heater, substantially as described. 6th. In a water heater, the combination of the water coil formed of a series of separate coils intermeshed with each other and connected together, supply and delivery connections for said water coil, a gas supply and a gas valve, and a controlling valve connected to the water supply and adapted to control the gas valve by the pressure of the water in the heater, substantially as described. 7th. In an automatic water heater, the combination with a water receptacle having

No. 66,447. Smoke Consumer. (*Foyer fumivore.*)



Claim.—1st. In a smoke consumer, a smoke box having an aperture in its bottom, a casing extending transversely under the smoke box and communicating therewith through said opening, a deflector located in the smoke box above said opening and spaced therefrom entirely so as to form an annular channel around the deflector, pipes leading from the ends of said casing on each side of the boiler to the fire box, and means for creating a suction in said pipes to draw the cinders and smoke from the smoke box to the fire box. 2nd. In a smoke consumer, a smoke box having an aperture in its bottom and located above said opening, so as to form an annular channel around the deflector, a pipe leading from the said opening to the fire box, and means for creating in said pipe a suction toward the fire box. 3rd. In a smoke consumer, a smoke box having an aperture in its bottom, a casing located under the smoke box and communicating therewith through the said opening, an upright rod extending from the bottom of the casing into the smoke box through the opening thereof, a deflector located in the smoke box and adjustable longitudinally upon said rod, a pipe leading from the casing to the fire box, and means for creating in said pipe, a suction toward the fire box.

James Whitely Alexander, Bridgeport, Ohio, U.S.A., 27th February, 1900 : 6 years. (Filed 17th February, 1900.)

TRADE-MARKS

Registered during the month of February, 1900, at the Department of Agriculture—
Copyright and Trade-Mark Branch.

7222. DEUTZ & GELDERMANN, 21 Rue Gambetta, Ay, Marne, France. Wines and Spirits, 1st February, 1900.
7223. THE AMERICAN TOBACCO COMPANY OF CANADA, Montreal, Que., Manufactured Tobacco, including Cigars and Cigarettes, 1st February, 1900.
7224. MICHAEL KEYFOR MILLS, Windsor, Ont. Newspaper: "The New Eve Success," 1st February, 1900.
7225. DAVID B. WOOD, Brantford, Ont. Flour, 2nd February, 1900.
7226. JAMES FERRIS JOSEPH GUNNING, Toronto, Ont. Shoe Dressing, 5th February, 1900.
7227.) CHRISTOPHER THOMAS & BROTHERS, LIMITED, Broad Plain
7228.) Soap and Candle Works, Bristol, England. Edible Fats, 7th
7229.) February, 1900.
7230. J. & J. COLMAN, LIMITED, Carrow Works, Norwich, and 108 Cannon Street, London, England. Mustard, 8th February, 1900.
7231. R. D. WOOLFALL & COMPANY, 64 Upper Brook Street, Manchester, England. Paints, 8th February, 1900.
7232. HELLER & BROTHERS, Newark, New Jersey, U.S.A. Rasps, Files, Hammers and other Farriers' and Machinests' Tools and Supplies, 8th February, 1900.
7233. THE COPP, CLARK COMPANY, LIMITED, Toronto, Ont. Exercise and Scribbling Books and Writing Pad Covers, 13th February, 1900.
7234. FLEET, LOWNDES & COMPANY, LIMITED, Toronto, Ont. Men's, Youths' and Boys' Garments, such as Overcoats, Coats, Vests, Pants and Suits, and Women's, Misses' and Girls' Garments, such as Cloaks, Mantles, Costumes, Waists, Skirts and Blouses, 13th February, 1900.
7235. WILLIAM BENNETT, SONS & COMPANY, Cambourne, Cornwall, England. Fuses for use with Explosives, 13th February, 1900.
7236. THE F. F. DALLEY COMPANY OF HAMILTON, LIMITED, Hamilton, Ont. Shoe and Leather Polish, 15th February, 1900.
7237. LA SOCIÉTÉ ANONYME DE LA DISTILLERIE DE LA LIQUEUR BÉNÉDICTINE, Fecamp, France. Liqueurs, 16 fevrier, 1900.
7238. THEOPHILE GUILLOIN, Nantes, France, Eaux-de-Vie, 16 fevrier, 1900.
7239. GEORGE DANA SMITH, Toronto, Ont. Remedies and Medicines, 16th February, 1900.
7240. THE GARDNER GOVERNOR COMPANY, Quincy, Illinois, U.S.A. Engine Governors, 16th February, 1900.
7241. IDA PARENT, Montreal, Que. Shoes, 16th February, 1900.
7242. CHARLES ONESIME THIBAUT, Fall River, Massachusetts, U.S.A., Trading as THE DR. TROUSSEAU CHEMICAL COMPANY. Medical Preparations, 17th February, 1900.
7243. AB. KIRSCHBAUM & COMPANY, Philadelphia, Pennsylvania, U.S.A. Men's, Boys' and Children's Clothing, 19th February, 1900.
7244. MANLIUS BULL, Winnipeg, Man. Soap, 19th February, 1900.
7245. OAKES BROTHERS & COMPANY, London, England. Indian Cigars and Tobacco, 19th February, 1900.
7246. MAURICE LEFEBVRE, Montreal, Que., Trading as MICHEL LEFEBVRE, JUNIOR. Groceries, 21st February, 1900.
7247. DIS-PEP COMPANY, Montreal, Que. Medicinal Preparations, 21st February, 1900.
7248. THE CONTINENTAL COSTUME COMPANY, LIMITED, Toronto, Ont. Ladies' Wearing Apparel, 21st February, 1900.
7249. STOHWASSER & COMPANY, London, England. Clothing, 22nd February, 1900.

