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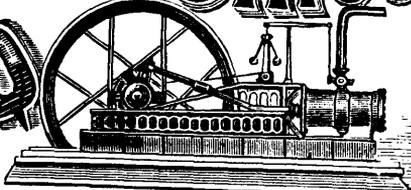
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# The Canadian Patent Office

## RECORD

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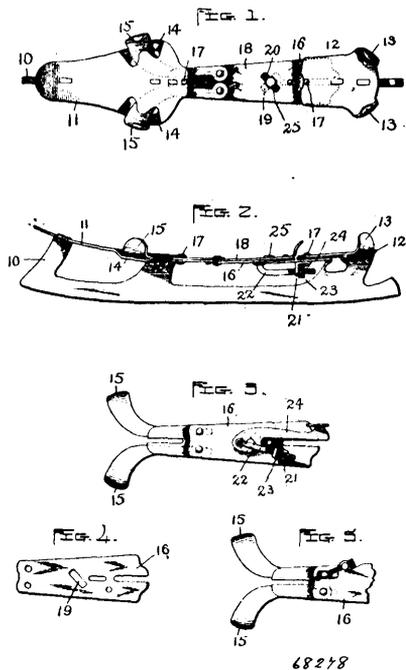
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#### No. 68,278. Skate. (Patin.)



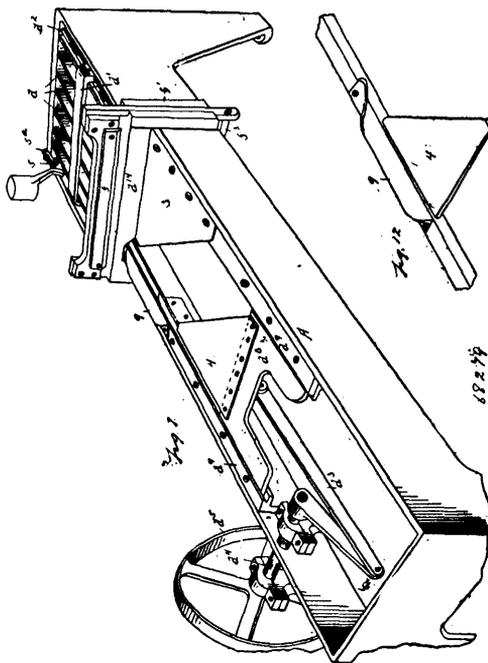
The Samuel Winslow Skate Manufacturing Company, Worcester, Massachusetts, assignee of Stephen S. Black, Pasadena, California, both in the U.S.A., 1st August, 1900; 6 years. (Filed 22nd November, 1899.)

Claim.—1st. In a skate, the combination of fixed rear heel stops a clamping lever, rearwardly closing toe clamps, a slide for operating the toe clamps, and a slide for operating a rearwardly closing heel clamp, said slides having oppositely inclined slots with a stud fitting therein and forming a connection to divide the strain of the clamp-

ing lever between the rearwardly closing toe clamps and the rearwardly closing heel clamp, substantially as described. 2nd. In a skate, the combination of the fixed back heel stops, the rearwardly closing toe clamps, a slide for operating the toe clamps, a slide for operating a rearwardly closing heel clamp, a clamping lever, and a screw forming an adjustable connection between the clamping lever and heel plate, said clamping lever being provided with a stud engaging oppositely inclined slots in said slides to divide the strain of the clamping lever between the rearwardly closing toe clamps and the rearwardly closing heel clamp, substantially as described. 3rd. In a skate, the combination of a clamping lever, the rearwardly closing toe clamps, a slide for operating the same, an adjusting screw connecting one of the toe clamps and its slide, to provide a transverse adjustment of the skate, a slide for operating a rearwardly closing heel clamp, and a connection for dividing the strain of the clamping lever between the rearwardly closing toe clamps and the rearwardly closing heel clamp formed by a stud fitting into oppositely inclined grooves in the slides, substantially as described.

#### No. 68,279. Paper Folding Machine.

(Machine à plier le papier.)

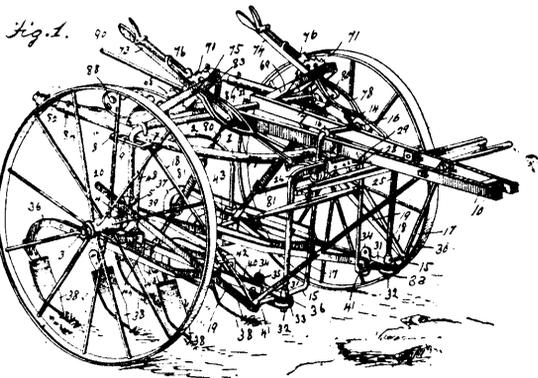


George P. Davis, Detroit Michigan, U.S.A., 1st August, 1900; 6 years. (Filed 22nd January, 1900.)

Claim.—1st. In a paper folding machine, in combination with a frame, and means for feeding paper intermittently, a fixed plate over which the paper is fed, a reciprocating die plate arranged on a plane lower than the fixed plate, and means for reciprocating the

die plate under the fixed plate, substantially as described. 2nd. In a paper folding machine, in combination with a fixed plate, a reciprocating die plate, located on a plane beneath the fixed plate, a paper turning guide located at one side of, and extending over the reciprocating plate and arranged to turn the edge of the paper over the die plate, substantially as described. 3rd. In a paper folding machine, in combination with a fixed plate, and a reciprocating die plate, a reciprocating die plate, a reciprocating paper feeding mechanism comprising a table made with a top of longitudinal slats, a cross plate above the slats, fingers pivoted in hangers from the cross plate and adapted to engage between the slats and against the cross plate, and means for actuating the fingers, substantially as described. 4th. In a paper folding mechanism, a paper feeding device comprising a table of longitudinal slats, a cross bar located above the table, gripping fingers pivoted below the table, and adapted to engage between the slats and against the cross bar, and an actuating lever operating in conjunction with the folding mechanism, and arranged to bring the gripping levers into gripping contact on the forward movement and release them from gripping contact on the backward movement, substantially as described. 5th. In a paper folding mechanism, a severing knife, a lever arranged to operate said severing knife, a reciprocating mechanism, a grooved friction roll carried by said reciprocating mechanism, the end of the lever being arranged diagonally across the path of the travelling friction roll, and the friction roll being arranged to move longitudinally of its axis, substantially as described. 6th. In a paper feeding mechanism, in combination with a reciprocating mechanism arranged to fold the paper, a severing knife, and a lever adapted to actuate the severing knife, and means whereby the actuating lever is operated during one direction of the reciprocating movement, and is not operated during the reverse reciprocation, substantially as described. 7th. In a paper folding mechanism, in combination with a reciprocating former around which the bag is formed, a point turner consisting of a curved engaging piece, pivoted beneath the line of travel of the forming piece, and having a curved part which normally extends across the line of travel, but which can be turned on its pivot to engage entirely underneath the former, substantially as described. 8th. In a paper folding machine, in combination with a reciprocating former, and a stationary folding plate, a jaw pivoted to the reciprocating former, and means whereby the jaw closes toward the former, during part of the reciprocation thereof, substantially as described. 9th. In a paper folding machine, in combination with a paper roll holder, means for actuating the roll of paper, a reciprocating feeding device, a severing knife, a paste spreading device, a reciprocating former, a fixed folding plate, and edge turner, and a point turner, all substantially as described.

**No. 68,280. Cultivator. (Cultivateur.)**



68280

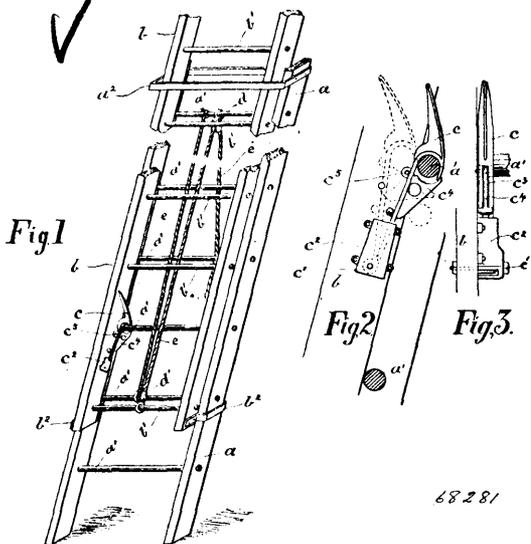
Dennis S. Blue and Alfred D. Hetrick, both of Fremont, Ohio, U.S.A., 1st August, 1900; 6 years. (Filed 11th July, 1900.)

**Claim.**—1st. In a cultivator, the combination with a main frame, of an auxiliary frame having horizontal guide rods at its lower end, braces connecting the auxiliary frame to the main frame, a main axle having depending portions and adjusting braces connecting the guide rods of the auxiliary frame adjustably to the main axle. 2nd. In a cultivator, the combination with an auxiliary frame having guide rods, of a shifting frame having legs provided with collars, clevises straddling the guide rods and through which the legs aforesaid pass, one member of the clevises abutting on the collars, nuts for retaining the other members of the clevises, grooved pulleys journaled on the legs and located between the members of the clevises and bearing on the guide rods, cultivator gangs pivoted to the clevises so as to be capable of up-and-down movement, means for raising and lowering the gangs, and means for moving the shifting frame, whereby the gangs can be simultaneously shifted laterally, substantially as described. 3rd. In a cultivator, the combination with a main frame, of an auxiliary frame having horizontal guide rods at its lower end, braces connecting the auxiliary frame to the

main frame, a main axle having depending portions, adjusting braces connecting the guide rods of the auxiliary frame adjustably with the main axle and cultivator gangs having sliding pivotal connection with the horizontal guide rods. 4th. In a cultivator, the combination with a shifting frame, composed of two sections having overlapping portions, one of which has a plurality of openings, and the other a single opening of a connecting rod, a bolt passing through the connecting rod and the openings aforesaid, cultivator gangs having a compound pivotal connection with the sections of the shifting frame, and shifting mechanism operatively connected to the connecting rod, substantially as described. 5th. In a cultivator, the combination with a shifting frame, of cultivator gangs pivotally connected thereto so as to be capable of vertical movement, and independent shifting devices operatively connected to the respective gangs and adapted for raising and lowering them, and also operatively connected to the shifting frame so that the latter can be moved laterally by either of them. 6th. In a cultivator, the combination with a shifting frame adapted for lateral movement, of cultivator gangs pivoted thereto so as to be capable of vertical movement, pivoted members, shifting levers pivoted to said members, operative connections between the levers and the respective gangs, whereby either gang may be raised or lowered independently of the other, and operative connections between the shifting frame and the pivoted members whereby movement of the latter causes a lateral movement of the gangs, substantially as described. 7th. In a cultivator, the combination with a shifting frame adapted for lateral movement, of cultivator gangs pivotally connected thereto, pivoted toothed segments adapted to swing laterally, shifting levers pivoted to said segments and having retractable locking mechanism to engage the teeth thereof, connections between said levers and the respective gangs, and shifting rods pivoted to the segments and the shifting frame, substantially as described. 8th. In a cultivator, the combination with a main frame, of an auxiliary frame having horizontal guide rods at its lower end, braces connecting the auxiliary frame to the main frame, a main axle having depending portions, adjusting braces connecting the guide rods of the auxiliary frame adjustably with the main axle and cultivator gangs having sliding pivotal connection with the horizontal guide rods, the forward ends of said cultivator gangs adjustably connected together. 9th. In a cultivator, the combination with a main frame, of an auxiliary frame having horizontal guide rods at its lower end, braces connecting the auxiliary frame to the main frame, a main axle having depending portions, adjusting braces connecting the guide rods of the auxiliary frame adjustably with the main axle and cultivator gangs having sliding pivotal connection with the horizontal guide rods, the forward ends of said cultivator gangs adjustably connected together and a connecting arch or frame for holding the rear ends of the cultivator gangs apart and admitting of independent vertical movement with respect to each other. 10th. In a cultivator, the combination with a main frame and axle having pivotal connection therewith, the axle having depending portions, of an auxiliary frame terminating at the lower end in horizontal guide rods, braces extending from the guide rods to the main frame, adjusting braces connecting the horizontal guide rods with the axle, cultivator gangs having sliding pivotal connection with said horizontal guide rods, means for holding said gangs apart at their forward and rear ends respectively and admitting of independent vertical movement at their rear ends and hand levers for raising and lowering said gangs, and for swinging them laterally. 11th. In a cultivator, the combination with a main frame, an axle having pivotal connection therewith, the axle having depending portions, of an auxiliary frame terminating at the lower end in horizontal guide rods, braces extending from the guide rods to the main frame, adjusting braces connecting the horizontal guide rods with the axle, cultivator gangs having sliding pivotal connection with said horizontal guide rods, means for holding said gangs apart at their forward and rear ends respectively and admitting of independent vertical movement at their rear ends, and hand levers having vertical and horizontal pivotal connection with the main frame and connected with the cultivator gangs for raising and lowering said gangs and for swinging them laterally. 12th. The combination with a main frame, an axle having depending portions, wheels in which the axle bears and an auxiliary frame connected with the main frame and provided at its lower ends with horizontal guide rods to the main frame, adjusting braces connecting the horizontal guide rods to the depending braces of the axle, of cultivator gangs connected together at their forward and rear ends and having sliding pivotal connection with the horizontal guide rods, and levers having vertical and horizontal pivotal connection with the main frame, and spring tension devices connecting these levers with the cultivator gangs. 13th. In a cultivator, the combination with a main frame, of clamp plates fitted against said frame and provided with slotted extensions, staples passing through the main frame and clamp plates, an axle loosely fitted in the staples and provided with the depending portions that lie in the slotted extensions, traction wheels in which the depending ends of the axle are mounted and braces for the axle. 14th. In a cultivator, a shovel comprising a standard having a curved and pointed lower end, a blade sunk flush in the end of the standard, whose upper portion is of considerably greater width than said standard, and which has lower sharpened edges converging toward the point of the standard, and a loop and fastener for connecting the standard to the foot of the cultivator. 15th. In a cultivator, the combination with side shovel gangs adapted for independent

up-and-down movement, and means for raising and lowering said gangs independently, of a pivoted centre shovel carrying frame also adapted for up-and-down movement and provided with a device adapted to engage one of the gangs so that said frame will move with the gang to which it is attached, substantially as described.

**No. 68,281. Self Hooking and Self Releasing Extension Ladder. (Echelle a rallonge)**

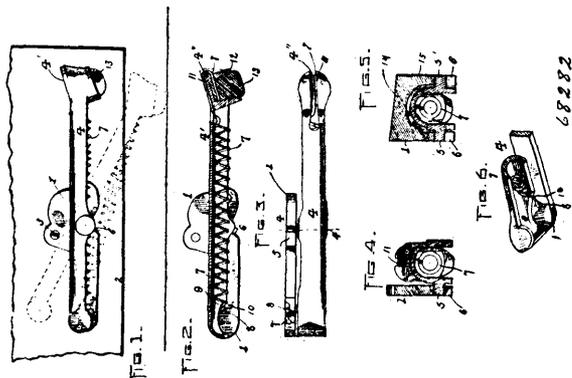


68281

Albert Marion Ferguson and Robert Alexander Jelly, both of Winnipeg, Manitoba, Canada, 1st August, 1900; 6 years. (Filed 11th July, 1900.)

*Claim.*—1st. In a self hooking and releasing extension ladder the combination of the peculiar form of the hook C with the box C<sup>2</sup>, pin or bolt C<sup>1</sup>, the peculiar form of release C<sup>4</sup> pivoted at the back of hook C at C<sup>5</sup> and operating in the slot C<sup>3</sup>, all substantially as set forth. 2nd. In a self hooking and releasing extension ladder, the combination of the hook C having its lower extremity perforated to receive the bolt C<sup>1</sup> the box C<sup>2</sup> also perforated for the same purpose, the bolt C<sup>1</sup> passing through the box C<sup>2</sup>, hook C, and side of ladder B, the releaser C<sup>4</sup> pivoted at the back of the hook C and working in slot C<sup>3</sup> with the ladders A A and B B. 3rd. In a self hooking and releasing extension ladder the combination of the hook C having its lower extremity perforated to receive the bolt C<sup>1</sup>, the box C<sup>2</sup>, also perforated for the same purpose, the bolt C<sup>1</sup> passing through the box C<sup>2</sup>, hook C and side of ladder B, the releaser C<sup>4</sup> pivoted at back of C and working in slot C<sup>3</sup> with the ladders A A and B B, and pulleys D and D<sup>1</sup> and cord or rope E, all formed, arranged and combined as set forth.

**No. 68,282. Door Holder. (Arrête-porte.)**



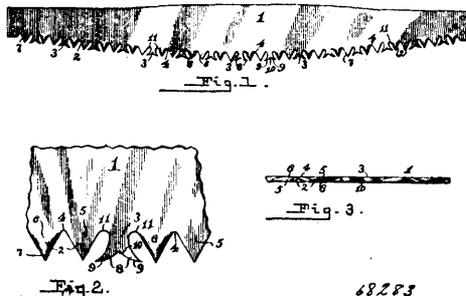
68282

Charles Herbert Ocumpaugh, Rochester, New York, U.S.A., 1st August, 1900; 6 years. (Filed 17th July, 1899.)

*Claim.*—1st. In a door holding device the combination of the plate fixed to the door, the lever provided with a trunnion bearing in the plate and a spring operatively joining the plate and lever, one end of said spring being attached at the extreme opposite end of the lever to increase the leverage and obviate the use of a special spring holding lug, and a friction block to the end of the lever by means of the

spring. 2nd. In a door holding device the combination of the plate fixed to the door, the lever provided with a trunnion bearing in the plate and a spring operatively joining the plate and lever, one end of said spring being attached to the extreme opposite end of the lever, and a friction block secured to the end of the lever by the means which secured the spring to the same, said lever having an upwardly bent portion provided with a block seat and with a groove to receive the spring wire extending around its end. 3rd. In a door holding device the combination of a plate, a lever, a spring bearing on the end of the lever and a friction block, said block being held to the lever by the spring, whereby the spring is fastened directly, the lever and a special lug avoided, said spring fastening also performing the additional function of holding the friction block.

**No. 68,283. Saw. (Scié.)**



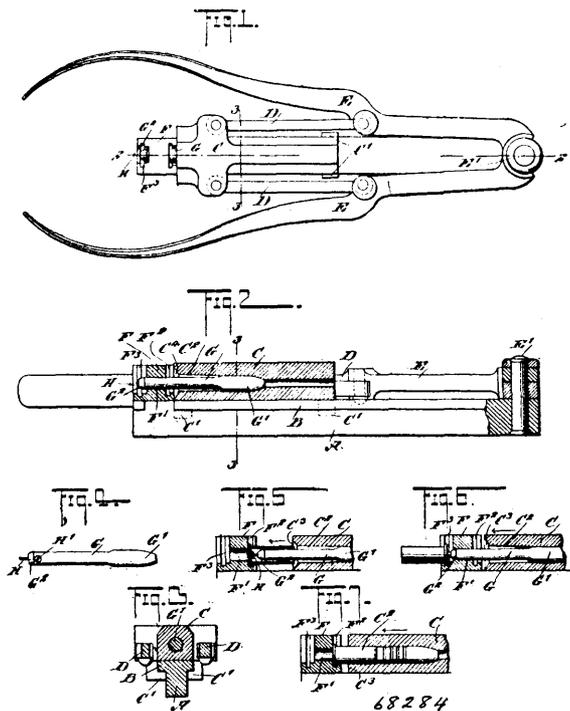
68283

Charley McDonner, Wausaukee, Wisconsin, U.S.A., 1st August, 1900; 6 years. (Filed 28th August, 1899.)

*Claim.*—In a saw, the blade having at the working edge thereof alternating pairs of cutting teeth, and rakers between said pairs of teeth, the two cutting teeth of each pair being arranged side by side and each tooth having one of its faces continuously rounded or convex from edge to edge thereof, so as not to present angular edges to the sides of the kerf, and said rounded or convex faces of the adjacent teeth being disposed in reverse relation, said rakers which alternate with the pairs of teeth being provided with outwardly divergent semi-crescent teeth having their bills curved toward the straight inclined edges of the adjacent cutting teeth, the notches between the cutting teeth, and also those between the latter and the raker shanks, being of equal depth and rounded at their bases, substantially as set forth.

**No. 68,284. Cartridge Reloading Tool. (Appareil à charger les cartouches.)**

(Appareil à charger les cartouches.)

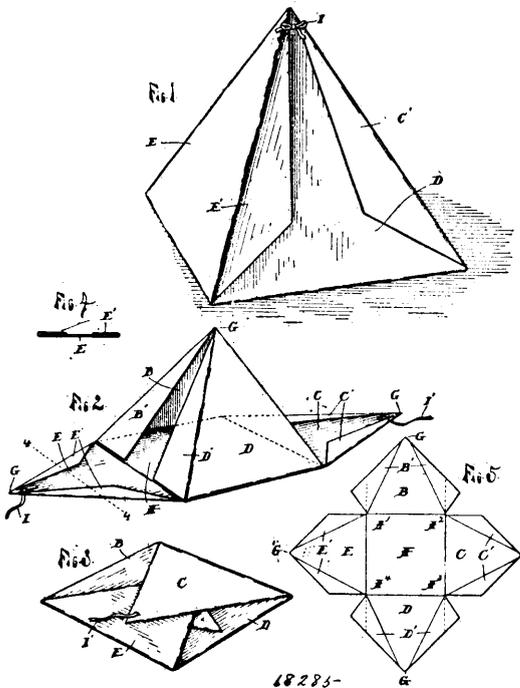


68284

Walter Herbert Gripman, Sioux Falls, South Dakota, U.S.A., 1st August, 1900; 6 years. (Filed 31st January, 1900.)

*Claim.*—1st. A cartridge reloading device, comprising a stationary die having a longitudinal cylindrical bore, retainers or guideways at the ends of the bore for receiving and holding the head of a shell in longitudinal alignment with said bore, a die movable longitudinally toward or from said stationary die, and having a tapering bore in axial alignment with said cylindrical bore and a pusher for removable insertion in the bore of said movable die and projecting beyond the front end thereof and passing through the bore in the stationary die, for seating the new primer on the shell, said pusher also serving for forcing a bullet through the bore in the stationary die and sizing the bullet, substantially as shown and described. 2nd. A cartridge reloading device, comprising a stationary die having a retaining or guideway at its inner face or end, for receiving and holding the head of the shell, a die movable longitudinally toward or from said stationary die, and a pusher removably held in said movable die in axial alignment with the shell, said pusher carrying at the front end a pin for engaging and removing the old primer in the shell, substantially as shown and described. 3rd. A cartridge reloading device, comprising a stationary die having a retainer or guideway at its inner face for receiving and holding the head of the cartridge, and a die movable longitudinally toward or from said stationary die and having a tapering bore in axial alignment with the cartridge, the walls of the bore being adapted to engage the bullet and shell of the cartridge, to crimp the shell upon the bullet and compress the powder by moving the bullet in the shell, and to resize the cartridge, substantially as shown and described. 4th. A cartridge reloading device, comprising a stationary die having a longitudinal cylindrical bore, retainers or guideway at the ends of the bore for receiving and holding the head of the shell or cartridge in longitudinal alignment with said bore, a die movable longitudinally toward or from said stationary die and having a tapering bore in axial alignment with said cylindrical bore, a pusher for removable insertion in the bore of said movable die, links pivotally connected with said movable die, and hand levers pivotally connected with said links, for imparting a sliding motion to said movable die upon swinging said levers outward or inward, substantially as shown and described.

**No. 68,285. Pyramidal Hat Bag. (Boîte à chapeau.)**



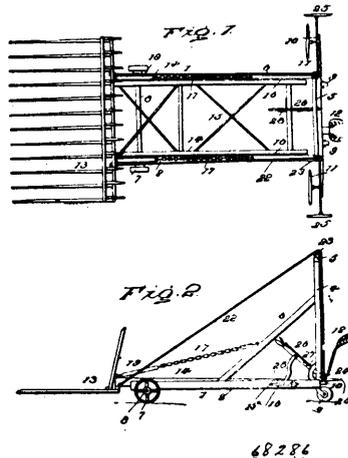
Martin L. Horning, Albion, Michigan, U.S.A., 1st August, 1900; 6 years. (Filed 14th July, 1900.)

*Claim.*—1st. A blank for a pyramidal bag or box consisting of a square sheet of stiff material cut and creased to form, having triangular parts removed from the middle of each side, the spaces left having their inner points at the four corners of the inner square, and creases extending from each of said inner corners to the next one, and similar creases extending from said inner corners to points in the sides of the original square blank near its corners, substantially as described. 2nd. The herein described pyramidal hat bag or box, comprising the square bottom, the triangular sides, and the triangular side flaps, the material at the line of junction of the bottom and sides, and sides and flaps being creased to form hinges, the opposite sides to be first folded normally carrying their flaps at acute angles thereto and adapted to rest with their lower edges on the bottom, and those to be last folded to inclose the first, normally

carrying their flaps at an acute angle, whereby the flaps of the first folded sides, will press outward against the inside of the last folded sides and the flaps of the last folded sides will press inward against the outside of the first folded sides, the creases being formed to act as hinges and springs to effect these results, substantially as described. 3rd. A blank for a pyramidal bag or box consisting of a square sheet of stiff material cut and creased to form, having triangular parts removed from the middle of each side, the spaces F having their inner points at the four corners of an inner square A, and creases extending from each of said inner corners to the next one, and similar creases extending from said inner corners to points in the sides of the original square blanks near its corners thereof. 4th. The herein described pyramidal hat bag or box, comprising the square bottom A, the triangular sides B, C, D, E, and the triangular flaps B<sup>1</sup> B<sup>1</sup> C<sup>1</sup> C<sup>1</sup>, D<sup>1</sup> D<sup>1</sup> E<sup>1</sup> E<sup>1</sup>.

**No. 68,286. Hay Rake and Stacker.**

(Rateau à foin et machine à emoullonner.)



Andrew Harvey Graves, Pleasanton, Iowa, U.S.A., 1st August, 1900; 6 years. (Filed 14th July, 1900.)

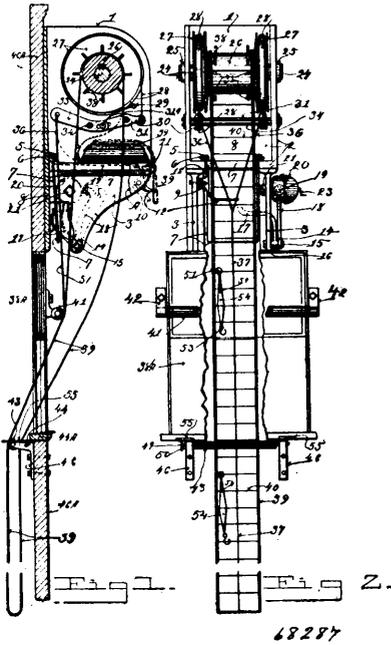
*Claim.*—1st. In a hay rake and stacker, a supporting frame, a rake, arms secured to the rake, means for supporting the front ends of the said arms, connections having longitudinally spaced pivotal connection with, respectively, the frame and the arms, and means carried by the frame for depressing the rear ends of the arms, as and for the purpose set forth. 2nd. In a hay rake and stacker, a supporting frame, a rake, arms having the rake attached thereto, means for supporting the front ends of the said arms, swinging pivotal connections between the arms and frame and having oppositely projecting bearings journalled, respectively, to the said arms and frame, and means applied to the frame to depress the rear ends of the said arms to effect an elevation of the rake, substantially as set forth. 3rd. In a hay rake and stacker of the character described, the combination of a wheeled frame, elevatable rake mechanism, pulleys arranged at the top and bottom of the rear of the frame, cables passed over said pulleys and laterally out from the frame and having draft devices applied thereto, a seat at the rear portion of the frame, and mechanism for raising and lowering the rake from said seat. 4th. In a hay rake and stacker of the character described, a frame, a rake having pivotal connection therewith, stays having connection with the rake and frame for limiting the upward movement of said rake mechanism, and springs co-acting with the stays to effect a cushioning action and partial retraction of the rake mechanism. 5th. In a hay rake or stacker of the character described, a frame, a rake having pivotal connection therewith, stays having connection with the rake and frame for limiting the upward movement of said rake mechanism, springs co-acting with the stays to cushion and partially retract the rake mechanism, and means for varying the tension of said springs, substantially as set forth.

**No. 68,287. Fire Escape. (Saurtcur d'incendie.)**

Felix Marian Lepore, Denver, Colorado, U.S.A., 1st August, 1900; 6 years. (Filed 14th July, 1900.)