7250. GEORGE M. S. WILSON & FREDERICK M. TUCKETT, Toronto and Markham, Ont., respectively. Proprietary Medicines, 26th February, 1900.
7251. HACHBORN & SHERIDAN, Toronto, Ont. Clothing for Men and Boys, 26th February, 1900.

INDUSTRIAL DESIGNS.

Registered during the months of January and February, 1900, at the Department of Agriculture—Copyright and Trade-Mark Branch.

1606. ANTHONY BIRCH, Lachine, Que. Bevel Guide for a Plane, 11th January, 1900.
1607. WILLIAM HENRY TRENHOLME and GEORGE HOGG, Montreal, Que. Paint Iron, 16th January, 1900.
1608. FREDERICK E. ROBERTS, Toronto, Ont. Fancy Basket, 17th January, 1900.
1609. SAMUEL J. RICHEY, St. John, N.B. Badge *re* "Soldiers of the Queen, Canadian Contingent South African War," 17th January, 1900.
1610. PIERRE COLLIN, Montreal, Que. Stove *re* "National," 19th January, 1900.
1611. ALBERT HENRY POWER, Toronto, Ont. Douche Bath Pan, 22nd January, 1900.
1612. NORMAN ERNEST WILLMOTT, Toronto, Ont. Butterfly Toy, 23rd January, 1900.
1613. CHARLES S. MEEK, Toronto, Ont. Skirt Protector, 3rd February, 1900.
1614. CHARLES S. MEEK, Toronto, Ont. Skirt Protector, 3rd February, 1900.
1615. THOMAS CUMMING ROBERTSON, JAMES ANDREW TAYLOR, WILLIAM WATT PRICE and GEORGE B. HOWES, Galt, Ont. Cream Separator, 3rd February, 1900.
1616. THE DOMINION RADIATOR COMPANY, LIMITED, Toronto, Ont. Radiator for an Oven, 9th February, 1900.
1617. THE DOMINION RADIATOR COMPANY, LIMITED, Toronto, Ont. Exterior of a Radiator Oven, 9th February, 1900.
1618. THE DOMINION RADIATOR COMPANY, LIMITED, Toronto, Ont. Interior of a Radiator Oven, 9th February, 1900.
1619. MACDONALD MANUFACTURING COMPANY, Toronto, Ont. Ornamentation of Tinware, *re* Indian Encampment, 13th February, 1900.
1620. MACDONALD MANUFACTURING COMPANY, Toronto, Ont. Ornamentation of Tinware, *re* Card Party of four men, 19th February, 1900.
1621. EDWIN THOMAS WRIGHT, Hamilton, Ont. Globe for Cold Blast Tubular Lanterns, 22nd February, 1900.

COPYRIGHTS

Entered during the month of February, 1900, at the Department of Agriculture—
Copyright and Trade-Mark Branch.

1111. VIE DE LA VÉNÉRABLE MÈRE D'YOUVILLE, FONDATRICE DES SŒURS DE LA CHARITÉ DE MONTREAL; SUIVIE D'UN HISTORIQUE DE SON INSTITUT. Par Madame L. A. Jetté, Spencer Wood, près Québec, Qué., 1er février 1900.
11142. EDUCATIONAL REVIEW SUPPLEMENTARY READINGS. CANADIAN HISTORY, NUMBER EIGHT, DECEMBER, 1899. George U. Hay, St. John, N.B., 1st February, 1900.
11143. DR. GORDON MEDICINE COMPANY'S REMEDIES AND RECEIPTS. (Circular.) Wilmer I. Gordon, Toronto, Ont., 1st February, 1900.
11144. OXYDONOR. (Book.) Dr. H. Sanche & Co., Montreal, Que., 1st February, 1900.
11145. LA LUNE BLANCHE. Words by Paul Verlaine. Music by Ethelbert Nevin, Op. 28. No. 6. The John Church Co., Cincinnati, Ohio, U.S.A., 2nd February, 1900.
11146. THE DREAM-MAKER MAN. Words by W. A. W. Music by Ethelbert Nevin, Op. 28. No. 5. The John Church Co., Cincinnati, Ohio, U.S.A., 2nd February, 1900.
11147. THE CANADA LAW JOURNAL. Volume XXXV. From 1st January to 31st December, 1899. Arthur Henry O'Brien, Ottawa, Ont., 2nd February, 1900.
11148. LUCIENNE VALSE. Par Arthur Desjardins, Montréal, Qué., 2 février 1900.
11149. ENGLISH CASES. Published in "The Canada Law Journal," Toronto. (Temporary Copyright.) Arthur Henry O'Brien, Ottawa, Ont. 3rd February, 1900.
11150. THE CANADIAN MAGAZINE. February, 1900. The Ontario Publishing Co. (Ltd.), Toronto, Ont., 5th February, 1900.
11151. THE GOODWIN METHOD, SECTION I, A HISTORY OF CANADA, (LESSON A) PRIMARY CHART. A HISTORY OF CANADA, (LESSONS A, B, C, D, and E.) Eli Nash Moyer, Toronto, Ont., 5th February, 1900.
11152. LOVELL'S COMMERCIAL COMPENDIUM FOR 1900. (Book.) John Lovell & Son, Montreal, Que., 6th February, 1900.
11153. BEHOLD THE BRIDEGROOM COMETH; OR, SOME REMARKABLE AND INCONTROVERTIBLE SIGNS WHICH HERALD THE NEAR APPROACH OF THE SON OF MAN. By Rev. Albert Sims, Kingston, Ont., 6th February, 1900.
11154. CANADIAN HYMN. Words by Charles Campbell. Music by J. E. March, M.D. John Edgar March, St. John, N.B., 7th February, 1900.
11155. THE GAVOTTE OF THE ROSE. (La Gavotta della Rose.) By Nicolò Celega. The John Church Co., Cincinnati, Ohio, U.S.A., 7th February, 1900.
11156. BEYOND THE DARK CLOUDS. (Oltre le Nubi.) Words by Piero Baronio. Music by Nicolò Celega. The John Church Co., Cincinnati, Ohio, U.S.A., 7th February, 1900.
11157. THE JOY OF LIVING. (La Joie de Vivre.) Scherzo. By Nicolò Celega. The John Church Co., Cincinnati, Ohio, U.S.A., 7th February, 1900.
11158. THE WALTZ OF THE LILIES. (Il Valzer dei Gigli.) By Nicolò Celega. The John Church Co., Cincinnati, Ohio, U.S.A., 7th February, 1900.
11159. THE ELEMENTS OF COMMERCIAL LAW. Compiled by T. H. Luscombe. The Business Educators' Publishing Co., Hamilton, Ont., 7th February, 1900.
11160. CANADIAN CONSTITUTIONAL HISTORY AND LAW." By A. R. Hassard, B.C.L. The Carswell Co. (Ltd.), Toronto, Ont., 7th February, 1900.
11161. CANADIAN JACK; OR THE HONOUR OF THE EMPIRE. (Patriotic Song.) Words and Music by Frank D. Fenwick, Sarnia, Ont., 8th February, 1900.