*Claim.*—1st. In a fire escape, the combination of a box-shaped cabinet, a drum mounted in said cabinet having a brake flange at each end, brake bands pivoted at one end in said casing and surrounding each of said brake flanges and secured at their opposite ends to one end of a lever, a pivotal support for said lever, a second lever pivotally secured to the free end of said first-named lever, a pivotal support for said second lever, and a brake operating rope secured to the free end of said second lever, substantially as described. 2nd. In a fire escape, the combination of a drum having projecting pins radiating from its surface at its opposite ends, a brake flange on each end of said drum, a pliable brake band surrounding each of said brake flanges, a compound lever connected to one end of each of

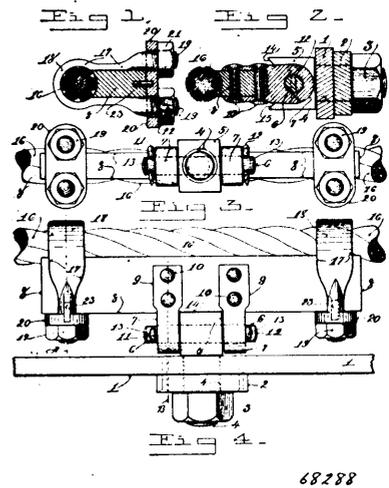
said brake bands, and a brake rope secured operatively to said brake levers, with an endless wire rope ladder comprising suitable sides,



and rounds arranged to roll on said drum and engage said pins with its rounds, substantially as specified. 3rd. In a fire escape, the combination of a cabinet, the drum journaled in said cabinet, the endless ladder mounted to roll on said drum, the projecting pins, the brake bands, the brake levers and the brake rope with the trap door hinged to said cabinet, and the trip latch arranged in the path of said ladder, substantially as specified. 4th. The combination with a fire escape, of the cabinet, a drum journaled therein, means including a brake flange on each end of said drum, and a depending rope for controlling the rotative speed of said drum, an endless rope ladder mounted on the surface of said drum and having suitable rounds, projections on said drum adapted to engage said rounds with a trap door hinged to said cabinet and adapted to hold said ladder and brake rope when in disuse, a trip latch arranged to be tripped by a movement of said ladder to place it in a position of use, and an alarm bell arranged to be sounded by the falling trap door, substantially as described. 5th. In a fire escape, the combination of the rotatable drum and the endless ladder, a cabinet, brackets arranged to support said cabinet, a trap door hinged in the floor of said cabinet between said brackets, a trip latch pivotally secured to one bracket and provided with two arms, one of which is arranged to hold up said trap door and having the other arm arranged to be engaged by said ladder when it is dislodged from said door, a spring actuating alarm bell pivoted to one of said brackets, a two armed lever pivoted adjacent to said bell, one arm of which is arranged in operative relation to ring said bell, and having the other arm arranged in the path of and adapted to be moved by the downward swinging movement of said trap door, whereby said two armed lever is actuated to ring said alarm bell, substantially as described. 6th. In a fire escape adapted to be placed at windows, the combination of the cabinet and the drum with the endless ladder mounted thereon, the brake flanges, the compound levers, the brake rope, and the trap door hinged in the floor of said cabinet, a trip latch arranged to support said door, an alarm bell arranged to be actuated by said door, a roller arranged across said window, and a pair of rollers arranged below the sill of said window, brackets adapted to support said rollers, and a platform leading from said sill to the front side of said ladder, substantially as described. 7th. In a fire escape to be placed at window and door openings of buildings, the combination of the drum, the supporting cabinet, the brake flanges on said drum, the pliable brake bands surrounding said flanges, and the brake rope, with a wire rope ladder arranged to rotate said drum, a trap door secured in said cabinet, the trip latch arranged to releasably support said door, the alarm bell arranged and adapted to be operated by the fall of said door, the brackets bolted to the building below the window sill, a platform on the outside of each bracket and extending in front of said ladder and two rollers pivoted to said brackets, there being a recess in one of said brackets adapted to allow one end of the outside roller to be raised out of its bearing, and means for securing the opposite end of the outer roller against displacement from its bearing, substantially as described. 8th. In a fire escape, the combination of a box-shaped cabinet secured above a window or door opening, a drum rotatably mounted in said cabinet, brake flanges on each end of said drum, a pliable brake band arranged to surround each flange, two levers pivotally attached

together at two of their ends, one lever of which is secured to one end of said brake band, and the other of which is connected to a rope depending from said lever to the ground, pivotal bearings for both of said levers at determined points of their respective length, an endless rope ladder mounted to roll on said drum, projections on said drum arranged to engage the rounds of said ladder, a roller arranged across said window, a second bracket at the outside of the sill of said window, supporting said roller at each end, one of which brackets is vertically slotted to allow said roller to be disengaged quickly from it, a platform on the outside of each bracket leading to the front of said roller, a trap door pivotally mounted in said cabinet, and arranged to support said ladder and brake rope in a position of disuse, means for locking said trap door in a position to support the ladder, means for unlocking said trap door and for moving it out of the operative path of said ladder and brake rope when said ladder is in use, a two armed lever pivoted to said cabinet, one arm of which is arranged to be engaged by said trap door, and an alarm bell arranged to be engaged by the other arm of said lever and to be sounded by the movement of said lever and said trap door when the ladder drops into a position of use, substantially as described.

**No. 68,288. Bucket Clip for Wire Rope Tramways.**  
(*Mâchoire pour cables et augets.*)

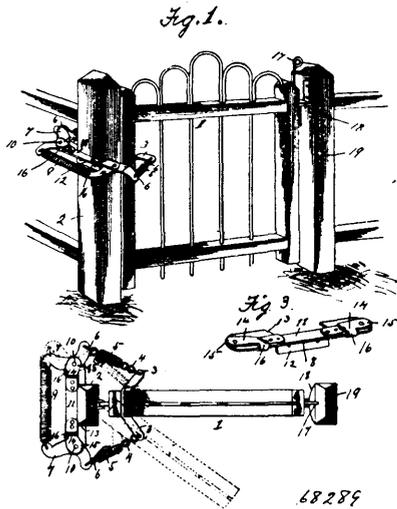


Byron C. Riblet, Nelson, British Columbia, Canada, 1st August, 1900; 6 years. (Filed 16th July, 1900.)

*Claim.*—1st. In a rope and bucket clip, the combination of a bar having a concaved edge adapted to fit against a rope, a yoke-shaped clip adapted to surround said rope and opposite sides of said bar, threaded ends on said clip, a strap on said ends against the edge of said bar and nuts on said threaded end arranged to clamp said rope and bar between said strap and clip, substantially as described. 2nd. In a rope and bucket clip, the combination of a bar fitted against a rope, a yoke arranged to clamp said rope and bar together, a hinge bolt pivotally secured to the opposite edge of said bar from said rope and arranged to be pivotally secured to a rope carried bucket, substantially as described. 3rd. In a rope clip, the combination of a rope and a bucket, with the rope fitting bar and the yoke clip and strap clampably securing said rope to said bar, substantially as described. 4th. In a rope and bucket clip, the combination with the rope, of a flat bar concaved at one edge to fit against the rope and clips arranged to clamp said rope and bar together, substantially as described. 5th. In a rope and bucket clip, the combination with the rope, of a flat bar concaved at one edge to fit against the rope, clips folded around said rope at each end of said bar, and arranged to lay against the opposite sides of said bar, threaded ends on said clips, nuts on said threaded ends, a strap on said threaded ends, a dowel pin in said strap and bar adapted to hold it against displacement and a bolt pivotally secured to the opposite edge of said bar from said rope to swing vertically and having stop projections arranged to define its vertical movement to about an angle of 45 degrees above and below its horizontal centre, a round threaded end and a nut on the end of said bolt, and a shoulder adjacent to said nut, substantially as described. 6th. In a rope and bucket clip, the combination with the rope, of the rope bar, the rope and rope bar clips, the straps and the pins adapted to hold the strap to the bar, with two lugs spaced a short distance apart and projecting from the opposite edge of said rope bar from said rope at the central portion of said rope bar, a pin extending through said lugs, a bolt pivoted to said pin and having a concentric portion adjacent to the edge of said bar, stops on said concentric portion adapted to define the pivotal movement of said bolt, and a round stud end to said bolt having a shoulder at one end

and a nut threaded to its outer end, substantially as described. 7th. In a rope and bucket clip for aerial tramways, the combination of a rope and the cross bar of a bucket, the rope bar, the clips, the straps, and the dowel pins, with two lugs provided with strap portions adapted to be secured to said bar, a pin extending through said lugs and secured thereto, and a bolt pivotally mounted on said pin and arranged to swing in a vertical plane, stops on said bolt arranged to engage said bar and adapted to define the vertical movement of said bolt above and below the horizontal centre of its pivotal pin, a shoulder on said bolt, a round portion adjacent to said shoulder, the bucket cross bar pivotally mounted on said round portion, and a nut threaded to the end of said round portion and adapted to secure said cross bar to said bolt, substantially as described. 8th. In a rope clip, the combination of the rope, the bar fitted to rest against said rope, the clip surrounding said rope and the opposite sides of said bar, the straps on the ends of said clips, the nuts for clamping said rope and bar between said clip and strap and the dowel pins in said straps and bar, with the lugs secured to the opposite edge of said bar from said rope, the pin secured in said lugs, the bolt pivotally mounted on said pin and the cross bar mounted on said bolt, substantially as described.

**No. 68,289. Door Spring. (Ressort de porte.)**



68289

Frank M. Bute, Ivester, Iowa, U.S.A., 1st August, 1900; 6 years. (Filed 17th July, 1900.)

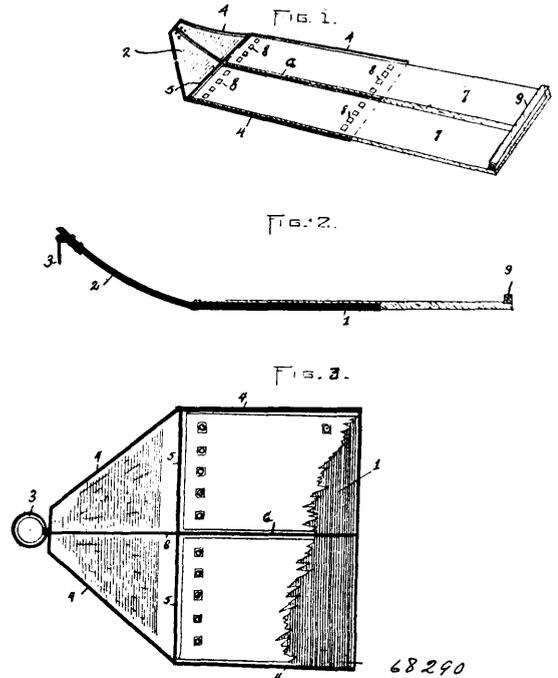
*Claim.*—1st. In a device of the class described, the combination with a support, and a swinging gate or door, of levers fulcrumed on the support and having arms extending forward and rearward from the same, springs located at opposite sides of the gate or door and connected with the same and with the forwardly extending arms of the levers, and a spring connected with the rearwardly disposed arms of the levers, substantially as described. 2nd. In a device of the class described, the combination with a swinging gate or door, provided with a pair of laterally disposed arms, of a support, a pair of bell crank levers fulcrumed on the support and located at opposite sides of the gate or door, springs connecting the arms of the gate or door with the adjacent portions of the lever, and a transverse spring connecting the rear portions of the levers, substantially as described. 3rd. In a device of the class described, the combination with a swinging gate or door, of a bracket provided with a supplemental plates having arms forming shoulders, levers fulcrumed on the bracket between the same and the supplemental plates, springs located at opposite sides of the gate and connecting the same with the levers, and a rear spring connected with the levers and holding the same in engagement with the said shoulders, substantially as described. 4th. In a device of the class described, the combination with a swinging gate or door, of a bracket consisting of a plate or body portion provided with a recess and having a flange depending from the inner wall thereof, and supplemental plates having outer portions spaced from the body portion of the bracket and provided with shoulders, levers fulcrumed between their ends on the bracket between the body portion and the supplemental plate, a rear spring connected with the rear ends of the levers, and side springs connected with the front ends of the levers and with the gate or door, substantially as described.

**No. 68,290. Stone Boat. (Traineau pour la pierre.)**

W. W. Marshall, assignee of Frank W. Chickering, both of Hardwick, Vermont, U.S.A., 1st August, 1900; 6 years. (Filed 17th July, 1900.)

*Claim.*—1st. In a drag or stone boat, the combination of a metallic shoe having an upwardly curved forward end and a horizontal

portion leading rearwardly therefrom, a bed or platform mounted upon the horizontal portion of said shoe and means for securing said

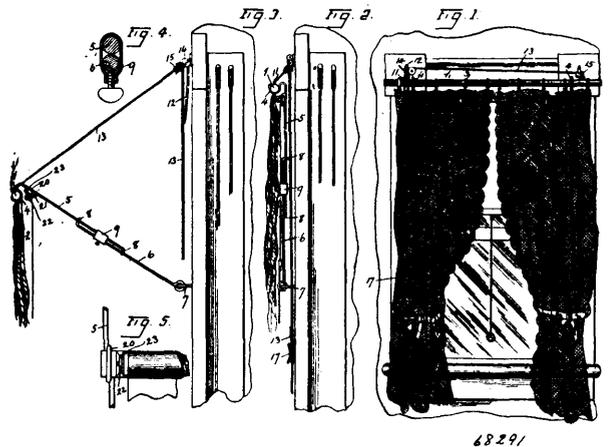


68290

bed or platform thereto. 2nd. In a stone boat or drag, the combination with a bed or platform, a metallic shoe attached to the forward end of said platform and extending partially under it, the extreme forward portion of said shoe curving upwardly from the forward end of the platform and the strengthening ribs crossing said shoe.

**No. 68,291. Window Curtain and Shade Support. (Support de rideau et store de fenetre.)**

(Support de rideau et store de fenetre.)



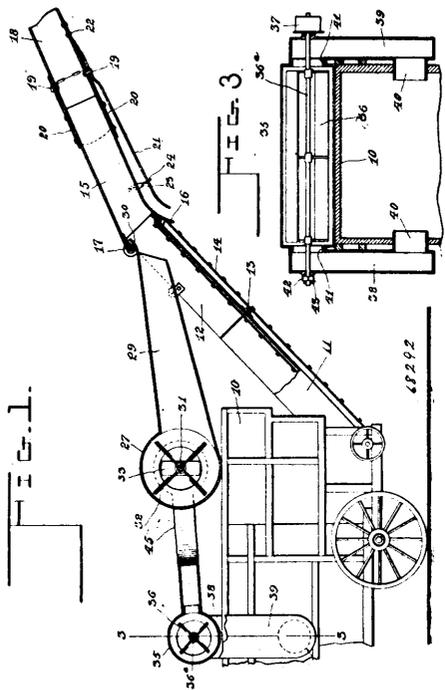
68291

James Gale, San Francisco, California, U.S.A., 1st August, 1900; 6 years. (Filed 16th July, 1900.)

*Claim.*—1st. The combination of a curtain pole, and a shade roller having rigid supports at the side of the window for said roller and pole, and a cord for supporting said shade and roller, said cord being passed over a sheave at the top of the window casing, and thence down the side thereof and suitably secured, substantially as described. 2nd. The combination with a curtain pole of a swinging support at each side of the window for said pole, said support being made of wire in two sections adjustably secured together, and a cord secured to said pole and passing over a sheave at the top of the window casing and then downwards and being suitably secured at its lower end, substantially as described. 3rd. The combination of a curtain pole, swinging rigid supports therefor at the sides of the window casing, a cord secured on one end of the pole, passing over a pulley at one side and then down the side of the window casing, a cord secured to the other end of the pole, passing over a pulley at the top

of the window casing, thence across the top of the casing to the first side, and thence down by the side of the window, and means for securing the lower ends of the said cord, substantially as described. 4th. The combination of a curtain pole, a rigid support at the side thereof, pivoted at its lower end, each support comprising a wire bent into a loop, and a rod held in said loops and carrying the bearings for a shade roller, substantially as described.

**No. 68,292. Pneumatic Straw Stacker.** (*Appareil pneumatique à amonçonner la paille.*)



Félix Grosjean, Deloraine, Manitoba, Canada, 1st August, 1900; 6 years. (Filed 17th July, 1900.)

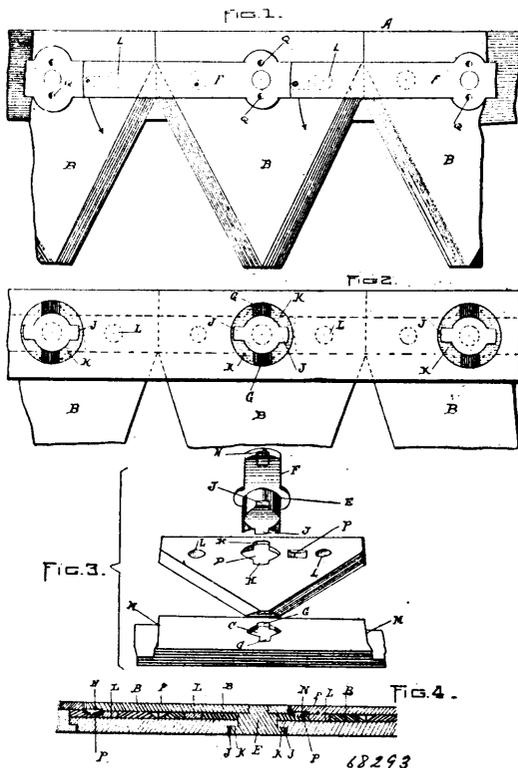
*Claim.*—1st. In a straw stacker, the combination with an endless elevator, of a stacker tube arranged to prolong the total length of a combined stacker, and a blower fan arranged to deliver a blast of air into the stacker tube substantially at the point where the latter receives the load from the endless elevator, substantially as described. 2nd. In a straw stacker, the combination with an endless elevator, of a pneumatic stacker tube having hinged connection with the upper side of the frame of said endless elevator, and a blower fan mounted on a grain separator and having a spout fitted to said elevator and said stacker tube at a point to discharge a blast across the delivery end of the endless elevator and into the stacker tube, substantially as described. 3rd. In a straw stacker, the combination with an endless elevator, and a stacker tube foldably connected thereto, a blower fan casing foldably mounted on a grain separator and having a tube disposed in movable relation to said elevator and said stacker tube, and a blower fan in said casing, substantially as described. 4th. In a straw stacker, the combination with a pneumatic stacker tube and a blower fan therefor, of an exhaust fan having operative connection with the chamber or interior of a grain separator, and off bearing conduits leading from said exhaust fan to said stacker mechanism, as and for the purpose described. 5th. In a straw stacker, the combination with an endless elevator, a stacker tube, and a blast fan, of suction legs fitted to a grain separator for communication with the chamber thereof, a suction fan casing in communication with said suction legs and having off bearing conduits connected with the casing of the blower fan, and an exhaust fan mounted in the suction fan casing to create through the suction legs currents of air which carry off chaff from the grain separator and deliver the same into the blower fan, substantially as described.

**No. 68,293. Fastening for Harvester Knives.** (*Attache pour couteaux de moissonneuses.*)

William C. Bush, Wilmington, Delaware, U.S.A., 1st August, 1900; 6 years. (Filed 17th July, 1900.)

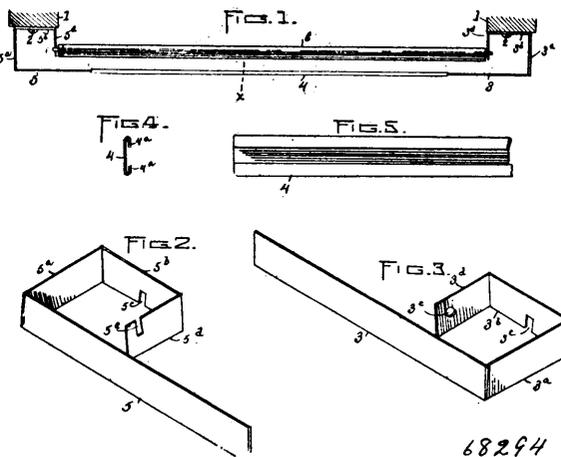
*Claim.*—1st. In a fastening for a harvester knife, a rotatable annular head with a tongue radiating from the periphery thereof, a knife having a circular opening therein, or at its edges, with a radial slot extending from the periphery thereof, and a cutter bar having a slot therein to receive said head and a shoulder at the base of said slot for the engagement of said radiating tongue. 2nd. In a fastener for harvester knives, annular heads, tongues on said heads, knives

with slots, a cutter bar with slots, and levers secured to said heads for rotating the same, said levers being adapted to cover the slots of



the knives and forming a continuous bar when the knives are secured. 3rd. In a fastener for a harvester knife, a rotatable head with a tongue radiating therefrom, and a cutter bar having a cut away portion for the reception of said head, a shoulder on the face of said cutter bar, and an opening having a grooved way in the said head, for engaging said shoulder on the face of the cutter bar.

**No. 68,294. Combined Pole and Shade Roller Hanger.** (*Ferrure de bâton de rideau.*)

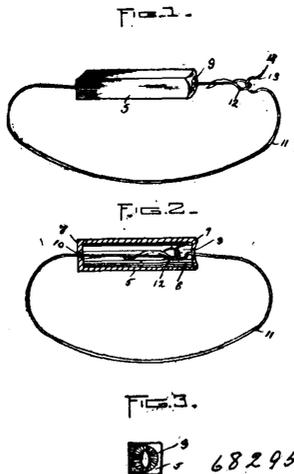


Stokely D. Dilts, Decatur, Illinois, U.S.A., 1st August, 1900; 6 years. (Filed 17th July, 1900.)

*Claim.*—1st. A curtain bar, having its ends extended first sidewise, then turned toward each other and then toward the body of the bar, the last named extensions being provided with bearings for a shade roller, substantially as specified. 2nd. The combination with a casing and headed pins extended therefrom, of a curtain bar having its ends extended first sidewise, then toward each other and toward the body of the bar, the last-named extensions being provided with bearings for a shade roller, and the second named extensions having slots in their under surfaces to engage the pins, substantially as specified. 3rd. A telescoping curtain bar composed

of a central bar forming a slideway, and end bars having their outer ends extended first sidewise, then toward each other and then toward the bodies of the bars, the last named extensions having bearings for a shade roller and the second-mentioned extensions having slots in their under surfaces, substantially as specified.

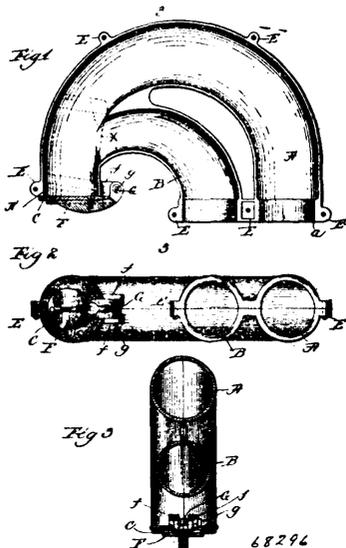
**No. 68,295. Car Seal. (Secau.)**



Leonidus D. Meador, Wewoka, Indian Territory, U.S.A., 1st August, 1900; 6 years. (Filed 17 July, 1900.)

*Claim.*—In a car seal, the combination of a block having a chamber therein, and perforations leading into the chamber of lesser diameter than the chamber and resulting in the formation of encircling walls, and a wire passed through said chamber and perforations, said wire having a loop at one end and a hook at the other adapted for mutual engagement, said hook being adapted to be drawn into the chamber with the loop and to expand therein so that its end will engage the adjacent perforation encircling wall.

**No. 68,296. Receiving Terminal for Pneumatic Despatch Systems. (Système de récepteur pneumatique de dépêches.)**

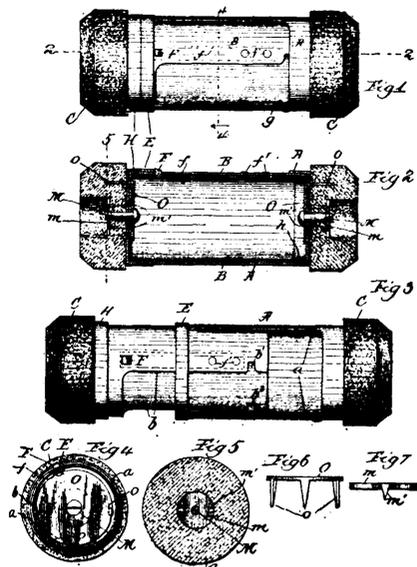


Charles F. Bodinus, Chicago, Illinois, U.S.A., 1st August, 1900; 6 years. (Filed 14th April, 1900.)

*Claim.*—1st. A delivery terminal for pneumatic despatch systems, having a branching passage, one branch thereof being an air-return passage and the other branch a carrier discharge passage having an open end, and an outwardly opening spring-closed flap valve for such open end, the diameter of the discharge passage being substantially that of the carrier intended for use in the system, and its length being such that it forms an air cushion for the carrier, and the carrier, when it strikes the valve, will overlap, approximately entirely, the throat of the air-return passage. 2nd. An upward delivery terminal for pneumatic despatch systems having a passage

curved to direct its end downwardly, and being divided into an air-return branch leading laterally from the main portion of the passage, and a carrier delivery branch being continued in the same general direction as the said main passage and having an open end, a valve for such open end and being operable by the impact of a carrier, the length of the delivery branch being sufficient to form an air cushion to check the momentum of the carrier, and the distance from the open end of the delivery branch to the more remote side of the air-return passage being not greater than the length of the carrier intended to be used in the system. 3rd. In a pneumatic despatch terminal, a tube having a carrier discharge branch, the direction of the discharge being transverse to the air return portion of the tube, a valve for the discharge branch operable by impact of a carrier, the discharge branch being the only means of communication with the interior of the tube opened by the discharge of the carrier, and being prolonged beyond the air-return portion of the pipe to form an air cushion, and the distance from the outer end of the discharge branch to the more remote side of the air-return portion of the tube being not greater than the length of the carrier intended to be used in the system.

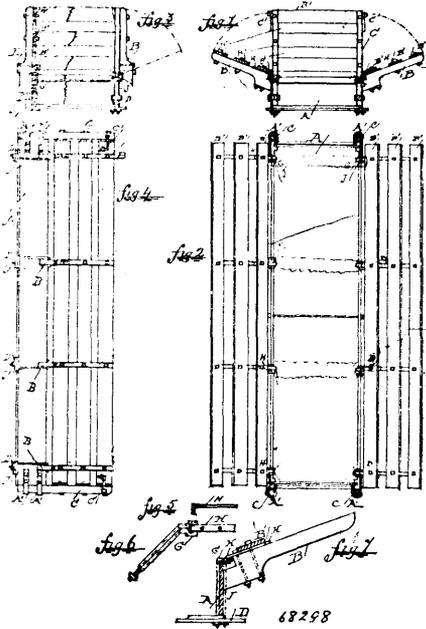
**No. 68,297. Cash Carrier. (Chien de magasin.)**



Charles F. Bodinus, Chicago, Illinois, U.S.A., 1st August, 1900; 6 years. (Filed 14th April, 1900.)

*Claim.*—1st. In a cash carrier of the type described, the combination with a pair of telescoping relatively oscillating members, each member having its outer end closed, of a spring catch projecting radially from the inner member through an aperture in the outer member, the length of such aperture circumferentially as to the carrier being as great as the range of relative oscillation of the two members. 2nd. In a cylindrical cash carrier of the type described, the combination with the body portion, of a cushion for attachment to an end thereof, a plate adapted to the inner face of such end and having spurs projecting through the body end into the cushion, and a draw bolt passing centrally through the cushion, the body end and the spurred plate. 3rd. In a cash carrier, the combination with a pair of telescopically engaged, relatively oscillating members, each having its outer end closed, of a spring advanced catch for locking the members against longitudinal separation, such catch being carried by one member and engaging and sliding circumferentially against the rearward edge of a portion of the other member, such sliding contact having an angular range as great as the relative oscillation of the two members. 4th. In a cylindrical cash carrier of the type described, the combination with a body portion comprising a pair of telescopically engaged relatively rotatable members, and a spring catch for preventing the disengagement of such members, of a cushion for attachment to an end of the body, a plate adapted to the inner face of such an end and having spurs projecting through the body end and into the cushion, a screw bolt projecting centrally through the plate and into the cushion, and a nut for the outer end of the bolt. 5th. In a cylindrical cash carrier of the type described, the combination with the body portion, of a cushion adapted to an end of the body and being centrally apertured and counter sunk at its outer face, a plate adapted to an end of the body and being centrally apertured and countersunk at its outer face, a plate adapted to the inner face of such body end having spurs projecting through such end and into the cushion and being centrally apertured, a nut adapted to fit within the enlarged end of the cushion aperture and having spurs for engaging, and a screw bolt passing through the plate and engaging the nut.

**No. 68,298. Hay and Stock Rack. (Rattelier à foin.)**

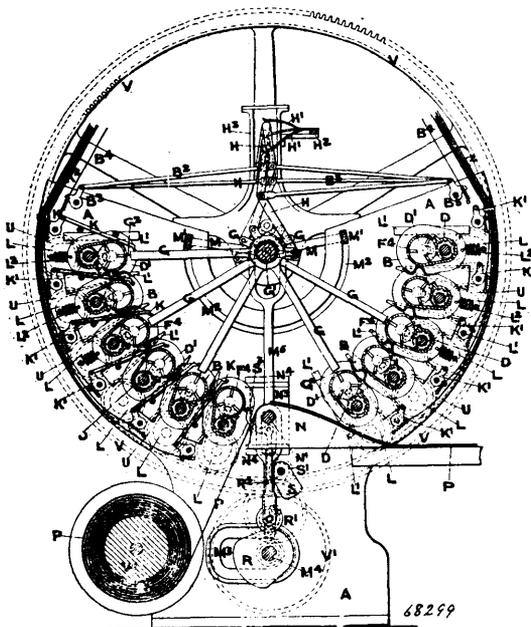


Jacob Colby, Harwich, Ontario, Canada, 2nd August, 1900; 6 years. (Filed 9th April, 1898.)

*Claim.*—In a hay and stock rack, the combination of a wagon box, eyes provided with shanks at right angles thereto, said shanks extending down inside of the box and through the bottom thereof, to which they are secured, by any suitable means, and wings consisting of slats B<sup>1</sup>, and boots B, hooks rigidly held on the boots B, said hooks being of shape and form adapting them for engagement with the eyes on the box, and forming hinged connections between the wings and the box, substantially as shown and described.

**No. 68,299. Method of and Apparatus for Manufacturing Inlaid Linoleums and Other Floor Cloths. (Méthode et appareil pour la fabrication de toile à plancher.)**

FIG. 1.

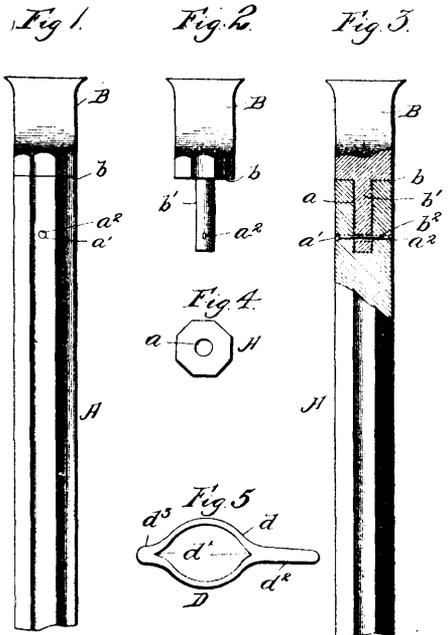


Wallace Garley Thomson, Selby, in the County of York England, 2nd August, 1900; 6 years. (Filed 2nd May, 1899.)

*Claim.*—1st. In the manufacture of inlaid linoleum and other floor cloths, having permanent patterns completely through the said

cloths, the employment of a series of cylinders B, hoppers C, conveyers D, rollers D<sup>1</sup>, spring moulds or bars D<sup>2</sup>, radial arms G, pressure levers and connecting rods H, stops K, levers K<sup>1</sup>, table N, and comb S<sup>3</sup>, operated and operating automatically, in the manner and for the purposes, substantially as set forth. 2nd. In the manufacture of inlaid linoleum and other floor cloths having permanent patterns completely through the said cloths, the combination with a series of cylinders B, for supplying the linoleum in cubes to form the pattern, of a series of radial arms G<sup>1</sup>, having needle points G<sup>2</sup>, pressure levers H, comb spring H<sup>1</sup>, stops K, levers K<sup>1</sup>, cams L, collecting arms M, having bars M<sup>1</sup>, connecting rod M<sup>2</sup>, cam M<sup>3</sup>, table N, cam R, runner or bowl R<sup>1</sup>, connecting rod R<sup>2</sup>, and comb S<sup>3</sup>, operated, and operating automatically, in conjunction with the ordinary pattern dobbie or jacquard, for the purpose substantially as set forth. 3rd. In the manufacture of linoleum and other floor cloths having permanent patterns completely through the said cloths, the employment of a series of cylinders B, having hoppers C, spiral, archimedean, or other conveyer D, roller D<sup>1</sup>, in which are slots D<sup>2</sup>, sliding bar D<sup>3</sup>, knives or moulds D<sup>4</sup>, such moulds being raised into position and depressed intermittently, in the manner and for the purposes, substantially as shown and described. 4th. In the manufacture of linoleum and other floor cloths, having permanent patterns completely through the said cloths, the use and employment of a slot N<sup>2</sup>, sliding bearing N<sup>3</sup>, cam T, runner T<sup>1</sup>, for raising and lowering the table N, in the manner and for the purposes, substantially as set forth.

**No. 68,300. Drill. (Forêt.)**



68300

George Arbuthnott Smith, Alberni, British Columbia, Canada, 2nd August, 1900; 6 years. (Filed 29th June, 1899.)

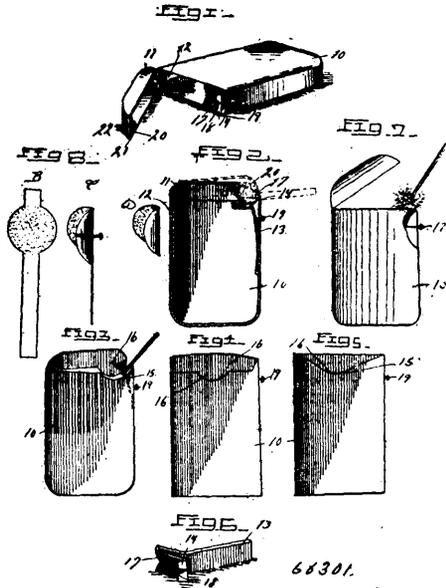
*Claim.*—A mining drill, comprising a drill shank, having a socket in its end and a perforation extending transversely through said end, a removable drill point loosely held in said socket and having an extension at one end provided with an elongated perforation, and shoulders adjacent to said extension, and a securing pin adapted to pass through said perforations, substantially as described.

**No. 68,301. Match Box. (Boîte à allumettes.)**

Thomas Addison Bell, New York City, New York, U.S.A., 2nd August, 1900; 6 years. (Filed 7th March, 1900.)

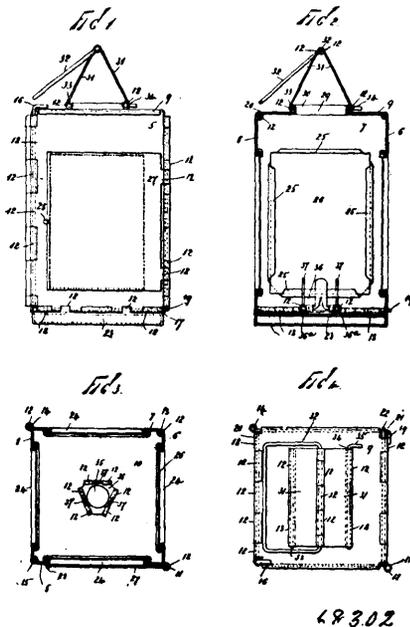
*Claim.*—1st. A match box provided with a catch spring having a roughened or scratch surface in combination with a lid provided with a similar, interior surface in position to meet the scratch surface of the spring, when the lid is closed on the box, substantially as described. 2nd. A match box provided with thumb notches 16,

in its edges, and a scratch spring provided with a scratch surface, in combination with a spring opening lid having projections to close



the thumb notches and a scratch surface to meet that of the catch spring, when the lid is closed on the box, substantially as described.

No. 68,302. Lantern. (Lanterne.)



Charles Henry Stonebridge, Fordham, New York, U.S.A., 2nd August, 1900; 6 years. (Filed 14th March, 1900.)

Claim.—1st. A collapsible lantern, comprising a plurality of pivotally connected body members, two of which are detachably connected, a top member and a bottom member each pivotally connected to one of said body members, and means whereby the free edge of said top member and the free edge of said bottom member may each be detachably connected with one of said body members, substantially as shown and described. 2nd. A collapsible lantern, comprising a plurality of pivotally connected body members, two of which are detachably connected, a top member and a bottom member each pivotally connected to one of said body members, and means whereby the free edge of said top member and the free edge of said bottom member may each be detachably connected with one of said body members, said top members being provided with a smoke opening and with a collapsible guard therefor, substantially as shown and described. 3rd. A collapsible lantern, comprising a

plurality of pivotally connected body members, two of which are detachably connected, a top member and a bottom member each pivotally connected to one of said body members, and means whereby the free edge of said top member and the free edge of said bottom member may each be detachably connected with one of said body members, and said bottom member being provided with a collapsible burner socket, substantially as shown and described. 4th. A collapsible lantern, comprising a plurality of pivotally connected body members, two of which are detachably connected, a top member and a bottom member each pivotally connected to one of said body members, and means whereby the free edge of said top member and the free edge of said bottom member may each be detachably connected with one of said body members, and a storage casing pivotally connected with one of said body members, and means for detachably connecting a free portion of said storage casing with one of said body members, substantially as shown and described. 5th. A collapsible lantern embodying a top member provided with a smoke opening and a guard therefor, comprising a plurality of plates, one of which is pivotally connected with said top member and means for detachably connecting the other thereof with said top member, said guard plates being pivotally connected together by means of a bail, substantially as shown and described. 6th. In a collapsible lantern, a top member provided with a smoke opening and with an upturned flange surrounding said smoke opening, said flange being formed into knuckles, and a collapsible guard comprising a plurality of pivotally connected plates which are provided with knuckles through which knuckles and the knuckles into which said flange is formed, are passed pintles, substantially as shown and described. 8th. In a collapsible lantern, a top member provided with a smoke opening, said top member being formed into an upturned flange surrounding said smoke opening, and a guard for smoke opening, comprising a plurality of loosely connected plates, one of which is pivotally connected with said flange, and another of which is detachably connected with said flange, substantially as shown and described. 8th. In a collapsible lantern, a top member provided with a smoke opening, said top member being formed into an upturned flange surrounding said smoke opening, and a guard for said smoke opening, comprising a plurality of loosely connected plates, one of which is pivotally connected with said flange, and a ball which is connected with said plates, substantially as shown and described. 9th. In a collapsible lantern, a body member comprising a single sheet or strip provided with a light opening, the edges of said body member surrounding said light opening being formed into guides which receive a sheet or strip of translucent material, and an edge of said body member being formed into knuckles or keepers whereby the same may be connected with another of said body members, substantially as shown and described. 10th. In a collapsible lantern, a body member provided with an aperture, and a plurality of socket fingers pivoted thereto and surrounding said aperture, whereby said socket fingers may be folded downwardly upon said bottom member, and whereby a candle or other similar device passes through said aperture will raise said socket fingers and be maintained in upright position thereby, substantially as shown and described. 11th. In a collapsible lantern, a candle socket comprising a plate having a central aperture, and the edges thereof are formed into knuckles surrounding said aperture, pintles turnably mounted in said knuckles and socket fingers connected with said pintles and arranged to be depressed or to be upwardly directed to form a socket whereby a candle may be supported, substantially as shown and described.

No. 68,303. Bicycle Parcel Carrier.

(Porte-paquet pour bicyclet.

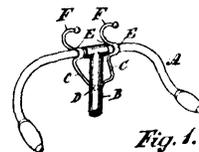


Fig. 1.

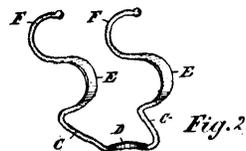


Fig. 2.

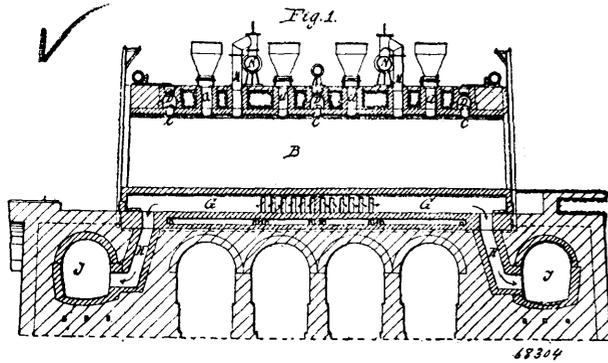
68303

James Russell Elliott, London, Ontario, Canada, 2nd August, 1900; 6 years. (Filed 23rd May, 1900.)

Claim.—As an improved article of manufacture, a bicycle clip or parcel carrier, formed of a single piece of wire, rod or strip of metal bent approximately of a U-shape and bent to form spring holding curves E, E, terminating in hooks F, F, and curved arms C, C, extending downwardly or below the handle bar to a desired distance

to give stability to the clip when in use, and the curve D, to fit across the steering spindle of the bicycle and resist the weight of the load, as set forth.

**No. 68,304. Coke Furnace.** (*Fournaise à coke.*)



Dr. Theodore von Bauer, Berlin, Germany, 2nd August, 1900; 6 years. (Filed 20th October, 1899.)

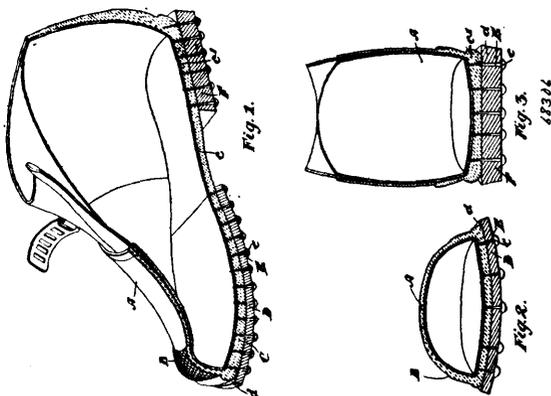
*Claim.*—In a coke furnace for the purpose described, the combination of the chamber B, mouth holes a, openings M, openings C, collecting channels D with bottom channel C, cooling channels placed thereunder, channels I and flues H, all substantially as described and for the purpose herein set forth.

**No. 68,305. Method of and Solvent Material for Treating Surfaces of Celluloid.** (*Méthode et matière pour le traitement de surfaces en cellulose.*)

Ademor Napoléon Petit, Newark, New Jersey, U.S.A., 2nd August, 1900; 6 years. (Filed 2nd May, 1900.)

*Claim.*—1st. A material for treating the surface of celluloid, consisting of a solvent of celluloid and a fatty acid or similar material, substantially as set forth. 2nd. A material for treating the surfaces of celluloid, consisting of a solvent of celluloid and a fatty acid or similar material in about the proportion of two parts of the solvent of celluloid to one part of the fatty acid or similar material, substantially as set forth. 3rd. A material for treating celluloid surfaces, consisting of amyl acetate and oleic acid, substantially as set forth. 4th. A material for treating celluloid surfaces, consisting of the celluloid solvent amyl acetate, and oleic acid in about the proportion of two parts of amyl acetate and one part of oleic acid, substantially as set forth. 5th. The method of treating the surfaces of celluloid for rendering the same appreciably soft and plastic, consisting in mixing together a solvent of celluloid and a fatty acid or similar material, applying the same to the surface of celluloid and allowing the same to remain exposed to the air for a short period to render such surface soft and plastic, substantially as set forth. 6th. The method of treating the surfaces of celluloid for rendering the same appreciably soft and plastic, consisting in applying to the surface of the celluloid a solvent of celluloid and a fatty acid or similar material and allowing the same to remain exposed to the air for a short period to render such surface soft and plastic, substantially as set forth.

**No. 68,306. Rubber Boot and Shoe.** (*Chaussure de caoutchouc.*)

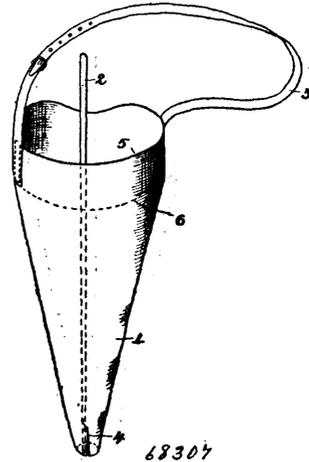


Charles Eugene Miller, Nelson, British Columbia, Canada, 2nd August, 1900; 6 years. Filed 18th July, 1900.)

*Claim.*—1st. In a rubber shoe, the combination with the upper rubber sole and heel and the usual flexible shank connecting the

same, of a leather outer half sole and a leather heel attached to the under side of the rubber sole and heel of the shoe respectively, as and for the purpose specified. 2nd. In a rubber shoe the combination with the rubber sole and heel and the usual flexible rubber shank connecting the same, of a leather sole and heel superimposed upon the rubber sole and heel and having the edges extending out beyond the edges of the rubber sole and heel and means for securing such leather sole and heel to the rubber sole and heel as specified.

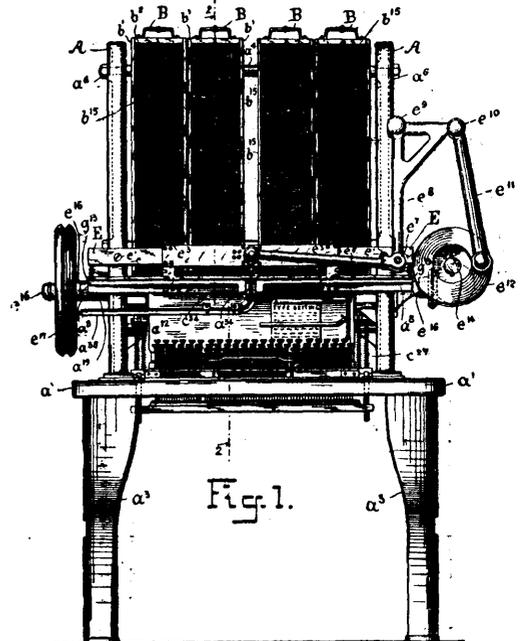
**No. 68,307. Fertilizer Distributor.** (*Distributeur d'engrais.*)



Rudolph Charles Hayer, of Vicksburg, Mississippi, U.S.A., 2nd August, 1900; 6 years. (Filed 17th July, 1900.)

*Claim.*—In a fertilizer distributor, a flexible bag, cone-shaped, open at both ends, the upper end of the bag distended by wire rings, a rod passing through and projecting out of the upper opening of the bag, the lower end of the rod secured to a lower corner of a vertical slit in the lower orifice of the bag, a strap secured to the upper edges of the bag, a buckle on this strap, substantially as and for the purpose specified.

**No. 68,308. Type Setting Machine.** (*Machine à composer.*)



The Dow Composing Machine Company, assignee of Alexander Dow, New York City, New York, U.S.A., 2nd August, 1900; 6 years. (Filed 2nd February, 1900.)

*Claim.*—1st. The combination in a type assembling machine, of an assembling table provided with a central type channel, two type

drivers suitably mounted to reciprocate alternately to drive the type delivered on the table to the central channel, means to eject type upon the assembling table, the type ejector mechanism and the type driving mechanism being so adjusted with reference to each other that the type are ejected upon the table when the respective type driver intended to operate thereon is withdrawn from the central channel to its furthest limit, friction bars suitably mounted in connection with the assembling table, means to cause the same to bear upon the type as the same are ejected upon the table or moved over the surface thereof, means to arrest the movement of the type in front of the central channel consisting of reciprocating dogs suitably mounted, and means to force the type into the central channel, substantially as described. 2nd. The combination in a type assembling machine of a type assembling table provided with a centrally located type channel, two type drivers operating alternately from either side of the type channel to drive the type delivered on the table to said channel, means operating automatically in unison with the drivers to eject the type on either side of the table when the respective drivers are at or near the extremity of their movement away from the central channel, a friction bar suitably supported with reference to said table, and means controlled by the type ejecting mechanism to lift said friction bar off the table a variable distance according to the thickness of the type ejected, and means to cause said bar to bear on the type as the same is ejected and during its movement on the table with a pressure, intended to operate as a restraining resistance, as the type are ejected on the table or moved over the face thereof, substantially as described. 3rd. The combination in a type assembling machine of a type assembling table provided with a centrally located type channel, two type drivers operating alternately from either side of the channel to drive the type delivered on the table to said central channel, and means operating automatically in unison with the drivers to eject the type on either side of the table when the drivers are at or near the extremity of their movement away from the central channel, two friction bars suitably supported with reference to said table one on either side of the central channel, and means controlled by the type ejecting mechanism to lift said friction bars off the table a variable distance, according to the thickness of the type ejected, and means to cause said bars to bear on the type, as the same are ejected, and during their movement on the table, with a pressure intended to operate as a restraining resistance, as the type are ejected on the table or moved over the face thereof, substantially as described. 4th. The combination in a type assembling machine of a type assembling table, provided with a centrally located type channel, two type drivers operating alternately from either side of the type channel to drive the type delivered on the table to said central channel, and means operating from a key-board to move ejector bars into position to be operated upon by automatically operated ejector blades, said blades being arranged to engage the ejector bars, when the drivers are at or near the most distant point in the extremity of their movement from the central channel, two friction bars suitably supported with reference to said table, and operating independently, one on either side of the central channel, and means controlled by the type ejecting mechanism to lift said friction bars off the table a variable distance, according to the thickness of the type ejected and means to cause said bars to bear on the type as the same are ejected, during their movement on the table with a pressure, intended to operate as a restraining resistance, as the type are ejected on the table or moved over the face thereof, substantially as described. 5th. The combination in a type assembling machine of a type assembling table, provided with a centrally located type channel, two type drivers operating alternately from either side of the type channel, to drive the type delivered on the table to said central channel, and means operating from a key-board to move ejector bars into position to be operated upon by automatically operated ejector blades, said blades being arranged to engage the ejector bars, when the drivers are at or near the most distant point in the extremity of their movement from the central channel, a friction bar suitably supported with reference to said table, and means controlled by the movement of the ejector bars in ejecting the type upon the table to lift said friction bar off the table a variable distance, according to the thickness of the type ejected, and means to cause said bars to bear on the type as the same are ejected and during their movement on the table with a pressure intended to operate as a restraining resistance, as the type are ejected on the table or moved over the face thereof, substantially as described. 6th. The combination in a type assembling machine of a type assembling table, provided with a centrally located type channel, two type drivers suitably mounted on a reciprocating carrier at either end thereof, with means to reciprocate said carrier, and means operating from a key-board to move the ejector bars into a position to be operated upon by automatically operated ejector blades, said blades being arranged to engage the ejector bars, when the drivers are at the most distant point in the extremity of their movement from the central channel, two rocking frames suitably supported on either side of the central channel, and carrying on one side of each friction bar, adapted to bear on the two sides of the table and on the other side of said frames, carrying contact points to engage the bevelled shoulders of the ejector bars with a pressure interposed to normally maintain the friction bars in contact with the table, the contact points being adjusted with relation to the shoulders of each ejector bar to lift the friction bar with the operation

by said ejector bar to pass between the friction bar and the table with a friction to operate as a restraining resistance, as the type are ejected on the table or moved over the face thereof, substantially as described. 7th. The combination in a type assembling machine of a type assembling table, provided with a centrally located type channel, two type drivers suitably mounted on a reciprocating carrier at either end thereof, with means to reciprocate said carrier, and means operating from a key-board to move the ejector bars into position to be operated upon by automatically operated ejector blades, said blades being arranged to engage the ejector bars, when the drivers are at the most distant point of their movement from the central channel, two rocking frames suitably supported on either side of the central channel, and carrying on one side of each friction bar, adapted to bear on the two sides of the table, and on the other side of said frames carrying contact points to engage the bevelled shoulders of the ejector bars with a pressure interposed to normally maintain the friction bars in contact with the table, the contact points being adjusted with relation to the shoulders of each ejector bar to lift the friction bars with the operation of each ejector bar to pass between the friction bar and the table with a friction to operate as a restraining resistance, as the type is ejected or moved on the table with means to arrest the movement of the type at the central channel, and to force the same into said channel, substantially as described. 8th. The combination in a type assembling machine of a type assembling table, with a central type channel and type drivers operating alternately to drive the type to the central channel, first from one side of the table and then from the other side, appropriate type reservoirs, type ejector bars suitably mounted to eject the type by a reciprocating movement, two ejector blades suitably mounted to rotate together and to engage the ejector bars when the same are brought into the path of their rotation, one of said blades being arranged to engage those ejector bars operating to eject the type on one side of the table, when the driver operating on that side of the table is withdrawn from the channel to the extremity of its movement, means controlled from a key-board to give to said ejector bars an initial movement to bring them into the path of the ejector blades, two friction bars suitably supported with reference to the table, one on either side of the central channel and means controlled by the operation of said ejector bars in ejecting the type upon the table, to lift said friction bars off the table a variable distance, according to the thickness of the type ejected, and means to cause said friction bars to bear on the type as the same is ejected, and during their movements on the table with a pressure intended to operate as a restraining resistance, as the type are ejected on the table or moved over the face thereof, substantially as described. 9th. The combination in a type assembling machine of a type assembling table, with a central type channel and type drivers operating alternately to drive the type to the central channel, first from one side of the table and then from the other side, appropriate type reservoirs, type ejector bars suitably mounted to eject the type by a reciprocal movement, two ejector blades suitably mounted to operate together and to engage the ejector bars when the same are brought into the path of their rotation, one of said blades being arranged to engage those ejector bars operating to eject the type on one side of the table when the driver operating on that side of the table is withdrawn to the extremity of its movement from the type channel, and the other of said blades being arranged to engage those ejector bars operating to eject the type on the opposite side of the table, when the driver operating on that side of the table is withdrawn from the central channel to the extremity of its movement, means controlled from a key board to give to said ejector bars an initial movement to bring them into the path of the ejector blades, two friction bars suitably supported with reference to the table, one on either side of the central channel, and means controlled by the operation of said ejector bars in ejecting the type upon the table, to lift said friction bars off the table a variable distance, according to the thickness of the type ejected, and means to cause said friction bars to bear on the type as the same is ejected, and during its movement on the table with a pressure intended to operate as a restraining resistance, as the type are ejected on the table or moved over the face thereof, and means to arrest the movement of the type at the central channel and to force the same into the said central channel, substantially as described. 10th. The combination in a type assembling machine of an assembling table with a central type channel, and appropriate type reservoirs, ejector bars suitably mounted to eject the type from the reservoirs, said bars being provided with suitable shoulders, key levers operating from a key board to give to the ejector bars an initial movement by engaging one of the shoulders of said bars, two ejector blades mounted on a normally rotating shaft on opposite sides of the plane of its axis, one of these blades operating on one side of the central channel, and the other blade adjusted to engage the shoulder of the ejector bars, operating on the other side of the central channel, when said shoulders are brought into the path of the movement of said blades by said initial movement operating from said key board, and means to retract said bars, two type drivers suitably mounted to reciprocate together, one to drive the type from one side of the central channel, when the other is retracted, and the other to drive the type from the other

side of the table to the other channel when the other is retracted, the ejector blades being arranged to engage the ejector bars to eject the type when the drivers operating on that side of the table is at or near the extremity of its movement from the central channel, two rocking frames suitably supported on either side of the central channel, and carrying on one side of each rocking frame a friction bar, and on the other side of each rocking frame a set of contact points to engage bevelled shoulders of the ejector bar, with a spring interposed to normally maintain the friction bars in contact with the table, said contact point being adjusted in relation to the shoulders of each ejector bar, to lift the friction bar with the operation of each ejector bar, sufficiently to permit the type controlled by said ejector bar to pass between the friction bar and the table with a friction to operate as a restraining resistance upon the type as the same is ejected or moved on the table, substantially as described. 11th. The combination in a type assembling machine, of a type assembling table provided with a centrally located type channel, two type drivers suitably mounted on a reciprocating carrier, at either end thereof, with means to reciprocate said carrier, and means operating from a key board to move ejector bars into position to be operated upon by automatically operated ejector blades, said blades being arranged to engage the ejector bars when the drivers are at the most distant point in the extremity of their movement from the central channel, two friction bars suitably supported on either side of the table, and carrying their adjacent ends reciprocating and abutting dogs, and means operated by the movement of the ejector mechanism to lift said bars to receive the type as the same are ejected upon the table, and means to depress said bars on to the type as the same are ejected and moved on the table, to exercise on the type a restraining resistance, and means to force the type into the central channel, substantially as described. 12th. The combination in a type assembling machine, of a type assembling table with a centrally located type channel, two type drivers as thin as the thinnest type, each supported between two walls suitably secured to a reciprocating carrier, one driver at either end of the carrier, with a spring cushion interposed between each driver and a carrier, and means reciprocate said carriers, and means operating from a key board to move ejector bars into position to be operated upon by automatically operated ejector blades, said blades being arranged to engage said ejector bars, when the drivers are respectively at the most distant point in the extremity of their movement from the central channel, two friction bars suitably supported, one on either side of the table, and carrying at their adjacent ends reciprocating and abutting dogs to arrest the movement of the type at the central channel, and means operated by the movement of the ejector mechanism to lift said bars to receive the type as the same are ejected upon the table, and means to depress said bars on the type as the same are ejected and moved on the table in order to exercise on the type a restraining resistance, and means to force the type into the central channel, substantially as described. 13th. The combination in a type assembling machine, of a type assembling table with a centrally located type channel, two type drivers as thin as the thinnest type, each supported between two walls suitably secured to a reciprocating carrier, one driver at either end of the carrier, and means to reciprocate said carrier, substantially as described. 14th. The combination in a type assembling machine, of a type assembling machine, of a type assembling table with a centrally located type channel, two type drivers as thin as the thinnest type, each supported between two walls suitably secured to a reciprocating carrier, one driver at either end of the carrier, with a spring cushion interposed between each driver and the carrier, and means to reciprocate said carrier, substantially as described. 15th. The combination in a type assembling machine, of a type assembling table with a central type channel, a carrier mounted to reciprocate in ways and means to reciprocate the same, a bracket secured to either end of said carrier, with two bifurcated frames mounted in ways to move horizontally one on each of said brackets, with two type drivers as thin as the thinnest type, supported one between each of said bifurcated frames, with a spring interposed between each bracket and the frame carried thereby to cushion the driving force of the drivers, substantially as described. 16th. The combination in a type assembling machine, of a type assembling table with a central type channel, a carrier mounted to reciprocate in ways and means to reciprocate the same, a bracket secured to either end of said carrier, two bifurcated frames mounted to move horizontally, one on either of said brackets, two type drivers as thin as the thinnest type supported one between each of said bifurcated frames, and a spring cushion interposed between each bracket and the frames carried thereby to cushion the driving force of the drivers, said frames secured to said brackets by an adjustment screw to adjust the throw of the drivers with reference to the central channel, substantially as described. 17th. The combination in a type assembling machine, of a type supporting frame, provided in its base with type channels to receive and support a column of type, a type assembling table provided with an aperture to receive the base of said frame, with the base of said channels in the plane of the surface of said table, removable type channels suitably supported within said frame, to feed the columns of type to the channels in the base of the frame, and suitable apertures in the base of each channel to permit ejectors to eject the lowest type in each column, substantially as described. 18th. The combination in a type assembling machine, of a type assembling table with a central type channel, and type drivers operating alternately to drive the type to the cen-