11162. L'EPREUVE. (Livre.) Par Paul Emile Prevost, M.D., Montréal, Qué., 8 février 1900.
11163. THE PROGRESSIVE SCORE AND REFERENCE TURF GUIDE BOOK. Douglas Alexander Thurston, Detroit, Michigan, U.S.A., 9th February, 1900.
11164. MY REDEEMER AND MY LORD. Poem by H. W. Longfellow. Music by Dudley Buck. The John Church Co., Cincinnati, Ohio, U.S.A., 9th February, 1900.
11165. THE CANADIAN HYMNAL. A Collection of Hymns and Music for Sunday Schools, Epworth Leagues, Prayer and Praise Meetings, Family Circles, etc. Revised and Enlarged. William Briggs, Toronto, Ont., 9th February, 1900.
11166. BENEDICITE, OMNIA OPERA. (Music.) By Albert Ham, Mus. Doc. F.R.C.O., Toronto, Ont., 10th February, 1900.
11167. THE BRITISH COLUMBIA REPORTS. Volume VI. The Law Society of British Columbia, Victoria, B.C., 13th February, 1900.
11168. OTTAWA SKETCHES. Published in "The Morning Chronicle" and "Daily Echo," Halifax, N.S. (Temporary Copyright.) The Chronicle Publishing Co., Ltd., Halifax, N.S., 13th February, 1900.
11169. BRITONS! REMEMBER! A New Patriotic Song. Words by C. A. Parker. Music by Geo. Bowles. Geo. Bowles, Winnipeg Man., 13th February, 1900.
11170. HE ISN'T SLEEPING NOW. Patriotic Song. By James Fax. Arranged by Arthur Blakely. James Fax, Toronto, Ont., 14th February, 1900.
11171. THE KNIGHTS OF THE CROSS. By Henryk Sienkiewicz. Translated from the Polish by Jeremiah Curtin. (First Half.) George N. Morang & Company, (Ltd.), Toronto, Ont., 14th February, 1900.
11172. MY SWEETHEART WALTZES. By A. Wellesley, Amey & Hodgins, Toronto, Ont., 15th February, 1900.
11173. L'ABSENTE. Valse pour Piano. Par A. J. H. St. Denis. André Julien Hormidas St. Denis, Montréal, Qué., 15 février, 1900.
11174. TRINKLIED. Words, Old German, Translation by M. R. L. S. Music by Hermann Lohr. The John Church Company, Cincinnati, Ohio, U.S.A., 16th February, 1900.
11175. A TREATISE ON THE LAW OF MORTGAGES OF REAL ESTATE. By Edwin Bell, LL.B., and Herbert L. Dunn, B.A. Edwin Bell, Chatham, Ont., and Herbert Langell Dunn, Toronto, Ont., 16th February, 1900.
11176. SAW LOGS: CONTENTS IN FEET, BOARD MEASURE, PROVINCE OF QUEBEC, LOG TABLE, 1889. Compiled by A. D. Ritchie. The Laurentide Pulp Co. (Ltd.), Grand'Mère, Que., 16th February, 1900.
11177. DER SCHWIEGERSOHN VON RUDOLF BAUMBACH. Annotated by Dr. Wilhelm Bernhardt. With Appendices by L. E. Horning. The Copp, Clark Co. (Ltd.), Toronto, Ont., 19th February, 1900.
11178. FRITZ, THE CAT. (Photo.) James Esson, Preston, Ont., 19th February, 1900.
11179. COONTOWN REVELS. Characteristic March, Two Step and Cake Walk. By Chas. E. Musgrave. The Anglo-Canadian Music Publishers' Association, (Ltd.), London, England, 19th February, 1900.
11180. ROYAL CANADIANS' MARCH AT SEAT OF WAR. Words by John Lion Alexander. Music by G. Alexander. John Lion Alexander, Toronto, Ont., 19th February, 1900.
11181. HERE WE ARE! (Canada's Contingent No. 1.) Patriotic Song and Chorus. Words by Will Burt. Music by Will Pearce. William Murray Pearce, Wolfe Island, Ont., 20th February, 1900.
11182. LONGING. Words by Franklin Pierce Carrigan. Music by Clayton Johns. The John Church Co., Cincinnati, Ohio, U.S.A., 23rd February, 1900.
11183. TO A ROSE. Words by Charlotte Fiske Bates. Music by Clayton Johns. The John Church Co., Cincinnati, Ohio, U.S.A., 23rd February, 1900.
11184. NIGHT AND THE VIOLETS. Words by Mrs. Denis O'Sullivan. Music by Mary Carmichael. The John Church Co., Cincinnati, Ohio, U.S.A. 23rd February, 1900.
11185. BRIGADELANCERS. New Edition Introducing "Soldiers of the Queen." By John Waldron. The Anglo-Canadian Music Publishers Association (Ltd.), London, England, 23rd February, 1900.
11186. SELECTIONS FROM SCOTTISH CANADIAN POETS. William Campbell, Toronto, Ont., *és qualité*. The Caledonian Society of Toronto, 23rd February, 1900.