tral channel, first from one side of the table and then from the other side, appropriate type reservoirs, type ejectors suitably mounted to eject the type by a reciprocating movement, two ejector blades suitably mounted to rotate together and to engage the ejector bars, when the same are brought into the path of their rotation, one of said blades being arranged to engage those ejector bars operating to eject the type on one side of the table, when the driver operating on that side of the table is withdrawn to the extremity of its movement from the type channels, and the other of said blades being arranged to engage those ejector bars operating to eject the type on the opposite side of the table, when the driver operating on that side of the table is withdrawn from the central channel to the extremity of its movement, means controlled from a keyboard to give to said ejector bars an initial movement to bring them into the path of the ejector blades, and means to retract said bars when the type are ejected, means to cushion said bars against the retracting movement, and means to cushion the same against the abnormal action of said ejector blades upon the ejector bars, substantially as described. 19th. The combination in a type assembling machine, of an assembling table with a central type channel and type drivers operating alternately to drive the type to the central channel, first from one side of the table and then from the other side, appropriate type reservoirs, type ejectors suitably mounted to eject the type by a reciprocating movement, two ejector blades suitably mounted to rotate together and to engage the ejector bars when the same are brought into the path of their rotation, one of said blades being arranged to engage those ejector bars operating to eject the type on one side of the table, when the driver operating on that side of the table is withdrawn to the extremity of its movement from the type channel, and the other of said blades being arranged to engage those ejector bars, operating to eject the type on the opposite side of the table, when the driver operating on that side of the table, is withdrawn from the central channel to the extremity of its movement, means controlled from a keyboard to give to said ejector bars an initial movement to bring them into the path of the ejector blades, and means to retract said bars when the type are ejected, a loaded cushion bar interposed between the abutting ends of the ejector bars, and an inclined plane, the rear end of said ejector bars being supported by appropriate springs, substantially as described. 20th. The combination in a type assembling machine, with appropriate type reservoirs, of ejector bars suitably mounted to reciprocate in ways to eject the type from the reservoirs, said bars being provided with suitable shoulders, key levers operating from a keyboard, a revolving ejector blade normally rotating, the key levers adapted to give to the ejector bars an initial projecting movement, sufficient to bring into the path of said revolving ejector blade an appropriate shoulder of said ejector bar by which engagement the ejector bar is projected to eject the type, a spring trigger adapted to engage a shoulder of said ejector bar, as the same is projected, and to retract the ejector bar when the same is released from engagement with the ejector revolving blade, substantially as described. 21st. The combination in a type assembling machine, with appropriate type reservoirs, of ejector bars suitably mounted to reciprocate in ways to eject the type from the reservoirs, said bars being provided with suitable shoulders, key levers operating from a keyboard, a revolving ejector blade normally rotating, the key levers adapted to give to the ejector bars an initial projecting movement, sufficient to bring into the path of said revolving ejector blade an appropriate shoulder of said ejector bar, by which engagement the ejector bar is projected to eject the type, a spring trigger adapted to engage a shoulder of said ejector bar as the same is projected, and to retract the ejector bar when the same is released from engagement with the ejector revolving blade, means to unlock the ejector bars with the initial movement of the key levers, and to lock the same with the retraction of said bar to its normal position, and means to cushion the ejector bars as the same are retracted, substantially as described. 22nd. The combination in a type assembling machine, with appropriate type reservoirs, of ejector bars suitably mounted to reciprocate in ways to eject the type from the reservoirs, said bars being provided with suitable shoulders, key levers operating from a keyboard, a revolving ejector blade normally rotating, the key levers adapted to give to the ejector bars an initial projecting movement sufficient to bring into the path of said revolving ejector blade an appropriate shoulder of said ejector bar, by which engagement the ejector bar is projected to eject the type, a spring trigger adapted to engage the shoulder of said ejector bar as the same is projected, and to retract the ejector bar when the same is released from engagement with the ejector revolving blade, means operated by the initial movement of the key levers to unlock the ejector bars, and to lock the same automatically as said bars are returned to their normal position, and a loaded cushion bar interposed between the abutting ends of said ejector bars and an inclined plane, substantially as described. 23rd. In a type assembling machine wherein type bars are projected, and retracted to eject the type from suitable reservoirs, the combination of such ejector bars with an inclined plane, and a cushion bar interposed between the abutting ends of said ejector bars and said inclined plane, to receive and cushion the movement of said bars as they are retracted, substantially as described. 24th. The combination in a type assembling machine wherein a shoulder of an ejector bar is engaged by a revolving projector blade, a cushion bar suitably supported in elastic supports beneath said ejector bars to normally support said bars in their projecting or retracting movement and adapted to yield to an abnormal depressing force incident

to the engagement of the projecting blade and the shoulder with which it is engaged, substantially as described. 25th. The combination in a type assembling machine, of an appropriate type reservoir, having a plurality of type cases, type ejector bars suitably mounted to eject the type, one of said bars operating on the type in each case, a key lever operated from a key-board to impart to one of a plurality of said ejector bars an initial movement, said key lever having also a lateral movement, a rock shaft suitably mounted and carrying a crank arm, with guide pins to receive one end of said key lever, and means to rock said shaft to bring said key lever into operative position with reference to one of a plurality of said ejector bars and means to lock said shaft, and means to move said lever laterally into a position when operated from a key-board to engage one of said ejector bars, substantially as described. 26th. The combination in a type assembling machine, of a type assembling table, type reservoirs and type ejector mechanism, the latter operating to eject the type from reservoirs on to the table, a friction bar suitably supported with reference to said table, and means controlled by the operation of the ejector mechanism in ejecting the type, to lift said friction bar off the table a variable distance, according to the thickness of the type ejected, and means to cause said bar to bear on the type as the same is ejected and during its movement on the table with a pressure intended to operate as a restraining resistance, as the type are ejected on the table or moved over the face thereof, substantially as described. 27th. The combination in a type assembling machine, of a type assembling table with a central type channel, type reservoirs and type ejector bars, the latter operating to eject the type from the reservoir, on the table, and type drivers operating reciprocally and alternately to drive the type to the central channel, two friction bars suitably supported in reference to said table, one on either side of the central channel, and means controlled by the operation of the ejector bars in ejecting the type to lift said friction bar off the table a variable distance, according to the thickness of the type ejected, and means to cause said bar to bear on the type as the same is ejected, and during its movement on the table, with a pressure intended to operate as a restraining resistance as the type are ejected on the table or moved over the face thereof, substantially as described. 28th. The combination in a type assembling machine of an assembling table with a central type channel, two type drivers suitably mounted on a reciprocating carrier to drive the type alternately to the central channel, two friction bars suitably supported, one on either side of the central channel, and means to cause said bars to bear on the type with a restraining resistance during the movement of the type on the table, two dogs with abutting heads, mounted one in each of the adjacent ends of the friction bars in ways suitable to move horizontally, to arrest the movement of the type at the central channel, and to continue the restraining resistance on the type to the full throw of the drivers, substantially as described. 29th. The combination in a type assembling machine, of an assembling table with a central type channel, two type drivers suitably mounted on a reciprocating carrier to drive the type alternately to the central channel, two friction bars suitably supported, one on either side of the central channel, and means to cause said bars to bear on the type with a restraining resistance during the movement of the type on the table, two dogs with abutting heads mounted one in each of the adjacent ends of the friction bars in suitable ways to move horizontally to arrest the movement of the type at the central channel, and to continue the restraining resistance on the face to the full throw of the drivers, and means to force the type delivered at the central channel into said channel, substantially as described. 30th. In a type assembling machine wherein type are assembled on an assembling table, the combination of an assembling table, type reservoirs and ejector bars, the latter operating to eject type from said reservoirs upon said table, a rocking frame suitably supported and carrying on one side a friction bar and on the other side contact points to engage bevelled shoulders of the ejector bars, with a spring interposed to normally maintain the friction bar in contact with the table, the contact points being adjusted in relation to the shoulders of each ejector bar to lift the friction bar, with the operation of each ejector bar, sufficiently to permit the type controlled by said ejector bar to pass between the friction bar and the table with a friction to operate as a restraining resistance upon the type, as the same is ejected on to or moved over the table, substantially as described. 31st. In a type assembling machine, an assembling table provided with a central type channel, in combination with suitable type reservoirs and reciprocating ejector bars, two rocking frames suitably supported on either side of the central channel, and carrying on one side of each, a friction bar, and on the other side of each, contact points to engage bevelled shoulders of the ejector bars, with a spring interposed to normally maintain the friction bars in contact with the table, the contact points being adjusted in relation to the shoulders of each ejector bar to lift the friction bars affected thereby with the operation of each ejector bar, sufficiently, to permit the type controlled by said ejector bar to pass between the friction bar and the table, with the friction necessary to operate as a restraining resistance upon the type as it is ejected, and during its movement over the table, two dogs with abutting heads, mounted one in each of the adjacent ends of the friction bars, in suitable ways to move horizontally to arrest the movement of the type at the central channel, and to continue the restraining resistance on the type to the full throw of the drivers, and means to drive the type alternately to the central channel, and means to force the type into the central channel, substantially as described. 32nd. The combination in a type

assembling machine, of an assembling table with a central type channel, suitable type reservoirs and means to eject the type from said type reservoirs on to the assembling table, said ejector mechanism operating independently on either side of the central channel, two friction bars suitably supported on either side of the central channel, and means controlled by the independent ejector mechanism, operating on either side of the central channel to control the movement of said independent friction bars to cause each of said friction bars to bear on the type ejected by the independent ejector mechanism as the type is ejected, and during its movement on the table with a pressure intended to operate as a restraining resistance to the movement of the type, type drivers operating reciprocally and alternately to drive the type to the central channel, said drivers operating in harmony with the ejector mechanism, to the end, that the type are ejected when the drivers are withdrawn from the central channel, substantially as described. 33rd. The combination in a type assembling machine, of an assembling table with a central type channel and appropriate type reservoirs, means to eject the type from said reservoirs on to the table operating independently on either side of the central channel, two friction bars suitably supported one on either side of the central channel, means to cause said bars to bear on the type with a pressure intended to operate on the type with a restraining resistance as the type are ejected and during their movement on the table, means operated by the type ejector mechanism operating on one side of the central channel to control the movement of friction bar on the same side of the central channel, to lift said friction bar off the table to receive the type as the same is ejected, and to operate upon the same with a restraining resistance as heretofore stated, and means operated by the type ejector mechanism on the other side of the central channel to control the ejector bar on the other side of the central channel, to lift the said bar off the table to receive the type as the same is ejected, and to operate upon the same as a restraining resistance as heretofore stated, type drivers suitably mounted to operate reciprocally and alternately to drive the type to the central channel, said drivers operating in harmony with the ejector mechanism, to the end, that the type are ejected when the drivers are withdrawn from the central channel, substantially as described. 34th. The combination in a type assembling machine, of a type assembling table, provided with a centrally located type channel, two type drivers operating alternately from either side of the type channel to drive to the type delivered on the table to said central channel, means to eject the type on the table, two friction bars suitably mounted one on either side of the central channel to operate independently, means to cause said bars to bear on the type with a restraining resistance during the movement of the type on the table, means operated by the ejector mechanism to lift said friction bars according to the thickness of the type ejected, the adjustment and operative relation of the parts being such that the friction bars act alternately and harmoniously in relation to the ejector and driving mechanism, substantially as described. 35th. The combination in a type assembling table with a centrally located type channel, two type drivers operating alternately from either side of the type channel, to drive the type delivered on the table to said central type channel, appropriate type reservoirs, two friction bars suitably supported one on either side of the central channel, and means to cause said bars to bear on the type with a restraining resistance as they are ejected on the table, and during their movement on the table, said pressure being controlled by the movement of the ejector bars, means to arrest the movement of the type at the central channel, means to eject the type from the reservoirs, operating alternately when the type drivers are at the most distant point in the extremity of their movement from the central channel, substantially as described. 36th. The combination in a type assembling machine, of an assembling table, with a centrally located type channel, two type drivers operating alternately from either side of the type channel, to drive the type delivered on the table to said central type channel, appropriate type reservoirs, two friction bars suitably supported with reference to said table, means controlled by the operation of ejector bars in ejecting the type upon the table, to lift said friction bar off the table a variable distance according to the thickness of the type ejected, and means to cause said bar to bear on the type as the same is ejected, and during its movement on the table, with a pressure to operate as a restraining resistance, as the type are ejected on the table or moved over the face thereof, means to arrest the movement of the type at the central channel, ejector bars suitably mounted to reciprocate in ways to eject the type from the reservoir, means operating from the key-board to move said ejector bars into position to be operated upon by automatically operated ejector blades, said blades being arranged to engage the ejector bars, when the drivers are at the most distant point in the extremity of their movement from the central channel, substantially as described. 37th. The combination in a type assembling machine, of a type assembling table with centrally located type channel, suitable type reservoirs and two type drivers suitably mounted at either end of a reciprocating carrier, with means to reciprocate said carrier, two friction bars suitably supported, one on either side of the central channel, and means to cause said bars to bear on the type with a restraining resistance during the movement on the table, controlled by the movement of the ejector bars, two dogs, with abutting heads, mounted one in each of the adjacent ends of the friction bars in

suitable ways, to move horizontally to shift from side to side of the central channel, as they are engaged by the type forced against the same by the type drivers, to arrest the movement of the type at the central channel, operating automatically as each type is delivered at the central channel, ejector bars suitably mounted to reciprocate in ways to eject the type from the reservoirs, and means operating from a key-board to move the ejector bars into position to be operated upon by automatically operated ejector blades, said blades being arranged to engage the ejector bars when the drivers are at the most distant point at the extremity of their movement from the central channel, substantially as described. 38th. The combination in a type assembling machine, of an assembling table with a centrally located type channel, suitable type reservoirs adapted to fit into an appropriate aperture in said table so that the base of the columns of type supported in the type reservoirs shall be in the plane of the surface of said table, two type drivers as thin as the thinnest type, each suitably supported between a bifurcated frame, a reciprocating carrier with brackets at each end thereof, one of said bifurcated frames carrying said type drivers mounted in horizontal ways on each of said brackets, with a spring interposed between the frames and their brackets, two rocking frames suitably supported and carrying on one side of each a friction bar, and on the other side of each, contact points to engage the bevelled shoulders of ejector bars, with a spring interposed to normally maintain the friction bars in contact with the assembling table, the contact points being adjusted in relation to the shoulders of each ejector bar to lift the friction bar with the operation of each ejector bar sufficiently, to permit the type controlled by each ejector bar to pass between the friction bar and the table, with a friction bar to operate as a restraining resistance, two dogs with abutting heads mounted one on each of the adjacent ends of the friction bar in suitable ways to move horizontally to arrest the movement of the type at the central channel, said friction bars being arranged to pass between the walls of the bifurcated frames supporting the type drivers, ejector bars suitably mounted to reciprocate in ways to eject the type from the reservoirs said bars being provided with suitable shoulders, key levers operating from a key-board to give the ejector bars an initial ejecting movement by engaging one of the shoulders of said bars, two ejector blades mounted on a normally rotating shaft on opposite sides of the plane of its axis, one of these blades adjusted to engage the shoulder of the ejector bars operating on one side of the central channel, and the other blade operating on the other side of the central channel, when said shoulders are brought into the path of said blades by said initial movement, and a spring trigger arranged to engage said ejector bars when the same are projected, and to retract the same when they are released from the operation of the rotating ejector blades, the ejector blades being arranged to engage the ejector bars to eject the type on each side of the table, when the type driver operating on that side of the table is at the extremity of its movement from the central channel, a rocking lever suitably mounted and provided at one end with a bifurcated type forcer to force the type into the central channel, and means to rock said lever at the instant that each type driver arrives at the type channel, substantially as described. 39th. The combination in a type assembling machine, of an assembling table with a centrally located type channel, suitable type reservoirs adapted to fit into an appropriate aperture in said table so that the base of the columns of type supported in the type reservoirs shall be in the plane of the surface of said table, two type drivers, as thin as the thinnest type, each suitably supported in a bifurcated frame, a reciprocating carrier with brackets at each end thereof, and one of said bifurcated frames carrying said type drivers, mounted in horizontal ways on each of said brackets with a spring interposed between the frames and their brackets, and means to adjust the throw of the drivers with reference to the central channel, two rocking frames suitably supported and carrying on one side of each a friction bar and on the other side of each, contact points to engage the bevelled shoulders of ejector bars, with a spring interposed to normally maintain the friction bars in contact with the assembling table, the contact points being adjusted in relation to the shoulders of each ejector bar, to lift the friction bar, with the operation of each ejector bar, sufficiently to permit the type controlled by said ejector bar to pass between the friction bar and the table with a friction to operate as a restraining resistance, two dogs, with abutting heads, mounted one on each of the adjacent ends of the friction bar, in suitable ways to move horizontally to arrest the movement of the type at the central channel, and to continue the resistance, said friction bars being arranged to pass between the walls of the bifurcated frames supporting the type drivers, ejector bars suitably mounted to reciprocate in the ways to eject the type from the reservoirs, said bars being provided with suitable shoulders, key levers operating from a key-board to give the ejector bars an initial ejecting movement by engaging one of the shoulders of said bars, two ejector blades mounted on a normally rotating shaft on opposite sides of the plane of its axis, one of these blades adjusted to engage the shoulder of the ejector bars on one side of the central channel, and the other blade operating on the other side of the central channel, when said shoulders are brought into the path of said ejector blades by said initial movement, and a spring trigger arranged to engage said ejector bars when the same are projected and to retract the same when they are released from the operation of the rotating ejector blades, the ejector blades being arranged to engage the ejector bars to eject the type on each side of the table,

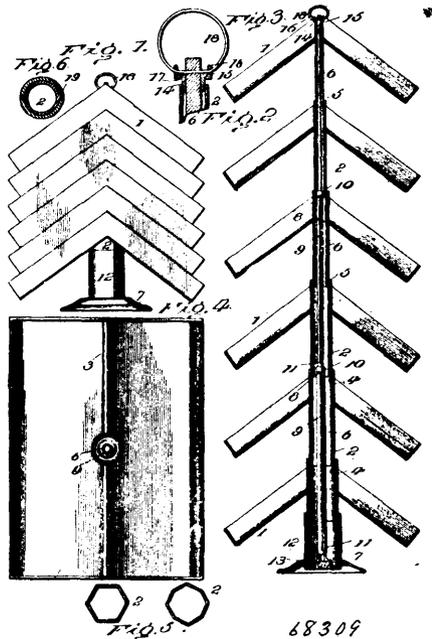
when the type driver operating on that side of the table is at the extremity of its movement from the central channel, a rocking lever suitably mounted and provided at one end with a bifurcated type forcer to force the type into the central channel, and means to rock said lever at the instant that each type driver arrives at the type channel, substantially as specified. 40th. The combination in a type assembling machine, of an assembling table with a centrally located type channel, suitable type reservoirs adapted to fit into an appropriate aperture in said table so that the base of the columns of type supported in the type reservoirs shall be in the plane of the surface of said table, two type drivers as thin as the thinnest type, each suitably supported in a bifurcated frame, a reciprocating carrier with brackets at either end thereof, and one of said bifurcated frames carrying said type drivers mounted in horizontal ways in each of said brackets, said brackets and frames secured together by an adjustment screw, with a spring interposed between the frames and their brackets, two rocking frames suitably supported and carrying on one side of each a friction bar and on the other side of each contact points to engage the bevelled shoulders of the ejector bars, with a spring interposed to normally maintain the friction bars in contact with the assembling table, the contact points being adjusted in relation to the shoulder of each ejector bar to lift the friction bar with the operation of each ejector bar sufficiently to permit the type controlled by said ejector bar to pass between the friction bar and the table, with a friction to operate as a restraining resistance, two dogs with abutting heads mounted one on each of the adjacent ends of the friction bar in suitable ways to move horizontally to arrest the movement of the type at the central channel, and to continue the restraining resistance on the type until the same are forced into the central channel, said friction bars being arranged to pass between the walls of the bifurcated frames supporting the type drivers, ejector bars suitably mounted to reciprocate in ways to eject the type from the reservoirs, said bars being provided with suitable shoulders, key levers operating from a key-board to give to the ejector bars an initial ejecting movement by engaging one of the shoulders of said bars, a locking bolt mounted on a lever secured to an arm of the key lever, and a recess to co-operate with said locking bolt in each ejector bar, two ejector blades mounted on a normally rotating shaft on opposite sides of the plane of its axis, one of these blades adjusted to engage the shoulders of the ejector bars operating on one side of the central channel, and the other blade operating on the other side of the central channel when said shoulders are brought into the path of said ejector blades by said initial movement, and a spring trigger arranged to engage said ejector bars when the same are projected and to react the same when they are released from the operation of the rotating ejector blades, the ejector blades being arranged to engage the ejector bars to eject the type on each side of the table when the type driver operating on that side of the table is at the extremity of its movement from the central channel, a rocking lever suitably mounted and provided at one end with a bifurcated type forcer to force the type into a central channel, and means to rock said lever at the instant that each type driver arrives at the type channel, a loaded cushion bar interposed between the abutting ends of the ejector bars and an inclined plane, the rear end of said ejector bars being supported by appropriate springs, substantially as described.

**No. 68,309. Display and Sample Case. (Caisse d'étalage.)**

Frank K. Underwood, and Lillie E. Hawkins, both of Oskaloosa, Iowa, U.S.A., 2nd August, 1900; 6 years. (Filed 5th February, 1900.)

*Claim.*—1st. In an exhibitor, a series of trays arranged the one above the other in vertical relation, a corresponding series of tubes telescopically related, each bearing a tray, and an extensible support for holding the tubes extended and the trays vertically spaced, substantially as described. 2nd. In an exhibitor, a series of trays arranged the one above the other in vertical relation, a corresponding series of tubes telescopically related, each bearing a tray, an extensible support composed of telescoping sections, and interlocking means between the sections of the support, substantially as set forth. 3rd. In an exhibitor, a series of trays arranged the one above the other in vertical relation, a corresponding series of tubes telescopically related, each bearing a tray, an extensible support arranged within the tubes bearing the trays and provided with interlocking means and composed of telescoping sections, the extreme sections of the extensible support and the end tray tubes being connected, substantially as described. 4th. In an exhibitor, a series of trays arranged the one above the other in vertical relation, a corresponding series of tubes telescopically related, each bearing a tray, an extensible support composed of telescoping sections of greater length than the tray tubes and in less number, and interlocking means between the sections of the extensible support, substantially as described. 5th. In an exhibitor, a series of trays arranged the one above the other in vertical relation, a corresponding series of tubes telescopically related, each bearing a tray, an extensible support composed of telescoping tubes, certain of the tubes having longitudinal slots formed with lateral notches, and projections applied to certain others of the tubes to co-operate with the longitudinal slots and notches thereon, as and for the purpose described. 6th. An exhibitor composed of a vertical series of superposed trays, telescopically related tubes of polygonal cross section applied to the respective trays, and an extensible support composed of telescoping

tubes of circular cross sections and formed with co-operating slots and projections the slots having lateral notches, substantially as



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specified. 7th. In an exhibitor, a base having upwardly projecting concentric extensions, telescoping tubes fitted to the outer extension of the base and bearing trays, and an extensible support fitted to the inner extension of the base and provided with interlocking means between its telescoping elements, substantially as described. 8th. An exhibitor comprising a base, telescoping tubes provided with corresponding stops to limit their extension, trays applied to the upper ends of the tubes, an extensible support having interlocking means, a ring loosely applied to the topmost tray tube, and a finger grip applied to the ring and connecting it with the top section of the extension support, substantially as described.

**No. 68,310. Candle Holder. (Chandelier.)**

Fig. 1

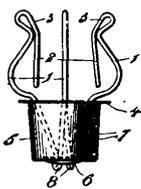
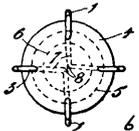


Fig. 2



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Richard Simmonds, Coromandel, New Zealand, 2nd August, 1900; 6 years. (Filed 14th July, 1900.)

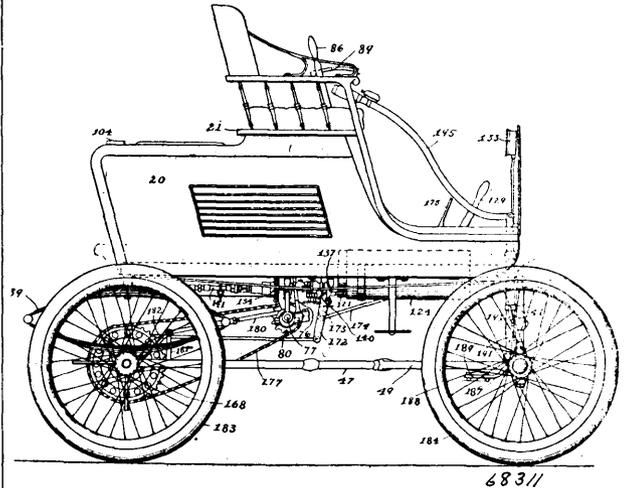
*Claim.*—A candle holder comprising in combination grippers having downward extensions and flaring ends, extensions to the grippers, a cork through which these said extensions pass, and top and bottom plates to the cork, substantially as set forth.

**No. 68,311. Automobile Vehicle. (Automobile.)**

Charles Allen Skerry, of Waltham, Massachusetts, U.S.A., 2nd August, 1900; 6 years. (Filed 9th December, 1899.)

*Claim.*—1st. An automobile vehicle, comprising running gear, a body, two frames of which one is adjustable longitudinally with relation to the other, one of said frames being supported by the

running gear, and propelling mechanism supported by the other of said frames. 2nd. An automobile vehicle, comprising running

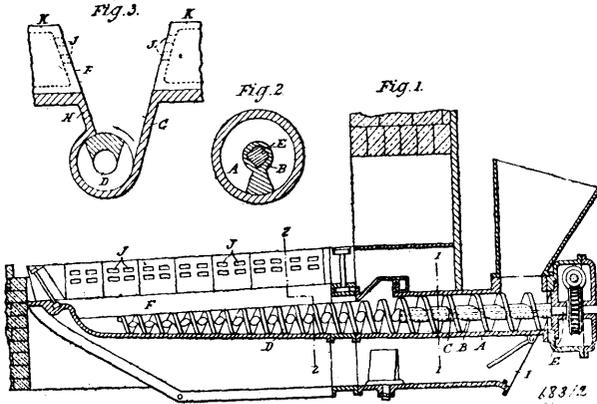


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gear, a vehicle body, and a frame secured to the running gear and supporting the said body, in combination with an inner independently removable frame for supporting the propelling mechanism. 3rd. An automobile vehicle, comprising running gear, a vehicle body, and a frame secured to the running gear and supporting the said body in combination with an inner longitudinally adjustable frame, propelling mechanism supported on the last mentioned frame, and connections between said mechanism and the driving axle of the running gear. 4th. An automobile vehicle, comprising an inner frame, for supporting the propelling mechanism, an outer frame relatively to which the inner frame is adjustable, a running gear upon which the outer frame is supported, and a vehicle body having its sides enclosing the outer frame and resting removably thereon. 5th. A vehicle, comprising an outer frame supported by the running gear, an inner frame for carrying the propelling mechanism, and hangers for adjustably connecting the said frames. 6th. A vehicle, comprising an outer frame supported by the running gear, an inner frame for carrying the propelling mechanism, hangers carried by the outer frame for supporting the inner frame, and means co-acting with said hangers for adjusting the inner frame relatively to the outer frame. 7th. A vehicle, comprising an outer frame supported by the running gear, an inner frame for carrying the propelling mechanism, two-part hangers for connecting said frames, and screw bars for adjusting the parts of the said hangers longitudinally of the frames. 8th. A vehicle, comprising an outer frame supported by the running gear, an inner frame for carrying the propelling mechanism, means at the front ends of the frames for adjusting one frame longitudinally relatively to the other, and means at the rear ends of said frames for holding one against vertical movement relatively to the other. 9th. A vehicle, comprising an inner frame, an outer frame, a hanger taking over the outer frame, a nut secured to the inner frame, and a screw bar engaging said nut and journaled in the said hanger. 10th. In a vehicle, front and rear axles, reach bars arranged in V-shape and connecting said axles, and braces inclined relatively to said reach bars and connecting said bars with the front axle. 11th. In a vehicle, front and rear axles, reach bars arranged in V-shape and connecting said axles, and braces inclined relatively to said reach bars and connecting said bars with the rear axle. 12th. In a vehicle, front and rear axles, reach bars arranged in V-shape and connecting said axles, and braces inclined relatively to said reach bars and connecting said bars with the front axle and the rear axle respectively. 13th. In a vehicle, front and rear axles, reach bars connecting the outer ends of the rear axle with the middle portion of the front axle, and braces connecting the middle portions of said reach bars with the outer ends of the front axle and the central portion of the rear axle. 14th. In a vehicle, the combination of a front axle, a divided rear axle, connections between the sections of the axle, tubular bearing sleeves for said sections, a strut for said sleeves, and braces between said strut and the inner ends of the sleeves. 15th. In a vehicle, the combination of a front axle, a divided rear axle, differential gearing between the sections of the axle, tubular bearings for said sections, and yokes connecting the inner ends of said bearings and lying in the front and in the rear of the said differential gearing, and a strut connecting the outer ends of said tubular bearings. 16th. In a vehicle, the combination of a front axle, a divided rear axle, differential gearing between the sections of the axle, tubular bearings for said sections, yokes connecting the inner ends of said bearings and lying in the front and in the rear of the said differential gearing, and a strut connecting the outer ends of said tubular bearings. 17th. In a vehicle, the combination of a front axle, a divided rear axle, differential gearing between the sections of the axle, tubular bearings for said sections, yokes connecting the inner ends of said bearings, a frame partially

supported by said rear axle, a crank shaft mounted in bearings on said frame, and an adjustable brace between the last mentioned bearings and one of said yokes. 18th. In a vehicle, the combination of a divided rear axle, tubular bearings for the sections of the axle, a frame partially supported by said tubular bearings, a driving shaft mounted in bearings on said frame, a chain connecting the driving shaft and the rear axle, and adjustable braces between the bearings for the crank shaft and the tubular bearings for said rear axle. 19th. An automobile vehicle, comprising running gear, a frame supported upon said running gear, a body supported on said frame, a second frame supported by the first mentioned frame, and longitudinally adjustable thereto, and power-generating devices located on the said second frame. 20th. An automobile vehicle, comprising running gear, an outer frame supported upon said running gear, a body removably placed upon said outer frame, an inner frame adjustably secured to said outer frame, power generating devices on said inner frame, and an adjustable connection between said inner frame and said running gear.

**No. 68,312. Mechanical Stoker.** (*Chauffeur mécanique.*)



Wilfred Rothery Wood, London, England, 2nd August, 1900; 6 years. (Filed 18th July, 1900.)

*Claim.*—1st. In mechanical stokers, a feed screw, that portion within the furnace being in the form of a helix or spiral having a decreasing carrying capacity, substantially as described. 2nd. In mechanical stokers, and in combination, a feed screw in the form of a helix or spiral and a coking or fuel chamber, the inner walls of which leave said screw at a point approximately in a horizontal plane with the axis of said screw on the side upon which it rises, and on the descending side at a point slightly beyond that formed by a vertical plane drawn through the axis, substantially as and for the purpose set forth. 3rd. In mechanical stokers, a feed screw having a constant pitch and diameter at its outer end, and a boss or stem, and a constant pitch and decreasing diameter upon that portion within the coking or fuel chamber wherein it is in the form of a helix or spiral, substantially as described.

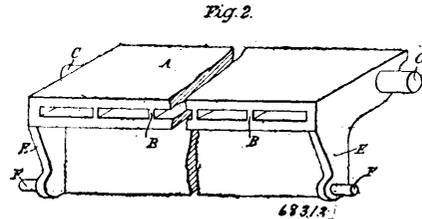
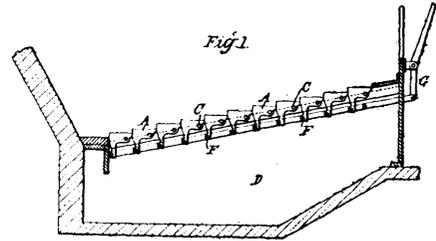
**No. 68,313. Combustion Furnace.**

(*Fournaise à combustion.*)

Wilfred Rothery Wood, London, England, 2nd August, 1900; 6 years. (Filed 18th July, 1900.)

*Claim.*—1st. In combustion furnaces, grate bars having substantially box like cross sections, the space within the bars forming the draught inlet to the furnace, and the top of such bars forming the furnace bottom, and the lower part of such bars in combination with the top of the next adjacent bar forming a stop plate extending rearward from the draught opening to prevent the fuel passing between said bars when in working position, substantially as described. 2nd. In combustion furnaces, grate bars having substantially a box like cross section, the space within the bars forming the draught inlet to the furnace, and means for moving such bars so as to cause the rear top section of one bar to move across the draught opening between the top and bottom section of the next adjacent bar to partially or entirely close the draught, substantially as described. 3rd. In combustion furnaces, grate bars having substantially a box like cross section and through which the draught passes, and means for moving such bars and causing the rear top face of one bar to cut or shear across the draught outlet of the next adjacent bar, substantially as described. 4th. In combustion furnaces, grate bars having substantially a box like cross section and through which the draught passes the top of such bars forming the furnace bottom, and the lower part of such bars in combination with the top of the next adjacent bar forming a stop plate to prevent fuel passing between such bars when in working position and means for moving such bars to form a dead plate, substantially as described. 5th. In combustion furnaces, grate bars having sub-

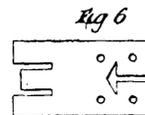
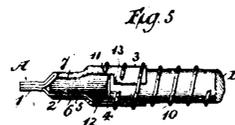
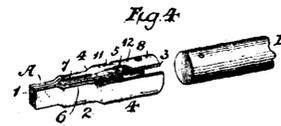
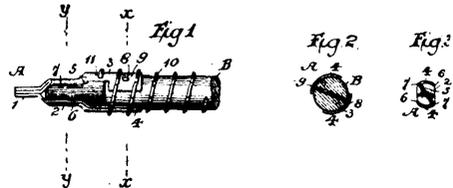
stantially a box like cross section and through which the draught passes the top of such bars forming the furnace bottom, and the



lower part of such bars in combination with the top of the next adjacent bar forming a stop plate to prevent fuel passing between such bars when in working position, and means for moving such bars to form a dead plate and finally to open the spaces between the bars for discharge of fuel or ashes, substantially as described.

**No. 68,314. Spring Shade Roller.**

(*Baton à ressort pour stores.*)



Ansel French Temple, Muskegon, Michigan, U.S.A., 2nd August, 1900; 18 years. (Filed 17th July, 1900.)

*Claim.*—1st. A spindle tip for spring shade rollers, composed of sheet metal folded sideways in longitudinal folds and bent into form, comprising a flat section, adapted to engage with the bracket, a ratchet section adapted to receive and engage with the pawls on the roller, and an inner section arranged to fit over the spindle, substantially as described. 2nd. A spindle tip for spring shade rollers, composed of sheet metal folded longitudinally, and bent into form, comprising an outer flat section adapted to engage with the bracket, a ratchet section, consisting of the outer folds 4 joined

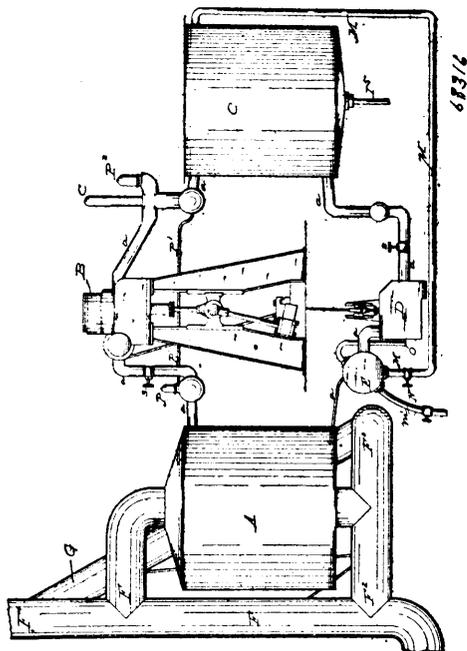
by the transverse web 5, and adapted to engage with the pawls on the roller, and an inner section formed by the folds 4 arranged to fit over the spindle, substantially as described. 3rd. In spring shade rollers, in combination, a spindle tip formed of sheet metal folded longitudinally and bent into form, consisting of a flat, outer end, adapted to engage with the bracket, and the outer folds 4 joined by, a transverse web 5 arranged and adapted to engage with the pawls, and to receive the end of the spindle, and the spindle B connected to the spindle tip within the folds 4, substantially as described.

**No. 68,315. Asphalt Block.** (*Blocs pour le passage des roues.*)

Ignace Bilodeau, Québec, Canada, 2 d'Aout, 1900; 6 ans. (Déposé 24 février 1900.)

*Résumé.*—Je reclame et desire faire breveter la composition ci haut mentionnée d'un mélange d'asphalte, coal-tar, de pierre concassée et de terre glaise lequel mélange doit-etre place dans des moules et soumis à un forte pression pour en former un corps homogène et ce dans les proportions et pour les fins ci haut decrites.

**No. 68,316. Apparatus for Using Gas for Motive Power.** (*Appareil à l'usage du gaz comme force motrice.*)



John C. Scott, Oyster Bay, assignee of John Charles Henderson New York City, both in New York, U.S.A., 2nd August 1900; 6 years. (Filed 3rd July, 1899.)

*Claim.*—1st. The combination in an apparatus of the character described with an evaporizer adapted to heat the medium employed by direct action of fire, flue gas or other heat media of a motor B, a condenser C and elastic cushion *c*<sup>1</sup> between the motor and condenser and adapted to exert pressure upon the gas exhausting into the condenser and the replacer pump D, substantially as described. 2nd. In an apparatus for utilizing gases for motive power, and for re-using the gas in four phases or cycles by means of increasing and decreasing temperature, the combination of the evaporizer or heater A, the motor B connected therewith, an elastic cushion *c*<sup>1</sup>, the condenser C, the replacer pump D, and the interchanger E, substantially as herein shown and described. 3rd. In a system of utilizing gases for the purpose of obtaining motive power, the evaporizing heater A, of gradually increasing temperature under constant pressure, substantially as herein shown and described, in combination with the motor B, the condenser C, the replacer pump D, and the interchanger E, located between the pump and the evaporizer, as herein shown and set forth.

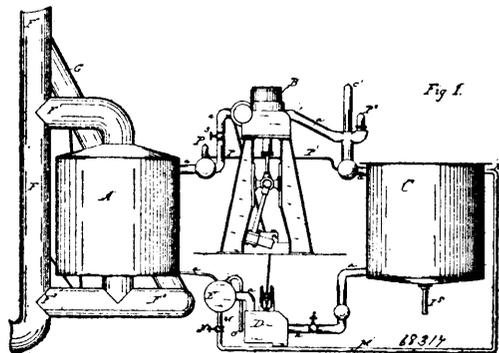
**No. 68,317. Method of Using Gas for Motor Power.**

(*Méthode d'utilisation du gaz comme force motrice.*)

John C. Scott, Oyster Bay, assignee of John Charles Henderson, of New York City, both in New York, U.S.A., 2nd August, 1900; 6 years. (Filed 3rd July, 1899.)

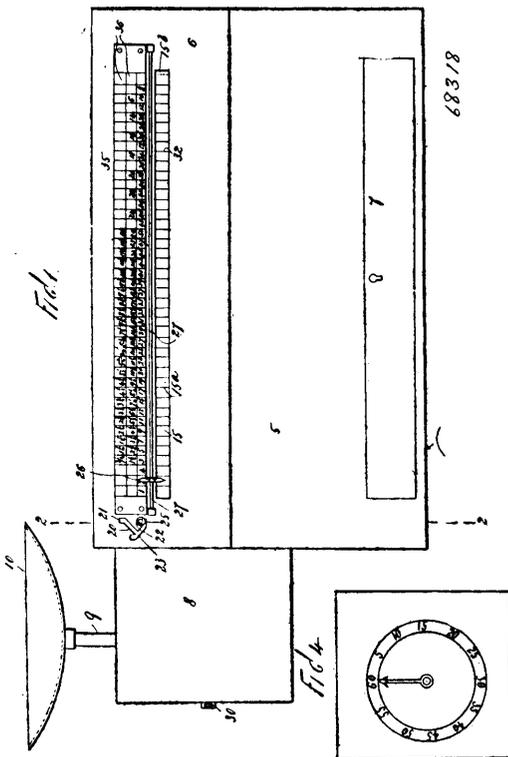
*Claim.*—1st. The method of evaporating and energizing carbonic acid gas for the purpose of obtaining power, which consists in developing its energy by heating the gas partially releasing the same for producing power, subjecting the gas so relieved to a downward pressure and replacing the same for a renewal of its power, substantially as described. 2nd. The method of obtaining the energy from

carbonic acid gas for motive power, first heating the gas, partially releasing the same for producing work, keeping the gas constantly



subjected to an elastic downward pressure, cooling the same, and returning the gas for the purpose of re-energizing and renewing of its power, substantially as described. 3rd. The method of producing energy from carbonic acid gas for motive power, which consists in heating the gas to about eighteen hundred pounds pressure, partially releasing the pressure in obtaining work or energy therefrom, subjecting the released gas to a constant elastic downward pressure, of about one thousand pounds cooling the same, returning the gas for the purpose of re-heating and re-using the same, as herein set forth. 4th. The method of evaporating and energizing carbonic acid for power purposes, consisting in increasing its temperature to about 125° fahrenheit and about eighteen hundred pounds pressure for obtaining power continuously decreasing its temperature and subjecting the gas to a continuous downward elastic pressure, further decreasing its temperature and liquefying the gas, re-heating and re-converting to the gaseous state for reuse, substantially as described.

**No. 68,318. Price Denoting Scale.** (*Balance.*)



David Walker, Maitland, Nova Scotia, Canada, 3rd August, 1900; 6 years. (Filed 23rd May, 1900.)

*Claim.*—1st. A scale of the class described, embodying a weight denoting member and a movable price denoting member, and means for varying the speed of movement of said price denoting member, substantially as shown and described. 2nd. A scale of the class described, embodying a movable price denoting member having the symbols of price totals arranged thereon in a predetermined manner, and a scale of prices per unit arranged adjacent thereto and

adapted to be read in connection therewith, substantially as shown and described. 3rd. A scale of the class described, embodying a movable price denoting member upon which the price total symbols are arranged in a predetermined manner, a scale of prices per unit arranged adjacent thereto and adapted to be read in connection therewith, and means for varying the speed of movement of said price denoting member, substantially as shown and described. 4th. A scale of the class described, embodying a weight dial, and a movable pointer which operates in connection therewith, and a movable price indicating member comprising a cylinder upon which are arranged in a predetermined manner a plurality of price total symbols, a scale of prices per unit arranged adjacent thereto, and adapted to be read in connection therewith, and means for varying the speed of said price indicating member, substantially as shown and described. 5th. A scale of the class described, embodying a movable price indicating member having a plurality of price total symbols arranged thereon in a predetermined order, a movable support upon which the commodity to be weighed is placed, and adjustable means for operatively connecting said movable support with said movable price indicating member, whereby the speed of movement of said movable price indicating member may be varied, substantially as shown and described. 6th. A scale of the class described, embodying a movable price indicating member having a plurality of price total symbols arranged thereon in a predetermined order, a movable support upon which the commodity to be weighed is placed, and adjustable means for operatively connecting said movable support with said movable price indicating member, whereby the speed of movement of said movable price indicating member may be varied, and a scale of prices per unit arranged adjacent said price indicating member and adapted to be read in connection therewith, substantially as shown and described. 7th. A scale of the class described, embodying a turnable cylindrical member having a plurality of price total symbols arranged thereon, a movable support upon which the commodity to be weighed is placed, a drive shaft operatively connected with said movable support and provided with a plurality of gears having varying numbers of teeth, a plurality of supplemental gears loosely and operatively connected with said cylindrical member, and means for shifting said supplemental gears, whereby the several supplemental gears may be caused to separately engage each with one of the gears upon said drive shaft, substantially as shown and described. 8th. A scale of the class described, embodying a turnable cylindrical member having a plurality of price total symbols arranged thereon, a movable support upon which the commodity to be weighed is placed, a drive shaft operatively connected with said movable support and provided with a plurality of gears having varying numbers of teeth, a plurality of supplemental gears loosely and operatively connected with said cylindrical member, and means for shifting said supplemental gears, whereby the several supplemental gears may be caused to separately mesh each with one of the gears upon said drive shaft, and a scale of price per unit symbols adapted to be read in connection with the symbols upon said cylindrical member, substantially as shown and described. 9th. A scale of the class described, comprising a weighing member provided with a dial of weights having a plurality of symbols of weight, a drive shaft provided with a pointer which operates in connection with said dial, a movable pan support operatively connected with said drive shaft, said drive shaft being provided with a plurality of gears of carrying numbers of teeth, and a price denoting member comprising a rotatable cylinder having arranged in a predetermined manner upon its surface, a plurality of symbols of price totals, a plurality of supplemental gears loosely operatively connected with said cylinder and arranged to be each separately operatively connected with one of the gears upon said drive shaft, means for adjusting said supplemental gears, and a scale arranged adjacent said cylinder and provided with a plurality of symbols of prices per unit which are read in connection with the symbols upon said cylinder, substantially as shown and described. 10th. A scale of the class described, comprising a weighing member provided with a dial of weights having a plurality of symbols of weight, a drive shaft provided with a pointer which operates in connection with said dial, a movable pan support operatively connected with said drive shaft, said drive shaft being provided with a plurality of gears of varying numbers of teeth, and a price denoting member comprising a rotatable cylinder having arranged in a predetermined manner upon its surface, a plurality of symbols of price totals, a plurality of supplemental gears loosely operatively connected with said cylinder and arranged to be each separately operatively connected with one of the gears upon said drive shaft, means for adjusting said supplemental gears, and a scale arranged adjacent said cylinder and provided with a plurality of symbols of prices per unit which are read in connection with the symbols upon said cylinder, said means for adjusting said supplemental gears comprising a slidable mounted device, and means for locking the same in one of a plurality of positions, substantially as shown and described.

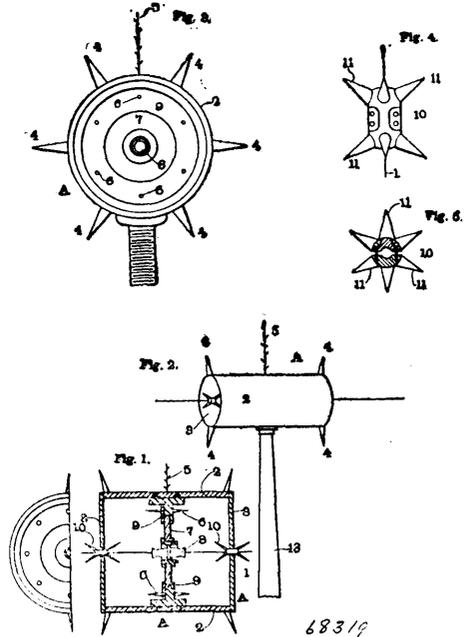
**No. 68,319. Electric Protector for Conductors.**

(Protecteur électrique pour conducteur.)

Joseph Arthur Poché, of New Orleans, Louisiana, U.S.A., 3rd August, 1900; 6 years. (Filed 4th May, 1900.)

Claim.—1st. The combination with a conducting pole and a conducting conduit secured thereto, of a conductor located centrally

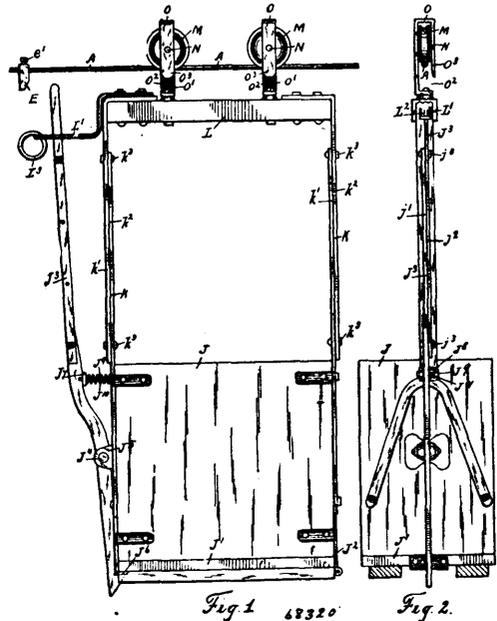
therein and passing therethrough, and lightning discharge receiving points extending from the outside of said conduit. 2nd. The com-



ination with a conducting pole, of a metallic conduit supported thereon and supporting an electric conductor which extends through the conduit and which is electrically insulated therefrom, lightning discharge dissipating points attached to the conductor at the ends of the conduits, lightning discharge receiving points extending from the outside of said conduit, and lightning discharge dissipating points electrically connected upon the inside of the conduit, and insulated from the conductor.

**No. 68,320. Automatic Manure Carrier.**

(Transport à cugrais.)



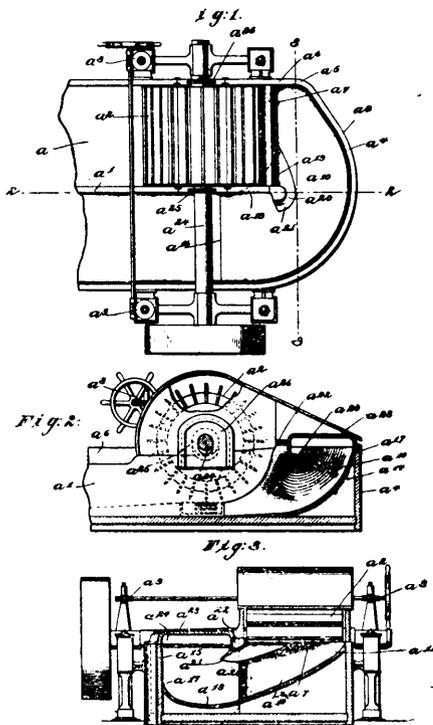
Thomas G. Hodgins, of the Town of Lucan, and Eli Hodgins, of the Township of Biddulph, both in the County of Middlesex, Ontario, Canada, 3rd August, 1900; 6 years. (Filed 2nd August, 1898.)

Claim.—1st. A carrier or car consisting of the swivel frames O, O, open at one side and formed with the downwardly projecting portion O<sup>3</sup>, and the wheels M, M, the beam L, the side bars K, K, and the box J, provided with a hinged bottom J<sup>1</sup>, in combination

with the lever  $J^3$ , formed with a shoulder  $J^6$ , and a spring for holding said shoulder in engagement with the flap end of the bottom  $J^1$ , substantially as and for the purpose set forth. 2nd. A carrier or car consisting of the swivel frames O, O, open at one side and formed with the downwardly projecting portion  $O^3$ , and the wheels M, M, the beam L, the adjustable side bars K, K, and the box J, provided with a hinged bottom  $J^1$ , in combination with the adjustable lever  $J^3$ , formed with a shoulder  $J^6$ , and a spring for holding said shoulder, in engagement with the flap end of the bottom  $J^1$ , substantially as and for the purpose set forth. 3rd. A carrier or car consisting of the swivel frames O, O, open at one side and formed with the downwardly projecting portion  $O^3$ , and the wheels M, M, the beam L, the side bars K, K, the box J, provided with a hinged bottom  $J^1$ , the lever  $J^3$ , formed with a shoulder  $J^6$ , and a spring for holding said shoulder in engagement with the flap end of the bottom  $J^1$ , in combination with a track A, and stop block E, substantially as and for the purpose set forth. 4th. A carrier or car consisting of the swivel frames O, O, open at one side and formed with the downwardly projecting portion  $O^3$ , and the wheels M, M, the beam L, the adjustable side bars K, K, the box J, provided with a hinged bottom  $J^1$ , the adjustable lever  $J^3$ , formed with a shoulder  $J^6$ , and a spring for holding said shoulder in engagement with the flap end of the bottom  $J^1$ , in combination with a track A, and stop block E, substantially as and for the purpose set forth.

**No. 68,321. Beater Engine for Paper Mills.**

(Machine pilon pour moulin à papier.)



Irwin Peter Dillon and Henry Clay King, both of Lawrence, Massachusetts, U.S.A., 3rd August, 1900; 6 years. (Filed 18th January, 1900.)

**Claim**—1st. In a beating engine, a tank containing a mid board, a beater, a back fall over which the stuff is driven by said beater, said back fall being undercut at its inner end and having an overhanging plate at its top edge adjacent said mid board, substantially as described. 2nd. In a beating engine, a mid board, a beater, and a back fall over which the stuff is driven by said beater, said back fall at its inner end adjacent said mid board having an overhanging plate, the free projecting edge of said plate extending downwardly at the end thereof adjacent said mid board, to constitute a retaining or guiding device for the flowing stuff, substantially as described. 3rd. In a beating engine, a mid board, a beater, and a back fall over which the stuff is driven by said beater, said back fall at its inner end adjacent said mid board having an overhanging plate, the free projecting edge of said plate extending downwardly at the end thereof adjacent said mid board and extending partially around the end of said mid board in a curve approximately concentric thereto, substantially as described. 4th. In a beating engine, a mid board, a beater and a back fall over which the stuff is driven by said beater, said back fall at its inner end adjacent said mid board having an overhanging plate, said plate having at the end thereof in line with

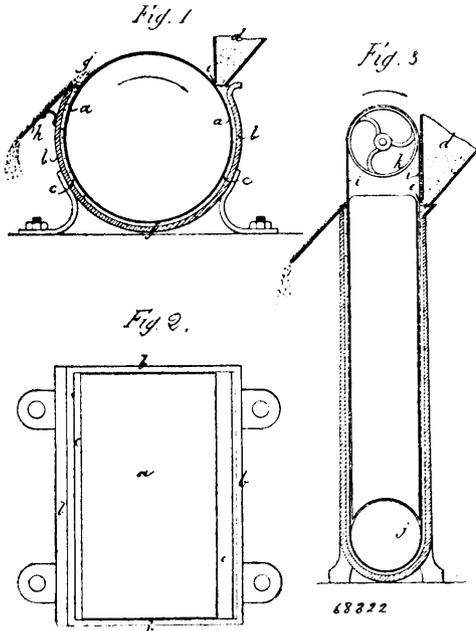
said mid board, a post like projection with a curved surface for the stuff to flow around, substantially as described. 5th. In a beating engine, a tank, containing a mid board and a back fall over which the stuff is driven by said beater, means for turning the stuff over and causing the peripheral flow thereof to reverse places in the tank with the mid board flow thereof after passing said beater, and an overhanging depending device extending into the path of the flow of the stuff at the end of said mid board on the side thereof away from said beater, substantially as described. 6th. In a beating engine, a tank, containing a mid board, a beater, and a back fall, said back fall being undercut at the end thereof adjacent said mid board and having a plate extending forward from the top of the back fall, said plate extending along said back fall approximately half the length thereof, and growing uniformly broader throughout its length approximately as far as said mid board, the free edge of said plate extending obliquely downward and away from said back fall from the narrow end of the plate to the broad end thereof, whereby a substantially arched cavity is provided adjacent said undercut portion of the back fall for the passage of the stuff driven over the outer end of the back fall opposite the mid board, substantially as described. 7th. In a beating engine, a tank, containing a mid board, a beater, and a back fall, said back fall at the end thereof adjacent said mid board being undercut, the surface of said back fall opposite said beater and at the outer end of the back fall sloping downwardly away from the beater, and thence curving towards said undercut portion and sloping downwardly towards said beater at the end of said undercut next to said mid board, substantially as described. 8th. In a beating engine, comprising a tank, having a mid board and beater, a trough at the end of the tank adjacent said beater, said trough having a back fall forming one wall thereof, the other wall being joined to the side of the tank adjacent the outer end of said back fall, and extending obliquely away from said back fall towards the middle line of the tank, and thence curving towards and meeting the other side of the tank, substantially as described. 9th. In a beating engine, a tank, a beater, a back fall and a trough at the end of the tank adjacent said beater to receive the stuff driven by said beater over the back fall, said trough being narrow at its upper end and continually broader toward its lower or discharge end, the bottom of said trough being shallow with only a slight curvature at its upper end and extending thence downwardly in approximately a straight line to about the medium line of the division of the tank opposite said beater, the rear wall curving gradually at all points throughout its length toward the middle of the trough, the beginning of said curvature being approximately flush with the top edge of the tank throughout the more shallow part of the trough and thence descending gradually approximately to the bottom of the trough at the discharge end thereof, substantially as described. 10th. In a beating engine, a tank, a mid board, a beater, a back fall, said back fall being in line with the end of the mid board, and a rounded turning centre adjacent the junction of the back fall and mid board for the stuff to turn around at the end of the tank, substantially as described. 11th. In a beating engine, a tank, a mid board, a beater, a back fall, said back fall being in line with the end of the mid board, and a rounded turning centre adjacent the junction of the back fall and mid board for the stuff to turn around at the end of the tank, said rounded turning centre having a flaring, sloping base beneath the surface of the stuff, substantially as described. 12th. In a beating engine, a tank, a mid board, a beater, a back fall, said back fall being in line with the end of the mid board, and a rounded turning centre adjacent the junction of the back fall and mid board for the stuff to turn around at the end of the tank, said rounded turning centre having a flaring, sloping base slightly beneath the surface of the stuff, said base and turning centre projecting laterally beyond and away from said mid board on the side thereof opposite the beater, whereby some of the stuff may flow under the same and some of the stuff may flow from the inner end of said back fall on to said base and be carried thereby and directed towards the outside of the tank opposite the beater, substantially as described.

**No. 68,322. Ore Amalgamator. (Amalgamateur de minerais.)**

Luis Lagarrigue, Paris, France, 3rd August, 1900; 6 years. (Filed 10th July, 1899.)

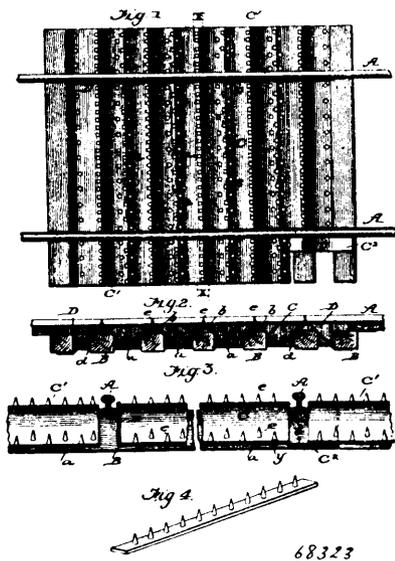
**Claim**—1st. The process for the treatment of sand and pulverulent ores of gold, silver and other metals by amalgamation, which consists in conveying through mercury metalliferous sands or dusts upon and by a moving surface traversing such mercury, whereby the sands or dusts adhere to the moving surface during immersion and become detached from such surface upon emerging from the mercury, as set forth. 2nd. The process for the treatment of sands and pulverulent ores of gold, which consists in depositing metalliferous sands or dusts in thin layers on a moving surface, carrying the adhering layers of sands and dusts through mercury by immersing the moving surface therein, and then discharging the sands or dusts by withdrawing the same with the moving surface from the mercury, as set forth. 3rd. In an amalgamator, the combination with a mercury bath, of a movable surface arranged to be immersed in the bath, and means for feeding metalliferous sands or dusts to such surface, as set forth. 4th. In an amalgamator, the combination with a mercury bath, of an endless band adapted to have movement relative to and through said bath, substantially as described. 5th. In an amalgamator, the combination with a mercury bath or baths,

of a series of movable surfaces arranged to traverse the bath or baths and to act successively on metalliferous sands or dusts, the latter



being adapted to be carried through the bath or baths by the movable surfaces acting successively thereon, as set forth.

**No. 68,323. Cattle Guard.** (*Garde-bétail.*)



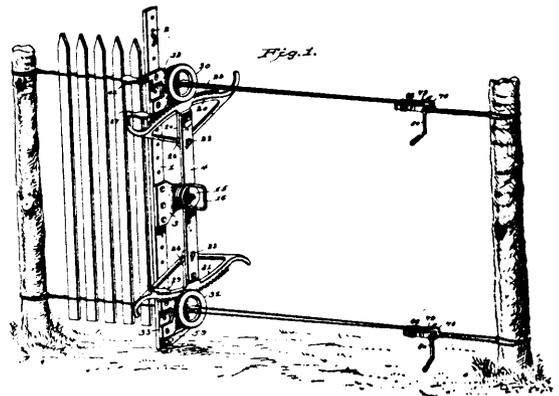
Joseph William Ross, of South Carrollton, and William H. Clarke, Ponderly, both in the State of Kentucky, U.S.A., 3rd August, 1900; 6 years. (Filed 14th July, 1900.)