11187. CANADIAN DRILLS AND EXERCISES NO. 3. CANADA, OUR HOMELAND. By Edith LeLean, Toronto, Ont., 24th February, 1900.
11188. THE POEMS OF ARCHIBALD LAMPMAN. Edited with a Memoir by Duncan Campbell Scott. Emma Maud Lampman, Ottawa, Ont., 24th February, 1900.
11189. THE ASSESSOR'S GUIDE. By James Morrison Glenn, Q.C., LL.B. (Second Edition.) The Municipal World Publishers, St. Thomas, Ont., 24th February, 1900.
11190. AFTER ALL. Words by G. H. Kerr. Music by Howard Webster. Whaley, Royce & Co., Toronto, Ont, 26th February, 1900.
11191. AN OLD-FASHIONED GIRL. Words by George Strayer Maxwell. Music by Lee Olean Smith. Whaley, Royce & Co., Toronto, Ont., 26th February, 1900.
11192. SONG OF IRAS. From "BEN HUR." Words by Lew Wallace. Music by Edgar Stillman Kelly. The John Church Co., Cincinnati, Ohio, U.S.A., 27th February, 1900.
11193. LINES ON THE RELIEF OF LADYSMITH. By Robert Jamieson, Perth, Ont., 27th February, 1900.
11194. LOVELL'S LOOSE LEAF INVOICE FORM. (Marked A.) Robert James Lovell, Toronto, Ont., 27th February, 1900.
11195. LOVELL'S LOOSE LEAF INVOICE FORM. (Marked B.) Robert James Lovell, Toronto, Ont., 27th February, 1900.