*Claim.*—1st. A cattle guard, consisting of the combination of the railway ties having their upper edges bevelled or cut-off at an incline, and zig-zag plates having upwardly projecting spikes and inclined sides of equal inclination and length resting against the cut-off edges of the ties at a point midway between their upper and lower angles and forming trough-like depressions dipping below the rails and ridges arranged parallel with and above the tie, with air spaces both along the top and sides of the ties, substantially as and for the purpose described. 2nd. A cattle guard, consisting of the combination of the railway ties having their upper edges bevelled or cut-off at an incline, a zig-zag spike plate having inclined sides of equal inclination and length resting against the cut-off edges of the ties midway between their upper and lower angles and forming trough-like depressions dipping below the rails and ridges arranged parallel with and above the ties and guard plates arranged parallel

to the rails and provided with tongues filling the spaces between the rails and the zig-zag plates, substantially as and for the purpose described.

**No. 68,324. Slat and Wire Fencing Machine.**

(*Machine pour clôtures en fil de fer.*)



68324

William Fontaine Seargeant, of Marshall, Missouri, U.S.A., 3rd August, 1900; 6 years. (Filed 19th February, 1900.)

*Claim.*—1st. In a fence machine, the combination with an upright and twister heads journalled thereon, of a fulcrum plate rigidly clamped to said upright, a lever journalled on said fulcrum plate and carrying means for engagement with the twister heads to operate the latter, and a carrying handle clamped to the fulcrum plate to hold the operating lever against displacement thereon and for moving the machine lengthwise along the wires comprising a disc having formed integral therewith and connected at diametrically opposite sides thereto a bail or handle, substantially as described. 2nd. In a fence machine, the combination with an upright and twister heads journalled thereon, of a fulcrum plate clamped to said upright and affording an off-set portion and a journal and having a passage extending centrally through said journal and off-set portion, an operating lever mounted on said journal and bearing against said off-set portion and having means for engaging with the twister heads to rotate the latter, and means for confining the operating lever in place on the journal comprising a centrally apertured disc fitted against the end of said journal and having formed integral therewith a bail or handle, a bolt passing through the apertures in said journal and disc and a nut engaging the bolt and bearing on said disc, substantially as described. 3rd. In a fence machine, the combination with an upright and twister heads journalled thereon, of a fulcrum plate rigidly clamped to said upright, and affording a passage extending therethrough, a pin secured in said journal and projecting from the front face thereof, a lever mounted on said journal and carrying means for engagement with the twister heads to operate the latter, and means for confining the operating lever in place on the journal comprising a centrally apertured disc having formed integrally therewith and connected at opposite sides thereto a bail or handle and having formed on its rear face a series of apertures, in any one of which said pin may be inserted, a bolt passing through said journal and disc and a nut engaging said bolt and bearing on said disc, the combination operating substantially as described. 4th. A fence machine comprising a signal integral bar affording an upright and provided throughout its length with equi distant apertures, an upper and lower journal plate each of which comprises a flat metal plate having near one side apertures aligning with those of the upright whereby it may be adjustably secured thereto and a portion projecting from one side of said upright and provided with a circular opening, a twister head journalled in each of said openings, a fulcrum plate adjustably secured to said upright intermediate the journal plates and having a portion projecting from one side of the upright, a journal formed on said projecting portion, in line with the twister heads, an operating lever mounted on the journal and having at opposite ends means for engaging the respective twister heads, and means for confining said operating lever upon said journal. 5th. In a fence machine, the combination with an upright of upper and lower journal plates secured thereon and projecting from one side of said upright and in said projecting portion having each a circular opening, said upper journal plate having an integral apertured arm extending from the opposite side of the upright whereby a handle may be secured thereto, twister heads journalled, respectively, in said circular openings, a fulcrum plate secured to said upright intermediate the journal plates and affording a journal, an operating lever mounted on said journal and having at opposite ends means for engaging the respective twister heads, and means for confining the operating lever on said journal. 6th. In a fence machine, the combination with an upright of an upper and lower

twister head journaled thereon each twister head having a pinion, an operating lever centrally and pivotally mounted on said upright and having at opposite ends toothed segments for engaging the respective pinions of the twister heads, said lower segment being provided at one side with an aperture, an operating handle carried by the upper segment and a bar secured in the aperture of the lower segment to afford a foot hold, substantially as described. 7th. In a fence machine of the class described, the combination with the apertured upright of a support for the picket being wired comprising an arm having one end slotted, to receive said upright edge wise, and apertured, whereby a bolt may be passed therethrough and through an aperture in the upright to secure said support in place, and its opposite end provided with an integral portion extending at right angles to the arm and affording a platform on which the lower end of the picket may rest, substantially as described. 8th. In a fence machine, a tubular twister head having a transverse web affording a central aperture and side slots communicating with said aperture, a twister having a tongue adapted to pass into said aperture and a head provided on opposite sides with slots aligning with those in said web, and means for securing said twister in the twister head, substantially as described. 9th. In a fence machine, a tubular twisted head having an interior transverse web affording a central rectangular aperture and slots communicating with the sides of said aperture, a twister having a tongue adapted to pass into said aperture and of a shape to fit snugly therein and having a head provided on opposite sides with slots aligning with those in said web, and means for securing said twister in the twister head, substantially as described. 10th. In a fence machine, a tubular twister head having an interior transverse web affording a central rectangular aperture and slots communicating with the sides of said aperture, a twister having a head provided on opposite sides with slots aligning with those of said web and a tongue adapted to pass into said aperture and fit snugly therein, a series of spacing jaws having recessed ends fitting in the slots of said head and body portions lying along the sides of said tongue, respectively, and means for securing the twister in the twister head, substantially as described. 12th. In a tension device of the class described, the combination with the inner frame and the outer clamping plates of a bolt passing through said frame and clamping plates, a nut engaging said bolt, and springs interposed respectively between the head and nut and the adjacent clamping plate, substantially as described. 13th. In a tension device of the class described, the combination with the inner frame having studs on the sides thereof, of the clamping plates having apertures to receive said studs, a bolt passing through said clamping plates and frame, a nut engaging said bolt, and leaf springs interposed respectively between the head and nut of said bolt and having at opposite ends elongated apertures to receive said studs, the combination operating as set forth. 14th. In a tension device of the class described, the combination with the inner frame having studs on the sides thereof of the clamping plates having apertures to receive said studs, a bolt passing through said clamping plates and frame, a nut engaging said bolt, and leaf springs interposed respectively between the head and nut of said bolt, said bolt having an elongated head provided with end flanges adapted to embrace opposite sides of the spring against which it bears to prevent turning of the bolt, substantially as described. 15th. In a tension device of the class described, the combination with the clamping plates having a crank shaft journaled therein, and of the inside frame having the end bars of an apertured lug or arm formed integral with the end bar opposite the crank shaft for the purpose described.

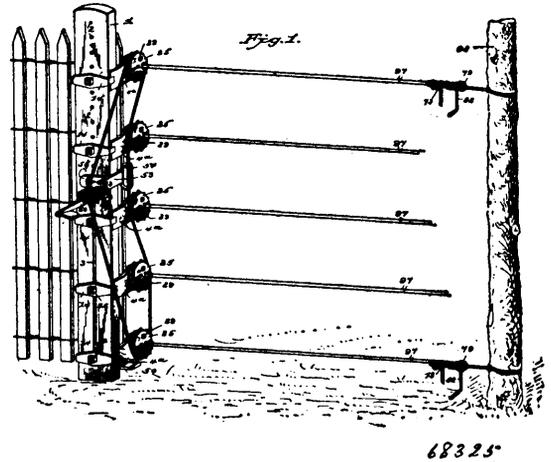
**No. 68,325. Machine for making fences and cribs.**

(Machine pour la construction de clôtures.)

William Fontaine Seargeant, of Marshall, Missouri, U.S.A., 3rd August, 1900; 6 years. (Filed 19th February, 1900.)

*Claim.*—1st. In a machine of the class described, the combination with an upright having a series of apertures, of a series of journal brackets mounted thereon, each of said brackets comprising a flat metal plate 4a having a circular opening and affording a flanged extension designed to abut against the edge of said upright and having a rectangular recess in its edge, an apertured bracket plate extending at right angles to the plate 4a and designed to bear against the inner face of said upright, an apertured clamping plate fitted against the opposite side of the upright and having end flanges embracing opposite edges thereof one of said flanges fitting snugly in said recess, a bolt passed through the aperture in said bracket plate, upright and clamping plate and having a nut, a wire twister revolvably mounted in the circular opening of each plate 4a and means for revolving said twisters, substantially as described. 2nd. In a machine of the class described, the combination with an upright, of a series of journal brackets secured thereon each of said brackets comprising a flat metal plate 4a having a circular opening, a bracket plate extending at right angles to the plate 4a, a web formed integral with the plate 4a and said bracket plate and having a straight edge

extending parallel with said plate 4a, a wire twister revolvably mounted in the circular opening of each of said plates 4a and means



for revolving said twisters, the combination operating as set forth. 3rd. In a machine of the class described, the combination with an upright, of a series of journal brackets secured thereon each of said brackets comprising two metal plates formed integral and extending at right angles to each other, a web formed integral with and extending in a plane at right angles to said plates and having an aperture, a wire holder comprising a post secured at one end in said aperture and carrying at its outer end two parallel spaced arms connected at one end and one of said arms being integrally connected with said post, a wire twister revolvably mounted in each of said journal brackets and means for revolving said twisters, the combination operating as set forth. 4th. In a machine of the class described, the combination with an upright, of a series of journal brackets secured thereon each of said brackets comprising two metal plates formed integral and extending at right angles to each other, a web formed integral with and extending in a plane at right angles to said plates and having an aperture and provided with a straight edge, a wire holder comprising a post secured at one end in said aperture and carrying at its outer end two parallel spaced arms the outer sides of which are in the same vertical plane as said straight edge, a wire twister revolvably mounted in each of said journal brackets and means for revolving said twisters, the combination operating as set forth. 5th. In a machine of the class described, the combination with an upright, of a series of journal brackets secured thereon, a wire twister revolvably mounted in each journal bracket, an integral web on each journal bracket having a straight edge designed to bear against the edge of the picket to be wired, said straight edges being in vertical alignment, and means for revolving said twisters substantially as described. 6th. In a machine of the class described, the combination with an upright, of a series of journal brackets secured thereon, a wire twister revolvably mounted in each journal bracket, a web on each journal bracket having a straight edge designed to bear against the edge of the picket to be wired, said straight edges being in vertical alignment, a wire holder mounted on each web and comprising two parallel, spaced jaws the outer sides of which are in vertical alignment with the straight edge of the web, and means for revolving said twisters, substantially as described. 7th. In a machine of the class described, the combination with an upright, of a series of wire twisters revolvably mounted thereon, an arm mounted on said upright and extending at right angles thereto, a bearing block adjustably mounted on said arm and carrying a journal, a driving sprocket gear mounted on said journal and having an elongated hub bearing against the same and a web provided with oppositely located apertures, a sprocket chain passed around said twisters and said driving sprocket gear, and a crank mounted on said journal and having studs engaging in the apertures of said web, substantially as described. 8th. In a machine of the class described, the combination with an upright, of a series of wire twisters revolvably mounted thereon, a driving sprocket gear, a sprocket chain passed around said twisters and said driving sprocket gear, a crank engaging said driving sprocket gear for revolving the same and a support for said driving sprocket gear comprising an arm 53 having at one end a handle and adjacent to said handle integral parallel arms extending at right angles to arm 53 and affording between them a recess to receive said upright, edge-wise, a bolt passed through said arms and the upright for securing the arm 53 in fixed relation thereto, and a bearing block on said arm having a journal for the driving sprocket gear, substantially as described. 9th. In a machine of the class described, the combination with an upright, of a series of journal brackets secured thereon and each of said journal brackets having a flat plate provided with a circular opening, and having a passage leading through said plate to said opening, a wire twister revolvably mounted in each journal bracket, each twister comprising a journal head having an

annular flange bearing against said plate and a journal mounted in said circular opening and provided on opposite sides with a slot for the wires to be twisted, a sprocket gear mounted on said journal and having an opening extending through its rim, said rim bearing against the opposite side of said plate, a cap mounted on said sprocket gear and having on opposite sides a slot corresponding with the slots of the journal head and bolts passing through said journal head and cap, and means for revolving said twisters, the combination being and operating substantially as and in the manner set forth. 10th. In a machine of the class described, a wire twister comprising a head having an annular flange and a journal, a sprocket gear mounted on said journal and having an inner annular shoulder abutting against the rear end thereof, an annular flange on the outer side of said sprocket gear, a cap seated on said annular flange, bolts passing through said journal head and cap, nuts on said bolts for clamping the parts in firm fixed relation to each other, said journal head and said cap having on opposite sides, respectively, slots for the wires to be twisted, and said sprocket gear having an opening to permit the passage therethrough of the wires, substantially as described. 11th. In a machine of the class described, the combination with the twisters, each of which has on opposite sides a slot for the wires to be twisted, of a series of interchangeable spacing jaws designed to be seated in said slots for the purpose described, each of said jaws comprising a flat metal plate having an upturned flange at one end to engage one face of the twister, and a lug extending from the inner side of the other end of the plate to engage the opposite face of the twister, substantially as described. 12th. A straining device, comprising a metal plate having one integral and one removable arm at one end thereof, a shaft journaled in said arms, a crank on said shaft, a ratchet on said shaft having a wire slot, a pawl for said ratchet pivotally mounted in said arms, and a wire tension device located on said plate, substantially as described. 13th. A straining device, comprising a metal plate having a wire winding device at one end, a series of posts projecting from one side of said plate, a bolt extending through said plate and having a clamping head at the upper side of said plate, a nut on said bolt, a socket plate supported on said nut, and a coiled spring interposed between said socket plate and the under side of said metal plate, the combination operating as set forth. 14th. A straining device, comprising a metal plate having a wire winding device at one end and affording a wire passage at said end, a series of posts projecting from one side of said plate, said plate having two or more apertures therein, a bolt passed through one or the other of said apertures and having a clamping head at the upper side of said plate, sockets formed on the under side of said plate concentric with but larger than said apertures, a nut on said bolt, a socket plate supported on said nut, and a coiled spring seated at one end in said socket plate and at the other end in one of the sockets on the under side of said plate, substantially as described.

**No. 68,326. Manufacture of Industrial Products.**  
(Fabrication de produits industriels.)

Edouard Thomas, Jean Bonavita and Maurice Olivier, all of Paris, France, 3rd August, 1900; 6 years. (Filed 13th October, 1899.)

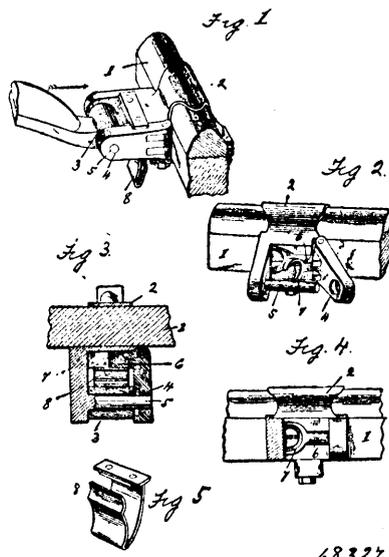
*Claim.*—1st. As a new article of manufacture, a product of viscose having incorporated therewith sodium sulphite and zinc oxide, substantially as and for the purposes described. 2nd. As a new article of manufacture, a product of viscose having incorporated therewith sodium sulphite and zinc oxide, and in addition thereto white or coloured pigments, substantially as and for the purposes described. 3rd. As a new article of manufacture, a product of viscose having sodium sulphite and zinc oxide incorporated therewith together with an excess of caustic soda and a proportion of vegetable or mineral oil, substantially as and for the purposes described. 4th. A process for obtaining a new product of viscose which consists in incorporating sodium sulphite and zinc oxide into alkali-cellulose, and subsequently treating the mixture with carbon bisulphide, as set forth. 5th. A process of obtaining a new product of viscose which consists in mixing sodium sulphide and zinc oxide one with the other and thereafter incorporating the mixture with ready prepared viscose, as set forth.

**No. 68,327. Thill Coupling.** (Arçon de limonière.)

William Henry Edwards, of Hillsborough, Indiana, U.S.A., 3rd August, 1900; 6 years. (Filed 23rd May, 1900.)

*Claim.*—1st. In a thill coupling the combination with a clip provided with parallel ears, one of which is hinged and is provided with an aperture, and the other of which is provided with a fixed pin to project through said aperture, the hinged ear being provided with an angular arm which is located between said cars and is arranged back to the fixed pin, substantially as set forth. 2nd. In a thill coupling the combination with a clip provided with parallel ears, one of which is hinged and is provided with a transverse aperture, and the other of which is fixed and is provided with a pin to project into said aperture, a thill iron having its eye engaged with said pin, an angular

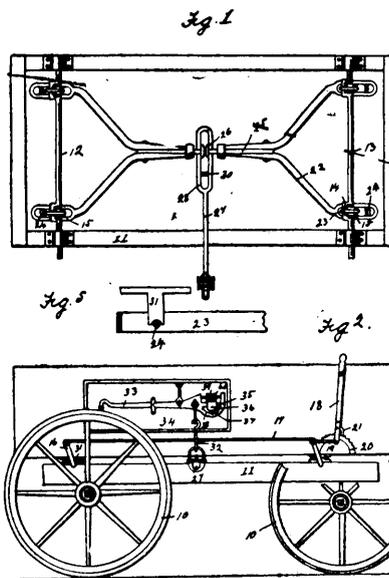
arm carried by the hinged ear and provided with a bifurcated end, and a spring inserted between the angular arm and the eye of the



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thill iron whereby the hinged ear is locked against outward movement, substantially as set forth.

**No. 68,328. Weighing Wagon.** (Wagon à bascule.)



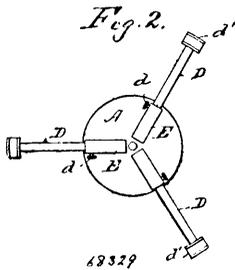
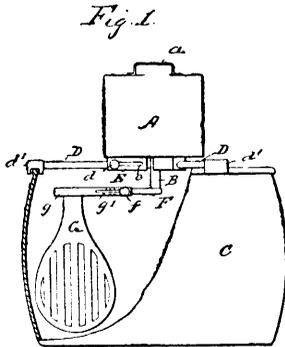
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Lucius D. Norris, of Madrid, Iowa, U.S.A., 3rd August, 1900; 6 years. (Filed 23rd May, 1900.)

*Claim.*—1st. In a weighing wagon, the combination of a frame, a wagon bed above the frame, two shafts rotatably mounted transversely of the frame, and each having two crank arms, the rein, two forked levers each having in each end of the fork an elongated opening, two detachable pins passed through the levers at said openings, a metal loop for each of said crank arms to encircle the inner pin of each of said forked ends and also the crank arms, a straight lever having an elongated opening in one end, two detachable pins in said opening rectangular in cross section, two metal loops attached to the inner end of said forked levers and to the inner end of said latter pins, and legs on the wagon bed to rest upon the remaining ones of said pins, for the purposes stated. 2nd. In a weighing wagon, the combination of a frame, a wagon bed upon the frame, two shafts rotatably mounted transversely of the frame, and each having two crank arms therein, two forked levers each having in each end of the fork an elongated opening, two detachable pins passed through the lever at said openings, a metal loop for each of the said crank arms to encircle the inner pin of each of said forked ends and also the crank arms, a straight lever having an elongated opening in one end, two

detachable pins in said opening rectangular in cross-section, two metal loops attached to the inner ends of said forked levers and to the inner one of said latter pins, legs on the wagon bed to rest upon the remaining ones of said pins, a crank arm on the end of each of said shafts, rods for connecting them, and a lever attached thereto whereby they may be moved in unison, for the purposes stated. 3rd. In a weighing wagon scale, the combination with a scale beam, of a screw threaded rod on the end of the beam opposite the pivoted end, the sliding weight on the said rod having a circumferential groove therein, a rod beneath the screw threaded rod, a sliding block thereon, a projection on the block to enter said groove, an indicator on the block and a scale marked below the block and adjacent to the indicator, substantially as and for the purposes stated.

**No. 68,329. Automatic Stirring Device for Cooking Purposes.** (*Agitateur pour cuisson.*)



Laura Worsley Taylor, of Llangollen, North Wales, 3rd August, 1900; 6 years. (Filed 11th June, 1900.)

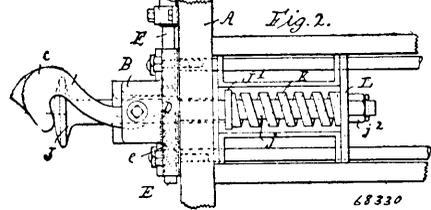
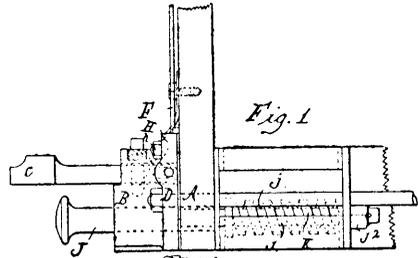
*Claim.*—1st. An improved automatic stirring device for culinary purposes, comprising clockwork mechanism secured to the saucepan, and an adjustable spoon or stirrer rotated by the mechanism, substantially as described and for the purposes specified. 2nd. An improved automatic stirring device for culinary purposes, consisting of a box containing clockwork mechanism, adjustable arms supporting the box and engaging with the edge of the saucepan, a spindle rotated by the clockwork, an adjustable arm upon said spindle, and a spoon stirrer carried by the arm, substantially as described and for the purposes specified. 3rd. The improved automatic stirring device for culinary purposes, constructed and operating, substantially in the manner described and shown and for the purposes specified.

**No. 68,330. Coupling and Buffer for Railroad Carriages and Wagons.** (*Attelage et tampon pour chars de chemin de fer.*)

William Smith, Lewis Road, Brighton, England, 3rd August, 1900; 6 years. (Filed 11th June, 1900.)

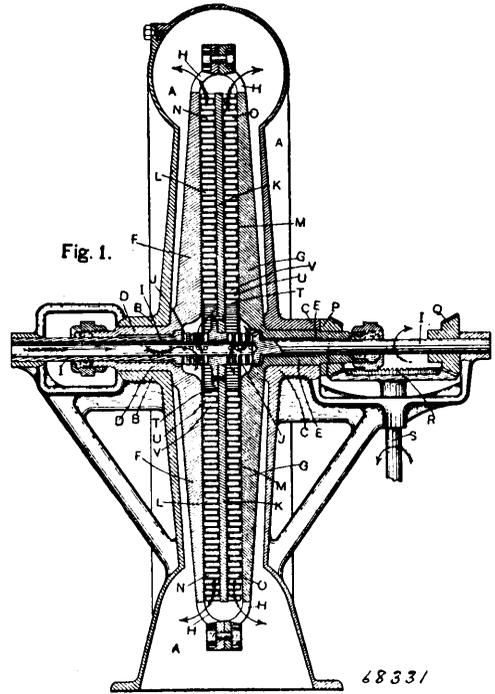
*Claim.*—1st. An automatic coupling apparatus for railway cars, consisting of a pivoted hook upon the end of the car turning horizontally, a rearward extension on the said hook, a sliding spindle and spring acting upon the said extension, and a lever operated from the side of the car bearing against one end of the spindle and adapted to actuate it, substantially as described and for the purposes specified. 2nd. In combination with the coupling apparatus claimed above, a single central buffer fitted to the casing carrying the coupling hook, substantially as described and for the purposes specified. 3rd. The improved automatic coupling apparatus for railway cars, constructed and operating substantially in the manner

described and shown in the accompanying drawings and for the purposes specified. 4th. The improved combined automatic coupling



and buffer apparatus for railway cars, constructed and operating substantially in the manner described and shown.

**No. 68,331. Steam Turbine.** (*Turbine à vapeur.*)



John F. Brady, Chicago, Illinois, U.S.A., 3rd August, 1900; 6 years. (Filed 13th October, 1899.)

*Claim.*—1st. In a steam turbine, two revoluble vane discs peripherally connected, and each mounted apart upon a separate hollow journal so as to form an interspace, a revoluble shaft mounted axially through the journals of the discs, and a vane disc firmly mounted on the shaft within the interspace, and passageways leading into the interspace from a source of steam supply, a series of circles of vanes, and each vane disposed at the angle substantially as stated, and projecting from the walls of the interspace, and a series of circles of vanes, each disposed at an angle to the first-named vanes and projecting from the sides of the shaft disc, and adapted to revolve between and in a similar plane to the series of circles of vanes of the walls of the interspace, and in an opposite direction, by virtue of the action of steam, substantially as stated. 2nd. In a steam turbine, two revoluble vane discs peripherally connected, and each mounted apart upon a separate hollow journal so as to form an interspace, a revoluble shaft mounted axially through the journals of the discs, and a vane shaft firmly mounted on the shaft within the interspace, and axial passageway in the shaft in communi-

cation with a steam supply, and a passageway through the sides of the shaft leading into the interspace, a series of circles of vane, each disposed at an angle substantially as described, and projecting from the walls of the interspace, and a series of circles of vanes each disposed at an angle to the first-named vanes, and projecting from the sides of the shaft disc, and adapted to revolve by the action of steam between and in a similar plane to the series of circles of vanes of the walls of the interspace and in an opposite direction thereto, as stated. 3rd. In a steam turbine, the vanes thereof having a substantially trapezoidal cross section with one of the faces thereof disposed at an angle to a radial line from the centre of the disc upon which the vanes are attached, each vane separated from the one adjacent thereto, whereby passageways for steam are formed between the vanes, substantially as and for the purpose stated.

**No. 68,332. Compound for Dry Cleaners.**

(Composé pour nettoyer.)

Jean Pinard, of Chicago, Illinois, U.S.A., 3rd August, 1900; 6 years. (Filed 26th June, 1900.)

*Claim.*—1st. The herein described cleaning compound, consisting of the ingredients and the proportions as follows:—benzine, two hundred and eighty parts; water, forty-two parts; soap, twenty-one parts; gum-arabic, fifteen parts; glycerine, thirty-six parts; ammonia, thirty parts; chloroform, twenty-five parts; sulfuric ether, thirty parts; sodium chloride, thirty parts; linseed oil, forty parts. 2nd. A cleaning compound consisting of benzine, water, soap, gum-arabic, glycerine, ammonia, chloroform, sulfuric ether, sodium chloride, and linseed-oil, substantially in the proportions specified.

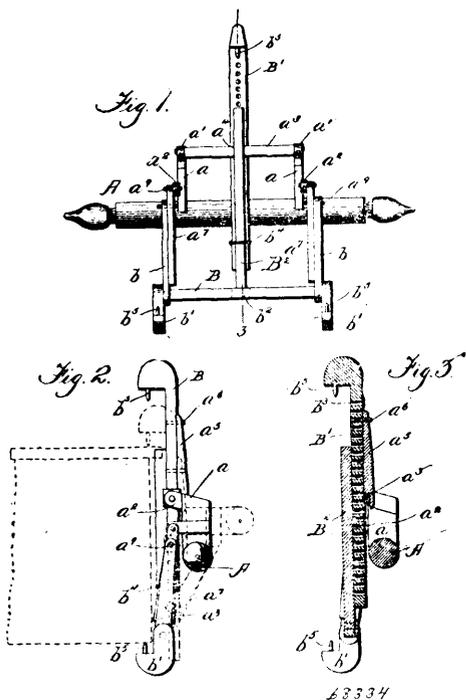
**No. 68,333. Art of Preserving Meat.**

(Art de préserver la viande.)

Frederick Cowin, of Chicago, Illinois, U.S.A., 3rd August, 1900; 6 years. (Filed 13th June, 1899.)

*Claim.*—1st. A meat covering comprising an envelope of canvas, skin, or like flexible material, completely inclosing the meat, and having its outer surface coated with a flexible air tight film formed of a meat extract, substantially as described. 2nd. A meat covering comprising an envelope of canvas, skin, or like flexible material, completely inclosing the meat, and having its outer surface coated with a flexible air tight film formed of a meat extract, and having a meat aroma and flavour, substantially as described. 3rd. The art of preserving meat by covering same with a substantially air tight film formed by evaporating, to the consistency of sirup, the liquid residue obtained in trying lard, having a meat aroma and flavour, and applied to the surface of the meat or package containing same, and dried thereon, substantially as described.

**No. 68,334. Coffin Handle.** (Poignée de cercueil.)



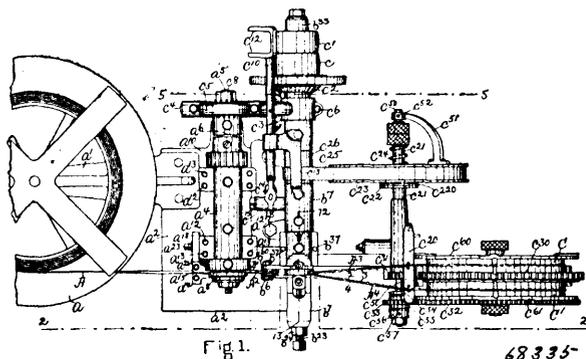
Ulric Hébert, of Black River, Quebec, Canada, 3rd August, 1900; 6 years. (Filed 8th February, 1900.)

*Claim.*—1st. A handle for coffins, comprising a handle having outwardly extending arms, a cross bar journaled in said arms, a

gripping bar slidably mounted in said cross bar and adapted to be locked in its adjusted position, a cross piece adjustably connected with said arms, and gripping hooks formed at each end of the said cross piece, substantially as described. 2nd. A handle for coffins, comprising a handle having outwardly extending arms, an outer and an inner lug fixed upon each of said arms, a cross bar journaled in the said outer lugs and having a grooved guideway formed therein, a gripping bar slidably mounted in said guideway and having perforations therein, a lug carried by said cross bar and having a locking pin adapted to engage said perforations, whereby the gripping bar is locked in its adjusted position, a cross piece adjustably connected to said inner lugs by means of links, gripping hooks secured at each end of the said cross piece, and a guide rod centrally secured to said cross piece and adapted to lie upon and slide along the said gripping bar, substantially as described.

**No. 68,335. Nail Making Machine.**

(Machine à faire les clous.)



The United Shoe Machinery Company of Canada, Montreal, Quebec, Canada, assignee of George Goddu, of Winchester, Massachusetts, U.S.A., 3rd August, 1900; 6 years. (Filed 20th December, 1899.)

*Claim.*—1st. In a nail making machine, the combination of the following instrumentalities, viz.:—a cutting mechanism adapted to form a string nail blank, comprising a series of connected tapered nails, and a compressing or swaging mechanism constructed to act on a portion only of the tapered nails and compress them intermediate of their opposite ends, for the purpose specified. 2nd. In a nail making machine, the combination of the following instrumentalities, viz.:—a cutting mechanism adapted to form a string nail blank, comprising a series of connected tapered nails, a compressing or swaging mechanism constructed to act on the wider portion of the tapered nails and compress them intermediate of their opposite ends, and a guide for the nail blank intermediate of the said cutting and compressing mechanisms, and through which the string nail blank is fed to the compressing mechanism, substantially as described. 3rd. In a nail making machine, the combination of the following instrumentalities, viz.:—a cutting mechanism constructed to cut a substantially flat band or ribbon into two string nail blanks, each comprising a series of connected tapering nails, and a compressing mechanism comprising a fixed and a movable die adapted to act on both string nail blanks simultaneously and constructed to compress the tapered side of the nails of said string nail blanks for a portion only of their length, and means to operate said movable die, substantially as described. 4th. In a nail making machine, the combination of the following instrumentalities, viz.:—a cutting mechanism, comprising rotatable cutting discs provided with peripheral dies having longer inclined and shorter transverse cutting edges, and a compressing mechanism comprising a fixed die, a movable die, a rotatable shaft to effect movement of the movable die in one direction, means to move said die in the opposite direction, and gearing connecting said rotatable shaft to the shaft of one of said rotatable cutting discs, substantially as described. 5th. In a nail making machine, the combination of the following instrumentalities, viz.:—a cutting mechanism constructed to form a string nail blank composed of a series of connected tapering nails, and a compressing mechanism adapted to operate on the tapered nails of the said string nail blank and compress the tapered side of the nail intermediate of its opposite ends for a portion only of its length, for the purpose specified. 6th. In a nail making machine, the combination of the following instrumentalities, viz.:—a compressing mechanism comprising a fixed die, a movable die, a carrier for said movable die provided at one end with a cam or projection, a rotatable shaft substantially in line with said carrier and provided on its front end with a cam or projection to engage the cam on said die carrier to move the same and its attached die longitudinally toward the fixed die, and means to move said carrier in the opposite direction, substantially as described. 7th. In a nail making machine, the combination of the following instrumentalities, viz.:—a compressing mechanism, comprising cooperating dies, a carrier for one of said dies, a rotary shaft substantially in line with said carrier, and means interposed between

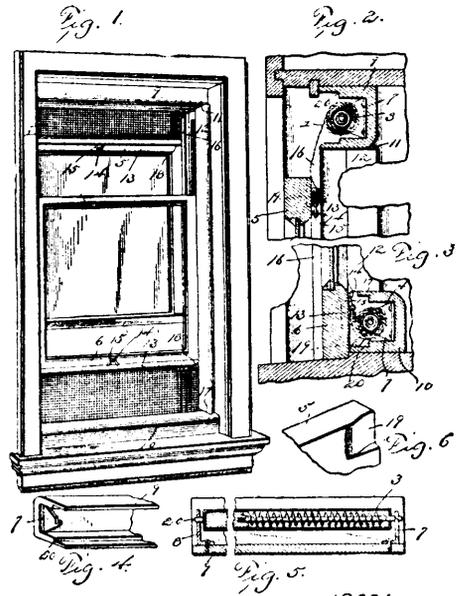
the abutting ends of said shaft and carrier and operated by said rotary shaft to impart longitudinal movement to said carrier from but in substantially an axial line with said shaft, substantially as and for the purpose specified. 8th. In a nail making machine, the combination of the following instrumentalities, viz.:—a cutting mechanism, constructed to form a string nail blank composed of a series of connected tapering nails, a compressing mechanism adapted to operate on the tapered nails of the said string nail blank and compress the tapered side of the nail between its opposite ends for a portion only of its length to form a nail having a stiffened shank portion, a defined head and a ductile point, and a guide for the string nail on opposite sides of the compressing mechanism, substantially as described. 9th. In a nail making machine, the combination of the following instrumentalities, viz.:—a cutting mechanism, comprising rotary cutting discs having peripheral dies co-operating to sever a metal band or ribbon into duplicate string nail blanks, each comprising a series of connected tapering nails, a compressing mechanism, comprising co-operating dies shaped to compress the tapered side of the nails of both string nail blanks, a carrier for one of said dies, and means to reciprocate said carrier in time with the rotation of the cutting discs, substantially as described. 10th. In a nail making machine, the combination of the following instrumentalities, viz.: a cutting mechanism comprising rotary cutting discs having peripheral dies co-operating to sever a metal band or ribbon into duplicate string nail blanks, each comprising a series of connected tapering nails, a compressing mechanism comprising co-operating dies shaped to compress the tapered side of the nails of both string nail blanks, a carrier for one of said dies, a rotary shaft provided with a cam to effect longitudinal movement of the said die carrier, and gearing connecting said rotary shaft with one of the shafts upon which the cutting discs are mounted, substantially as described. 11th. In a nail making machine, the combination of the following instrumentalities, viz.: a cutting mechanism comprising rotary cutting discs having peripheral dies co-operating to sever a metal band or ribbon into duplicate string nail blanks, each comprising a series of connected tapering nails, a compressing mechanism comprising co-operating dies shaped to compress the tapered side of the nails of both string nail blanks, a carrier for one of said dies, and means to reciprocate said carrier in time with the rotation of the cutting discs, and a guide for the string nail blanks having slots or channels arranged one above the other, substantially as described. 12th. In a nail making machine, the combination of the following instrumentalities, viz.: a cutting mechanism constructed to cut a substantially flat band or ribbon into two string nail blanks, each comprising a series of connected tapering nails, and a guide for the said ribbon or band comprising the members a15 a14 separated by a space and one of which is adjustable toward the other, one of said members having a slot or groove for the reception of the band and the other having a plain face with which said band makes contact, substantially as described. 13th. In a nail making machine, the combination of the following instrumentalities, viz.: a cutting mechanism constructed to cut a substantially flat band or ribbon into two string nail blanks, each comprising a series of connected tapering nails, guide for the said ribbon or band comprising the members a15, a14, between which the said band or ribbon is passed, a bar a18 to which said members are secured, and an adjusting device for said bar consisting of a pin a22 provided with a slot, and a screw a19 having a collar which engages the slot in said pin, substantially as described. 14th. In a nail making machine, the combination of the following instrumentalities, viz.: a cutting mechanism constructed to cut a substantially flat band or ribbon into two string nails, and a winding mechanism comprising two reels, one for each string nail, a traverse co-operating with said reels to lay the string nails thereon, a driving mechanism for each reel, and a separate tension device for said driving mechanisms, for the purpose specified. 15th. In a nailing machine, the combination of the following instrumentalities, viz.: a cutting mechanism comprising cutting discs mounted upon rotatable shafts, a compressing mechanism comprising co-operating dies, a carrier for one of said dies, a rotary shaft to operate said carrier, a worm shaft geared to the die operating shaft, and provided with a worm gear mounted on one of the shafts of the cutting discs and meshing with the said worm, substantially as described.

**No. 68,336. Window Screen.** (*Store de fenetre.*)

Charles W. Rodecker, Kansas City, Missouri, and Clara E. Morison, of Atlantic City, New Jersey, all in the U.S.A., 3rd August, 1900; 6 years. (Filed 14th July, 1900.)

*Claim.*—1st. In a device of the class described, the combination with a window frame having its beads or strips cut-away to form recesses, and a window sash, of a casing removably fitted in the recesses provided with bearings, a spring actuated roller journaled in said bearings in the casing, a screen wound around the roller and guided on the inner faces of the strips or beads of the window frame, and means for connecting the screen with the sash, said spring operating to retain the casing in the said recesses, substantially as described. 2nd. In a device of the class described, the combination with a window frame provided with recesses formed by cutting away the strips or beads, a window sash, of an approximately U-shaped casing fitting within the recesses and closed at the top, bottom and front and open at the inner side or back, a spring actuated roller journaled in the casing, and a screen wound around the roller and

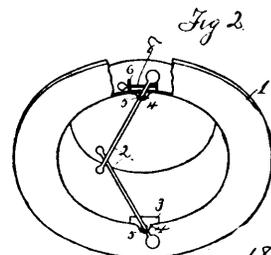
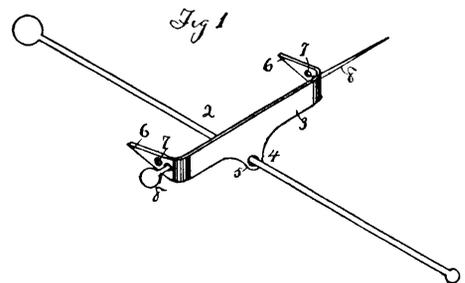
connected with the sash and supported on and guided by the inner faces of the strips or beads, whereby the casing is retained in the



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recesses of the window frame, substantially as described. 3rd. In a device of the class described, the combination of a casing adapted to be mounted in a window frame and provided with bearings and having upper and lower shoulders located adjacent to the bearings and extending longitudinally of the inner faces of the opposite walls of the casing, the spring actuated roller mounted in the said bearings, and a screen arranged on the roller and having a binding at its free edge, said binding being arranged to engage the shoulder of the casing, substantially as described. 4th. In a device of the class described, the combination of a casing substantially U-shaped in cross section, provided at the inner faces of its top and bottom with longitudinal shoulders, bearings located within the casing, a spring actuated roller mounted in the bearings, and a screen arranged on the roller and provided at its outer edge with a binding adapted to engage the said shoulders, substantially as and for the purpose described.

**No. 68,337. Hat Fastener.** (*Attache de chapeaux.*)



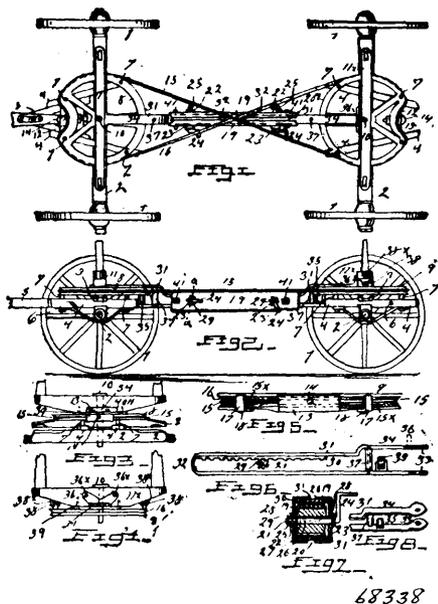
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Jane Warner and James T. Craig, both of Kansas City, Missouri, U.S.A., 3rd August, 1900; 6 years. (Filed 16th July, 1900.)

*Claim.*—A hat fastener consisting of a plate having pointed perforated projections adapted to be thrust through the crown of the hat, a pin engaging said perforation to secure said plate to the hat, a perforated extension on said plate extending below the junction

of the crown with the brim of the hat, and a hat pin engaged in the perforation in said extension and adapted to slide therein, substantially as set forth.

**No. 68,338. Vehicle. (Vehicule.)**

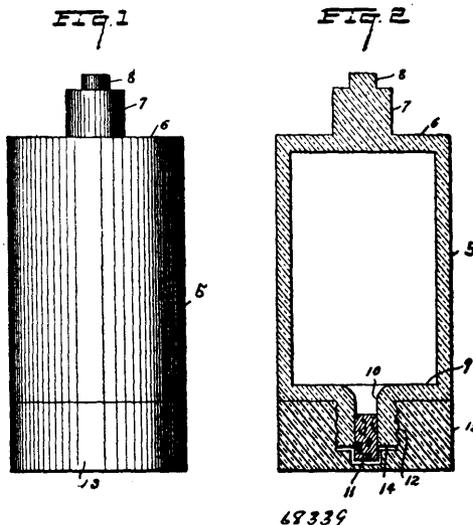


Arthur Smithson and George A. L. McIndoo, both of Sedan, Minnesota, U.S.A., 4th August, 1900; 6 years. (Filed 6th June, 1900.)

*Claim.*—1st. A four wheeled vehicle having two, peripherally grooved fifth wheels, each with a continuous, substantially circular ring, one secured upon each axle, a chain or wire rope passed continuously about and secured to the fifth wheels lying in their grooves, and crossing between the two fifth wheels, and a suitable extensible reach holding the fifth wheels apart, and a rope stretched, substantially as set forth. 2nd. In a four wheeled vehicle, the combination with the front and rear axles thereof, of two fifth wheels, one secured upon each axle and having a continuous ring with a notch in its periphery, a bolster pivoted on a king bolt passed down centrally through each fifth wheel, a reach, extensible in its middle and pivotally secured with one end on one of the king bolts, and with the other end pivotally secured on the other king bolt, and rigidly secured to the adjacent bolster at a right angle with the same, two extensible strands of wire rope crossing each other near the middle of the vehicle, and being secured permanently to one of the fifth wheels, and adjustably to the other one of them, by the clamping blocks 13, and bolts 14, in the said peripheral notches, substantially as and for the purpose set forth. 3rd. A vehicle having a reach consisting of two horizontally bifurcated bodies or yokes, clamping plates and bolts holding the yokes in line with one another, the upper and lower bars of each yoke being extended beyond the clamping plates and secured to the king bolt, one above the fifth wheel and the other below it near the axle. 4th. A four wheeled vehicle having a reach consisting of two yokes 31, secured with their outer ends on or to the front and rear axles or parts of the vehicle, and having their inner ends abutting against each other, the two guiding and clamping plates 19, housing the adjacent ends of the yokes and having bolts extended transversely through the plates and the yokes, for clamping the yokes at various points of extension between the plates, substantially as set forth. 5th. A four wheeled vehicle having a reach constructed of two yokes 31, secured with their outer ends to the front and rear axles or other portions of the wagon, and having their inner ends butting against each other, the two guiding and clamping plates 19, housing the adjacent ends of the yokes, and bolts extending through the plates and the yoke, for clamping the yokes between the plates, one or both of said yokes having a rack as 30, the pinion 29, engaging the rack and having a shaft journaled in the plates 19, and provided with means for turning it, substantially as and for the purpose set forth. 6th. In a four wheeled vehicle, the reach consisting of two grooved plates secured together with transverse bolts, and two yokes clamped between the said plates, butting together in the middle of the plates with their inner ends, while the outer ends are adapted to be secured to the front and rear portions of the vehicle, one or both of said yokes having a rack, and one or more of the bolts holding the plates secured together, having the pinion 29, secured upon it and engaging the rack, and the collar 23, nut 22, and crank 24, and means for retaining the nut on the bolt when loosened, substantially as and for the purpose set forth. 7th. In a four wheeled vehicle, the combination with the front and rear axles, of a peripherally grooved

fifth wheel secured upon each of them and having the opposite notches 12, with the clamping bolts 14, and blocks 13, therein, a chain or wire rope passed about the fifth wheels in the manner of a cross belt, and having its middle portion secured by one of the clamps 13, and its ends adjustably secured by the other clamp 13, substantially as and for the purpose set forth. 8th. In a vehicle, the combination with a fifth wheel of a bifurcated reach, straddling the edge of the fifth wheel and being securable to the king bolt in centre thereof, the lower arm of the bifurcated portion of the reach having an anti-friction roller supporting the edge or lower side of the fifth wheel, substantially as set forth. 9th. In a vehicle, the reach consisting of two yokes, each of which is bifurcated, substantially its entire length into an upper and a lower bar, which are some distance apart, to give more resistance to vertical pressure, and means for securing the yokes together, substantially as set forth. 10th. In a vehicle having a reach consisting of two clamping plates bolted together, and two yokes clamped with their adjacent ends between said plates, said yokes being each made of an upper and a lower bar, secured together some distance apart, to insure vertical strength, and said bars being flat and wide horizontally, to insure strength against horizontal strain, substantially as set forth. 11th. A vehicle having one or more fifth wheels like 8 or 9, with a notch 12, clamp 13, and clamping bolt 14, holding the clamp in the notch, substantially as and for the purpose set forth.

**No. 68,339. Bottle and Similar Receptacle. (Bouteille, etc.)**



Alexander Paterson, of London, Middlesex, England, 4th August, 1900; 6 years, (Filed 23rd July, 1900.)

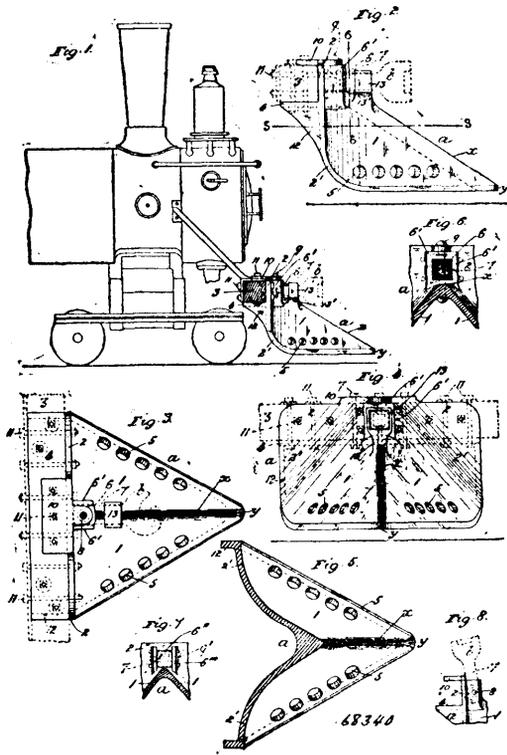
*Claim.*—1st. A bottle provided with a closed top having a cylindrical projecting piece arranged thereon and decreased in size at its outer end to form a supplemental cylindrical projecting piece, said projecting pieces being constructed and arranged to simulate respectively a bottle neck and a stopper, a bottle neck arranged upon the bottom of said bottle and adapted to receive a stopper and screw threaded exteriorly, and a cap recessed to fit said neck and stopper and adapted to be screwed upon said neck and into engagement with said bottom, and with which form the support of base of the entire bottle, substantially as shown and described. 2nd. A bottle provided with a closed top having a solid projection piece arranged thereon and designed to simulate respectively a bottle neck and stopper, a bottle neck arranged upon the bottom of said bottle and which receives a stopper and a detachable cap recessed to fit said neck and which is connected therewith and forms the support or base proper of the entire bottle, substantially as shown and described. 3rd. A bottle consisting of a body portion provided with a closed top having a non-perforated projecting piece arranged thereon and designed to simulate respectively a bottle neck and a stopper, a bottle neck arranged upon the bottom of said body portion and which receives a stopper, and a detachable cap which fits the bottom of said body portion and forms the support or base proper of the entire bottle, being recessed to fit said neck and of cross section corresponding to said body portion, substantially as and for the purpose set forth.

**No. 68,340. Locomotive Pilot or Fender. (Defense de locomotives.)**

Morse B. Schaffer, of St. Louis, Missouri, U.S.A., 4th August, 1900; 6 years. (Filed 23rd July, 1900.)

*Claim.*—1st. A locomotive pilot made in one piece and adapted to be secured to the pilot beam, and having a pocket or recess

adapted to receive the shank of the pilot coupler, the walls of the said pocket being integral with the pilot, substantially as described.



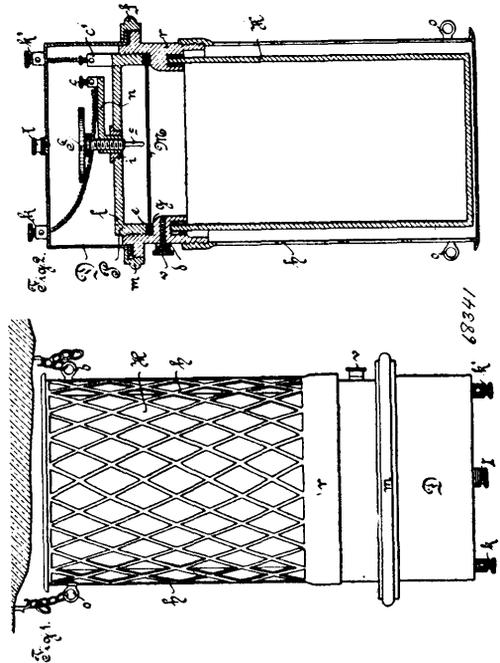
2nd. A locomotive pilot made in one piece and formed with a rear flange adapted to be secured to the pilot beam, and having a pocket or recess adapted to receive the shank of the pilot coupler, the walls of the said pocket being integral with the pilot, substantially as described. 3rd. A locomotive pilot made in one piece and adapted to be secured to the pilot beam, and having a pocket or recess and a yoke, adapted respectively to receive the shank of the pilot coupler, the walls of the said pocket and yoke being integral with the pilot, substantially as described. 4th. A locomotive pilot made in one piece and formed with a rear flange, and a rib at right angles to the flange, the said flange and rib being adapted to be secured to the pilot beam, and the said pilot having a pocket or recess adapted to receive the shank of the pilot coupler, the walls of the said pocket being integral with the pilot, substantially as described.

**No. 68,341. Apparatus for indicating the presence and accumulation of gases.** (*Appareil pour indiquer l'accumulation du gaz.*)

Gustav Adolph Lyncker, of Munich, Bavaria, Germany, 4th August, 1900; 6 years. (Filed 8th May, 1900.)

*Claim.*—1st. Apparatus for indicating automatically the presence and accumulation of methane (fire-damp) coal gas, hydrogen gas and any other gas the specific weight of which is not above 0.6 (atmosphere air being 1), consisting of a cylinder H, closed at the bottom and made of porous burnt clay, said cylinder is at the top air tight closed by a silver foil (membrane), which by means of a ring P, is electrically connected with one terminal C<sup>1</sup>, whilst the other terminal C, is connected with a contact screw S, provided in a lateral arm I, of ring P, said contact screw S, with platinum point s, may be adjusted over the middle of the foil so as to adapt and vary the sensitiveness of the apparatus to the respective gases, substantially as described. 2nd. In an apparatus for indicating automatically the presence and accumulation of methane (fire-damp) coal gas, hydrogen gas and any other gas the specific weight is not above 0.6 (atmosphere air being 1), consisting of a cylinder H, closed at the bottom and made of porous burnt clay said cylinder is at the top air tight closed by a silver foil (membrane), which by means of a ring P, is electrically connected with one terminal C<sup>1</sup>, whilst the other terminal C, is connected with a contact screw S, provided in a lateral arm I, of ring P, said contact screw S, with platinum point s, may be adjusted over the middle of the foil so as to adapt and vary the sensitiveness of the apparatus to the respective gases whereby the

clay vessel is surrounded by a perforated cylinder h, having two edges o, by means of which the apparatus can be hung upside down



so as to come in function when gases are simply floating past and have impregnated a layer of air a few inches thick, substantially as described.

**No. 68,342. Vehicle Spring.** (*Ressort de vehicule.*)

FIG. 1.

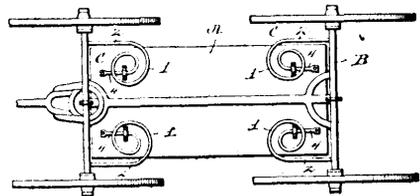
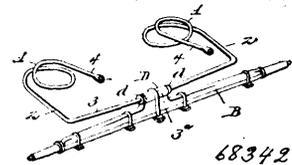


FIG. 2.

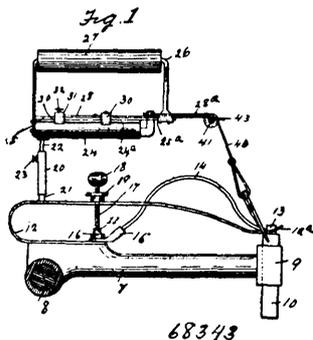


Charles Lee Thomas, of Buffalo, New York, U.S.A., 4th August, 1900; 6 years. (Filed 30th May, 1900.)

*Claim.*—1st. The herein described vehicle spring consisting of a single piece of spring metal, whose end portions are bent to form torsion coils, and whose intermediate portions are bent to form lateral arms, and a transverse connecting arm, having a central journal portion, substantially as specified. 2nd. The combination with a vehicle body, and running gear, of torsion coil springs one of which connects said body and running gear at each end portion, and which form the only connection between the two, each of said springs consisting of a single piece of metal whose end portions are bent to form torsion coils which are secured to the underside of the vehicle body, and whose intermediate portion is bent to form side arms, and a transverse connecting arm, together with boxes or bearings on the axle or bolster in which the intermediate portions of the connecting arms are freely journaled, substantially as specified. 3rd. The herein described vehicle spring, consisting of a single piece of spring metal, whose end portions are bent into symmetrical volute coils, and whose intermediate portions are bent to form lateral arms leaving the outer portions of said coils, and transverse arm which connects said lateral arms, the inner ends of the coiled portions of

the metal being extended from a point within the coils to a point without the coils in the direction of the extension of said lateral arms, substantially as specified.

**No. 68,343. Pressure Regulator for Commutator Brushes.** (*Régulateur de pression pour brosses de commutateurs.*)

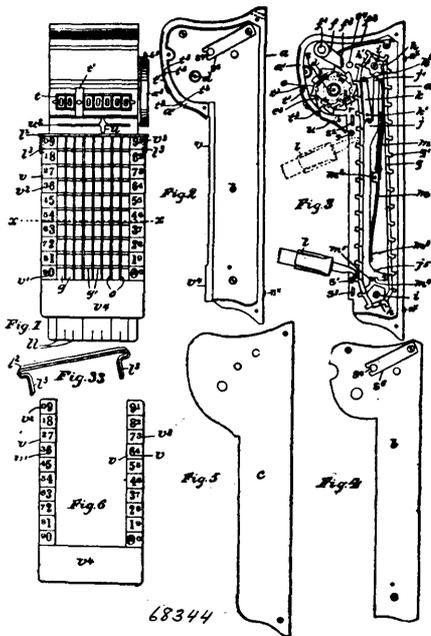


Joel Oscar Moisson, of Charleston, South Carolina, U.S.A., 4th August, 1900; 6 years. (Filed 6th June, 1900.)

*Claim.*—1st. The herein described means for regulating the pressure of commutator brushes provided with tensional means for holding the same in engagement with the commutator, comprising a tension scale having a pointer element, and means connected with said pointer element which are engaged with the commutator brush, said tensional element of the commutator brush being provided with means for regulating the tension thereof, substantially as shown and described. 2nd. The herein described means for regulating the pressure of commutator brushes, which commutator brushes are mounted in brush holders carrying tensional elements which operate in connection with said brushes, and which tensional elements are provided with means for regulating the potential thereof, comprising a scale device provided with a tensional pointer element, and devices connected with said pointer element which are engaged with the commutator brush, said scale devices being provided with an insulated support which operates in connection with the brush holder, substantially as shown and described. 3rd. The herein described pressure regulator for a commutator brush, which commutator brush is slidably mounted in a brush holder and which brush holder is provided with a tensional element which operates in connection with said brush and is provided with means for regulating the potential thereof, comprising a body portion provided with a support which operates in connection with the brush holder, said body portion being provided with a scale and with a tensional pointer device which operates in connection with said scale, said pointer device being provided with devices which are engaged directly with said brush, substantially as shown and described. 4th. The herein described pressure regulator for commutator brushes, comprising a body portion provided with an insulated support and with a handle, said body portion being further provided with a scale and with a tensional pointer device which operates in connection with said scale, and gripper devices which are flexibly connected with said pointer device and which are directly engaged with said brush, substantially as shown and described. 5th. A pressure regulator for commutator brushes, comprising a body portion provided with an adjustable insulating support and with a scale, a spring-retracted pointer device provided with a pointer which operates in connection with said scale, a supplemental member which is adjustably connected with said body portion and provided at one end with a pulley, and a cord or other flexible device connected with said pointer device and passed operatively about said pulley, said cord being provided at its outer end with a gripper device which is directly engaged with said brush, substantially as shown and described. 6th. A pressure regulator for commutator brushes, comprising a body portion provided at one end with an adjustable support carrying at its lower end an insulating tip, said body portion being provided with a slotted face plate having a scale, a pointer bar mounted within said body portion and arranged to slide therein, and tensionally connected with the rear end of said body portion by means of a spring, said pointer bar being provided with a pointer which operates in connection with said scale, and a supplemental plate slidably and adjustably connected with said face plate and superposed thereon, said supplemental plate being provided at its outer end with a slotted portion in alignment with which is arranged a pulley, a flexible device which is connected with said pointer bar and passed about said pulley and provided at its outer end with two pivoted gripper members, the free ends of which are directly connected with the brush, substantially as shown and described.

**No. 68,344. Calculating Machine.**

(*Machine à calculer.*)



Henry Goldman, of Chicago, Illinois, U.S.A., 4th August, 1900; 6 years. (Filed 8th May, 1900.)

*Claim.*—1st. The combination with a series of operatively connected and toothed non-reversible, registering wheels, of endless chains, on rollers, radially tangent to said wheels, substantially as specified. 2nd. The combination with spurred endless, roller mounted, chains and rotating, non-reversible, registering wheels, tangent at a radial point to said chains, of opposed tablets, each provided with numerals, relatively complementary to nine on one tablet, and relatively complementary to ten on the other tablet, substantially as specified. 3rd. The combination with spurred endless, roller mounted, chains and registering wheels tangent at a radial point to said chains, and a register opening, of opposed tablets each provided with scale numbers relatively complementary to nine on one tablet and relatively complementary to ten on the other tablet, and chain covers and register opening with movable shutter and separatrix, or decimal pointer, substantially as specified. 4th. The combination with a series of revoluble non-reversible chain spur actuated side recessed numerating wheels, the right hand sided recesses provided with teeth and the opposite recesses with two spring actuated pawls, one actuated centripetally and the other centrifugally, and each provided with a spur at its free end, vertical to its wheel, of a shaft for said wheels, a circular cam with a radial spur and a septum in the same plane between said wheels, an opening in said septum forming a cam to operate said centrifugally acting spur to engage and release said in-pointing teeth and operate said numerating wheels, and a hand wheel with releasable spring stop to said shaft to reset said numerating wheels to zero, substantially as specified. 5th. The combination with a series of numerating wheels and endless and spurred chains on rollers, radially tangent, to actuate said wheels, of spring actuated and connected levers to actuate said chain, and rollers and bars to catch and release said chain spurs, and a stylus to operate said chain, substantially as specified. 6th. The combination with a series of numerating wheels and endless, radially tangent and spurred, actuating chains and septums between said chains, of a stylus and curved point to actuate said chains, substantially as specified. 7th. The combination with a series of endless and spurred chains and numerating wheels, actuated by said chains, of septums and chains provided with distinguishing colors and marks, substantially as specified. 8th. The combination with a series of chains and numerating wheels actuated by said chains, of means to shut out any of said chains and thereby temporarily separate the numerating wheels and chains into independent result-producing machines, substantially as specified.

**No. 68,345. Cleaner for Boiler Tubes.**

(*Nettoyeur de tubes de chaudières.*)

Robert James Wilson, of Hammersmith, Middlesex, England, 4th August, 1900; 6 years. (Filed 23rd July, 1900)

*Claim.*—1st. In devices for cleaning boiler and other tubes of the class herein described, the combined construction and arrangement of the various parts, substantially as described and illustrated herein and for the purpose set forth. 2nd. In devices for cleaning boiler and other tubes in combination, a support, a shaft or rod

attached to said support of the required length, a wad of suitable material such as leather, adapted to remove the substance removed

Fig. 1.

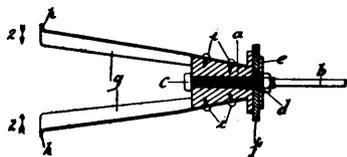
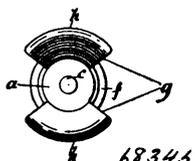


Fig. 2.



68345

from the interior of the tube, elastic or spring projections or arms attached to said support having ends shaped to bear upon the interior of the tube, said ends being toothed or corrugated if desired, substantially as described and illustrated herein and for the purpose set forth.

**No. 68,346. Apparatus for the Treatment of Slimes and Tailings for the Extraction of Gold and other Precious Metals.** (*Appareil pour le traitement et l'extraction des minerais.*)

Fig. 1

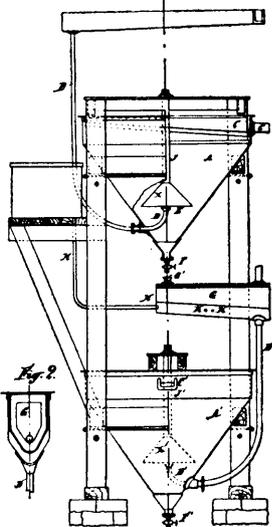
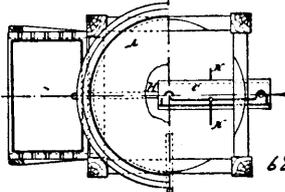


Fig. 3.



68346

Harry Samuel Denny, of Johannesburg, South African Republic, assignee of John Collins Clancy, of 21 Montith Row, Glasgow, Scotland, 4th August, 1900; 6 years. (Filed 25th January, 1898.)

*Claim.*—1st. In an apparatus for the purposes described, a precipitating vat A provided with outflow cock F, and overflow launder C, in combination with inflow pipes D, provided with bell shaped mouth E and inverted funnel X, having hollow stem or tube J, substantially as shown and set forth. 2nd. In an apparatus for the purposes described, the combination of a vessel or chamber G, having openings G<sup>1</sup>, with the pipes H and K for the admission respectively of cyanide solution and compressed air, substantially as shown and set forth.

**No. 68,347. Door Hanger.** (*Ferrure de porte.*)

Fig. 1.

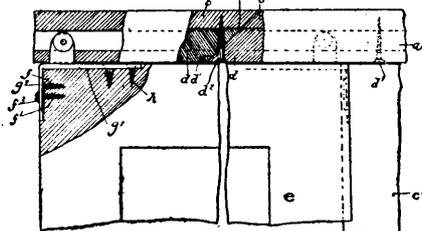
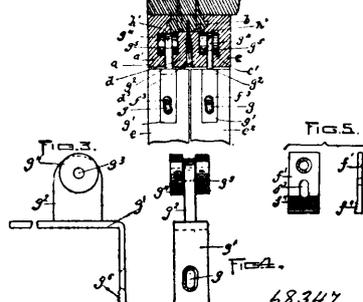


Fig. 2.



68347

Frederick Larson, of Chelsea, and William J. Miller, of East Boston, both of Massachusetts, U.S.A., 4th August, 1900; 6 years. (Filed 18th July, 1900.)

*Claim.*—1st. A roller frame consisting of side pieces provided with inturned tracks, and the centre piece having tracks, substantially as described. 2nd. A roller frame consisting of side pieces provided with inturned tracks, and a detachable centre piece having outturned tracks, substantially as described. 3rd. A roller frame consisting of side pieces provided with inturned tracks, a detachable divisible centre piece on said roller frame, substantially as described. 4th. A toothed plate slotted at F<sup>2</sup>, and adapted to be fixed to the edge of the door, combined with the roller hanger made as an angle bar carrying a roller, said bar being adapted to be fitted and secured to the edge and top of a door, one end of said bar being provided with teeth to engage the teeth of said slotted plate, said angle bar having a slot to receive the adjusting screw used to confine the toothed end of said bar in engagement with the teeth of the slotted plate, substantially as described. 5th. A roller frame consisting of side pieces provided with inturned tracks, and a detachable centre piece having outturned tracks to thereby provide a plurality of ways combined with a plurality of doors or sashes, each having a plurality of rollers running on each pair of tracks of the said roller frame to operate substantially as described.

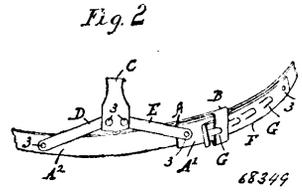
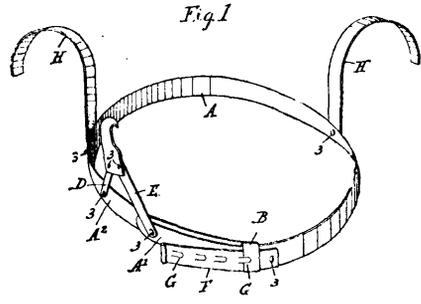
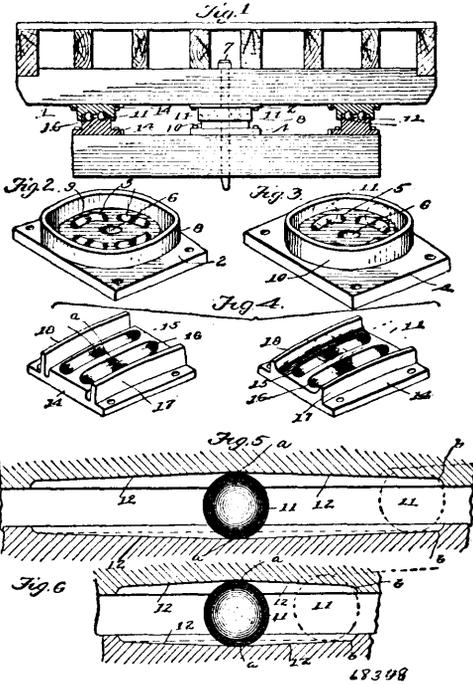
**No. 68,348. Bearing for Car Trucks.** (*Coussinet pour châssis de chars.*)

Charles Henry Hartman, of Allegheny City, Pennsylvania, U.S.A., 4th August, 1900; 18 years. (Filed 23rd July, 1900.)

*Claim.*—1st. A bearing comprising a truck center plate, a swiveled body center plate rotating thereon, and means for automatically elevating the body center plate when the truck center plate turns, substantially as described. 2nd. A bearing comprising upper and lower center plates designed to be mounted respectively on a car body and a truck and both of said plates provided in their bearing faces with pockets forming oppositely inclined faces, and anti-friction devices interposed between the center plates, arranged in the pockets and adapted to ride up the inclined faces, of said upper and lower, substantially as described. 3rd. A bearing comprising upper and lower center plates designed to be mounted on a car body and a truck, and provided in their bearing faces with tapering elliptical pockets arranged in an annular series and forming inclined end faces, and anti-friction devices interposed between the plates, arranged in the pockets and adapted to ride up the inclined faces, substantially as and for the purpose described. 4th. In a middle or center bearing, the combination with upper and lower members

provided with annular series of ball races having opposing inclined faces, and balls arranged in said ball races, substantially as de-

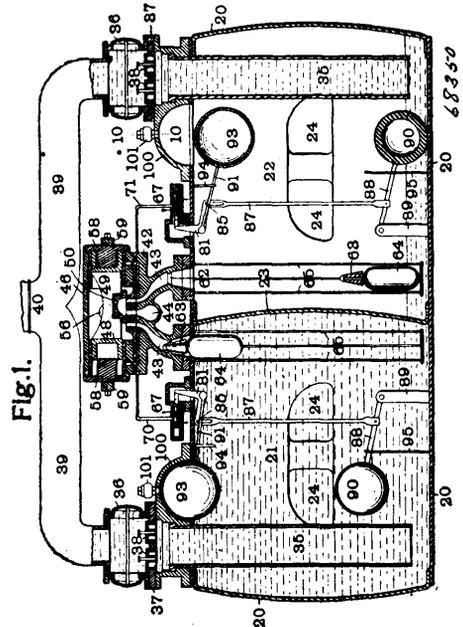
purposes set forth. 2nd. In a bucket supportor the like, the combination with a band A having means of suspension, of a loop B.



scribed. 5th. In a middle or center bearing, the combination with upper and lower members provided with an annular series of independent ball races having opposing inclined faces, and independent balls arranged in said races, substantially as described. 6th. In a bearing, the combination with upper and lower center plates, provided with annularly arranged ball races, of balls arranged in said races, and inclined faces co-operating with the balls for the purpose described. 7th. In a bearing, the combination with upper and lower center plates, provided with annularly arranged independent ball races, of independent balls arranged in said races, and inclined faces co-operating with the balls for the purpose described. 8th. In a bearing for bars, the combination of a middle or center bearing and side bearings, each composed of upper and lower plates and provided with ball pockets having oppositely inclined faces, and anti-friction devices interposed between the upper and lower plates of said bearings, substantially as described. 9th. In a car bearing, the combination of middle and side bearings composed of upper and lower members and means for automatically elevating the car body when the truck turns with relation to the car body, substantially as described. 10th. In a car bearing, the combination of middle and side bearings composed of upper and lower members and means interposed between the upper and lower members of said bearings for automatically elevating the car body when the truck turns with relation to the car body, substantially as described. 11th. A bearing comprising a body center plate, a truck center plate, ball pockets in said plates, balls arranged in said pockets, and an inclined ball running face for each of said balls, whereby the car body is automatically elevated when the truck moves with relation to the car body, substantially as described. 12th. A car truck bearing comprising upper and lower middle or center plates, each having a series of separated arc-shaped grooves and a series of balls, one resting in each groove of the lower plate, with a part of its circumference projecting into the corresponding groove of the upper plate, substantially as described. 13th. A car truck bearing comprising upper and lower plates, each having a series of individual separated pockets or grooves which are semi-circular in cross section, and a series of balls, a single ball resting in each pocket or groove of the lower plate and projecting into the corresponding groove or pocket of the upper plate, substantially as described. 14th. A bearing comprising a truck center plate, a swiveled body center plate rotating thereon, and co-operating means interposed between said plates for automatically elevating the body center plate when the truck center plate turns, substantially as described.

connecting links D and E and a part C connecting D and E, substantially as and for the purposes set forth. 3rd. In a bucket support or the like, the combination of the band A, means of suspension H, loop B, links D and E, connected as by a part C, to tongue F and ears or lugs G, all substantially as and for the purposes set forth.

No. 68,350. Air Pump. (Pompe à air.)



No. 68,349. Bucket Support. (Support pour angets.)

William James Muir, of Poowong East, Colony of Victoria, Australia, 4th August, 1900; 6 years. (Filed 21st July, 1900.)

Claim.—1st. In a bucket support or the like, the combination with a band A having a loop or the like B, and a tongue F with lugs or ears (G, of links as D, E connected to said band, and also connected each to a separate part as C, substantially as and for the

Marcus Lafayette Mitchell, of St. Louis, Missouri, U.S.A.. 4th August, 1900; 6 years. (Filed 4th June, 1900.)

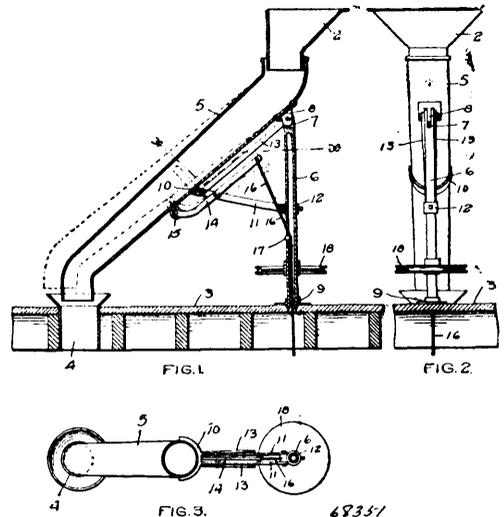
Claim.—1st. In a compressed air water elevator, two chambers each provided with a valved inlet and a valved delivery, a main valve for controlling the admission of air to, and exhaust thereof, from said chambers, and means for alternately and independently connecting each end of said main valve with the air supply and exhaust by the rise and fall of the liquid in said chambers, whereby the shifting of the main valve is controlled by the admission and exhaust of air due to the conjoint action of both chambers. 2nd. In a compressed air water elevator, two chambers each provided

with a valved inlet and a valved delivery, a main valve for controlling the admission of air to and exhaust thereof from said chambers, two independent primary valves each adapted to control both the supply and exhaust to operate said main valve, a primary valve being in connection with each of said chambers, a float in each of said chambers for moving the primary valve connected therewith in one direction independently of the other primary valve, a weight in each of said chambers for moving the primary valve connected therewith in the other direction independently of the other primary valve, and operating connections between said primary valves and said main valve, whereby said main valve is actuated by the conjoint action of said primary valves. 3rd. In a compressed air water elevator, two chambers each provided with a valved inlet and a valved delivery, a piston for controlling the admission of air to and exhaust thereof from said chambers, a double acting primary valve for each of said chambers, one communicating with one end of said piston, and the other with the other end of said piston, and means for independently operating each of said primary valves by the rise and fall of the liquid in its respective chamber. 4th. In a compressed air water elevator, a chamber for containing the liquid to be raised and provided with a valved inlet and a valved delivery, an air supply for supplying compressed air to force out the contents of said chamber, a valve controlling the admission of air from said air supply to said chamber through a main port, secondary port for supplying air to said chamber to raise the pressure in the same, and means for opening said latter named port by the initial movement of said valve before the main port is opened. 5th. In a compressed air water elevator, a chamber for containing the liquid to be raised and provided with a valved inlet and a valved delivery, an air supply for supplying compressed air to force out the contents of said chamber, a valve controlling the admission of air from said air supply to said chamber through a main port a secondary port for supplying air to said chamber to raise the pressure in the same, means for opening said secondary port by the initial movement of said valve before the main port is opened, and means for retarding the movement of said valve after said secondary port is opened until the pressure in said chamber is raised to substantially the pumping pressure. 6th. In a compressed air water elevator, a chamber for containing the liquid to be raised and provided with a valved inlet and a valved delivery, a main air supply for supplying compressed air to force out the contents of said chamber, a valve controlling the admission of air from said main air supply to said chamber through a main port, a second air supply, a secondary port for supplying air to said chamber from said second air supply to raise the pressure, and means for opening said secondary port by the initial movement of said valve. 7th. In a compressed air water elevator, a chamber for containing the liquid to be raised and provided with a valved inlet and a valved delivery, a main air supply for supplying compressed air to force out the contents of said chamber, a valve controlling the admission of air from said main air supply to said chamber through a main port, a second air supply, a secondary port for supplying air to said chamber from said second air supply to raise the pressure in said chamber, means for opening said secondary port by the initial movement of said valve, and means for retarding the movement of said valve after said secondary port is opened until the pressure in said chamber is raised to substantially the pumping pressure. 8th. In a compressed air water elevator, a chamber for containing the liquid to be raised and provided with a valved inlet and a valved delivery, a main air supply for supplying compressed air to force out the contents of said chamber, a valve controlling the admission of air from said main air supply to said chamber through a main port, a piston actuating said valve, a second air supply for supplying air to the ends of said piston, and a secondary port leading from the cylinder of said piston to said main air port and having a larger area than said second air supply opening, whereby the uncovering of said secondary port will reduce the pressure in said cylinder and retard said valve until the pressure in said chamber is raised to substantially the pumping pressure. 10th. In a compressed air water elevator, a chamber for containing the liquid to be raised and provided with a valved inlet and a valved discharge, a main air supply, a main valve controlling said main air supply, a second and separate air supply for operating said main valve, an auxiliary valve for controlling said second air supply, a mechanism for automatically operating said auxiliary valve, a valve for cutting off said main air supply independent of said second air supply, and means for manually operating said auxiliary valve while said main air supply is cut off. 11th. In a compressed air water elevator, two chambers each provided with a valved inlet and a valved discharge, two main air ports, one communicating with each chamber, a suitable air supply adapted to be put in communication with said main air ports, an exhaust port also adapted to be put in communication with said main air ports, a valve for closing off the main air port in communication with an emptied chamber from both the air supply and the exhaust while the main air port of the filling chamber is in communi-

cation with the exhaust, and means for maintaining said latter communication until said latter chamber is filled. 12th. In a compressed air water elevator, two chambers each provided with a valved inlet and a valved discharge, two main air ports, one communicating with each chamber, a suitable air supply adapted to be put in communication with said main air ports, an exhaust port also adapted to be put in communication with said main air ports, a valve arranged to close off the main air port of the emptied chamber from both the air supply and the exhaust while the main air port of the filling chamber is in communication with the exhaust, and means for retaining said valve in said position until said latter chamber is filled. 13th. In a compressed air water elevator, two chambers, each provided with a valved inlet and a valved discharge, two main air ports, one communicating with each chamber, an air supply, an exhaust, a valve adapted to alternately connect each of said main air ports with the air supply and the exhaust, secondary air ports for supplying air to said chambers to raise the pressure in the same, a piston controlling said secondary ports, and means for actuating said valve by the movement of said piston to move said valve a less distance than said piston. 14th. In a compressed air water elevator, two chambers, each provided with a valved inlet and a valved delivery, two main air ports, one communicating with each chamber, an air supply, an exhaust, secondary air ports for supplying air to said chambers to raise the pressure in the same, a piston acting as a valve for said secondary ports, a valve for said main ports, and loose connections between said valve and said piston, whereby said piston will move a greater distance than said valve. 15th. In a compressed air water elevator, two chambers each provided with a valved inlet and a valved discharge, two main air ports, one communicating with each chamber, a main air supply adapted to furnish compressed air to said main air ports, a suitable valve controlling the admission of air to said main ports, a piston for actuating said valve, a secondary air supply adapted to supply air at a higher pressure than said main air supply for moving said piston, passageways between said secondary air supply and said main ports, and means for closing said latter named passageways while one of said main ports is cut off from the main air supply and the other of said main ports is in communication with the exhaust. 16th. In a compressed air water elevator, a main chamber provided with a valved inlet and a valved discharge, an air supply for supplying compressed air to force out the contents of said chamber, a float in said chamber for controlling said air supply, a dome or secondary chamber above said main chamber for receiving said float, and a relief valve for said dome adapted to allow the escape of air from said dome at a low pressure but to be closed by a high pressure.

#### No. 68,351. Distributing Spout for Grain Elevators.

(Auge de distribution pour élévateur à grain.)

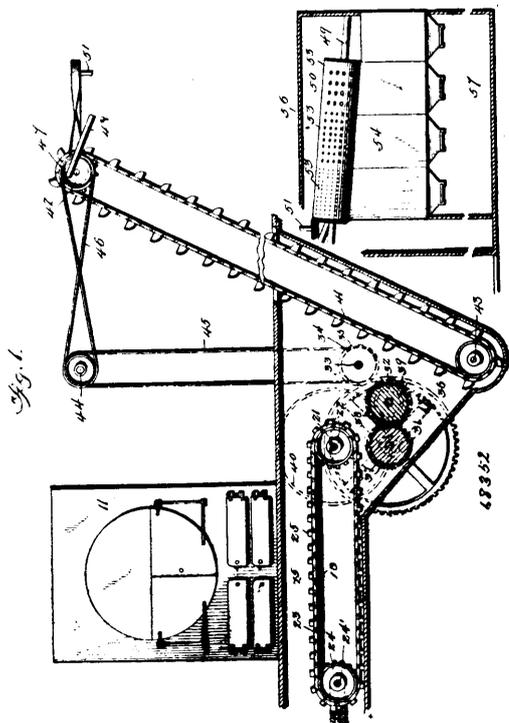


James J. Gerber, of Minneapolis, Minnesota, U.S.A., 4th August, 1900; 6 years. (Filed 21st July, 1900.)

*Claim.*—1st. The combination, with a grain distributing spout, having its upper end connected with a grain discharge opening and its lower end fitted into a bin opening, of an upright rotatable standard, whereon said spout is pivotally supported and adapted to swing horizontally therewith and vertically thereon, a fork provided on said standard and supporting the lower portion of said spout, and a lever pivoted on said fork and having one arm in engagement with the under side of said spout and its opposite arm connected with a rope or cord, to permit the operator at a distance to lift the lower end of said spout away from the bin opening, substantially as described. 2nd. The combination, with a grain distributing spout

having its upper end connected with a grain discharge opening and its lower end fitted into a bin opening, of an upright rotatable standard wherein said spout is pivotally supported and adapted to swing horizontally therewith and vertically thereon, a lever 14 pivoted beneath said spout and having a roller 15 at one end to engage the under surface of said spout and roll over the same, and a cord connected to the opposite end of said lever to permit the operator at a distance to lift said spout out of a bin opening, substantially as described. 3rd. The combination, with a grain distributing spout having its upper end connected with a grain discharge opening and its lower end fitted into a bin opening, of an upright rotatable standard, wherein said spout is pivotally supported and adapted to swing horizontally therewith and vertically thereon, a fork supporting the lower portion of said spout, brace bars 13 connecting said fork and said standard, a lever 14 pivoted on said fork and having one arm in engagement with the under side of said spout and a cord connected to the other arm of said lever to permit the operator at a distance to lift the lower end of said spout out of a bin opening, substantially as described. 4th. The combination, with a grain distributing spout having its upper end connected to a grain discharge opening and its lower end fitted into a bin opening, of an upright rotatable standard wherein said spout is pivotally supported and adapted to swing horizontally therewith and vertically thereon, a lever pivotally supported beneath said spout and having one arm in engagement with the underside of said spout and adapted to move over the same, and a cord connected to the opposite arm of said lever to permit the operator to lift the lower end of said spout out of a bin opening, substantially as specified.

**No. 68,352. Apparatus for Removing Ashes from Boiler Furnaces.** (*Appareil pour enlever les cendres des fournaies.*)



Daniel Campbell, Fairville, New Brunswick, Canada, 4th August, 1900; 6 years. (Filed 21st July, 1900.)

*Claim.*—1st. In a boiler furnace, the combination of an ash pit arranged transversely to the line of the grate, and an endless conveyer mechanism arranged within said ash pit, for the purpose described, substantially as set forth. 2nd. In a boiler furnace, the combination of the ash pit having the converging walls below the grate, and an endless conveyer mechanism arranged within the ash pit below the plane of the converging walls thereof, substantially as and for the purposes described. 3rd. In a boiler furnace, the combination of an ash pit arranged transversely to the line of the boiler grate, a metallic lining within the ash pit and having the upstanding flanges, and an endless conveyer mechanism having slats

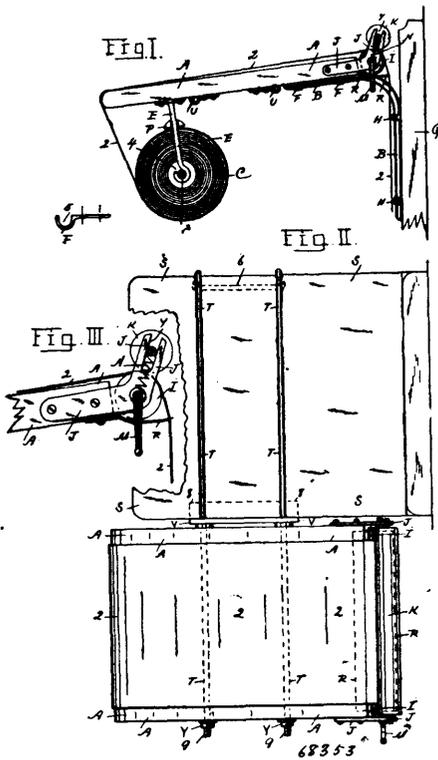
arranged between to travel between said flanges and to sweep close to the lining, substantially as described. 4th. In a boiler furnace, the combination of an ash pit arranged transversely to the line of the boiler grate, a metallic lining in the bottom of the ash pit and consisting of the flanged connected sections, and an endless ash conveyer arranged within said ash pit and having slats adapted to sweep close to said lining, substantially as and for the purposes described. 5th. In a boiler furnace, the combination of an ash pit, an endless conveyer mechanism operatively arranged within said ash pit, means for discharging clinkers to said conveyer mechanism, and a clinker crushing mechanism arranged to receive the contents of said conveyer mechanism, substantially as and for the purposes described. 6th. In a boiler furnace, the combination of an ash pit, a conveyer mechanism therein, and a clinker crushing mechanism in operative relation to said conveyer mechanism, substantially as described. 7th. In a boiler furnace, the combination of an ash pit having a sub-chamber, a clinker crushing mechanism in said sub-chamber, an ash conveyer within said ash pit and arranged to deliver to the clinker crushing mechanism, and an elevator mechanism taking its load from the sub-chamber of the ash pit, substantially as described. 8th. In a boiler furnace, the combination of an ash pit having a sub-chamber, a clinker crushing mechanism within said sub-chamber, means for driving said crushing mechanism, and an ash conveyer disposed within the ash pit and driven from an element of the crusher mechanism, substantially as described. 9th. In a boiler furnace, the combination of an ash pit, an endless ash conveyer arranged within said ash pit and having a drive shaft at one end and the individual idler sprockets at the other end, adjusting devices supporting said idler sprockets of the endless conveyer, a clinker crushing mechanism below the drive shaft of said endless conveyer, and gear connections between the conveyer drive shaft and an element of the crushing mechanism, substantially as described. 10th. In a boiler furnace, the combination of an ash pit, an ash conveyer therein, a clinker crushing mechanism in operative relation to said ash conveyer, a screening and grading mechanism, an elevator mechanism from the clinker crushing mechanism to the screening and grading mechanism, and suitable power connections for the several mechanisms, substantially as described. 11th. In a boiler furnace, the combination of an ash conveyer, a clinker crushing mechanism, an elevator mechanism, a revoluble grading screen having a plurality of grading screen sections, a series of bins below said screen, and power connections for operating the several mechanisms in due order, substantially as described. 12th. In a boiler furnace, the combination with a grate, of an ash conveyer, and means for discharging clinkers removed from the grate to said ash conveyer, substantially as described. 13th. In a boiler furnace, the combination with a grate, of an ash conveyer, and an adjustable dead plate arranged to lie in the plane of the grate and to be inclined towards the ash conveyer, substantially as described. 14th. In a boiler furnace, the combination with a grate, of an ash conveyer, a hinged dead plate, a latch mechanism therefor, and means for operating the latch mechanism, substantially as described. 15th. In a boiler furnace, the combination with a grate, of an ash conveyer, a hinged dead plate, a latch carried by said dead plate, and a handle or lever connected with said latch, as and for the purposes described. 16th. In a boiler furnace, the combination with a grate, of an ash conveyer, a hinged dead plate, a latch mounted on the dead plate, a keeper carried by the dead plate and loosely embracing the latch, and handle or lever connected detachably to the latch, substantially as described. 17th. In a boiler furnace, the combination with a grate, and a boiler front having an opening or doorway in the horizontal plane of said grate, a dead plate hinged to the boiler front in the horizontal plane of the grate and of said opening, a door hinged in a position to close said opening, a latch on said plate, a handle bar adapted to be thrust through the opening and adjusted to engage with latch, and an ash conveyer below the grate, substantially as described.

**No. 68,353. Telephone Desk.** (*Pupitre de téléphone.*)

Charles E. Bartholomew, of Hamilton, Ontario, Canada, 4th August, 1900; 6 years. (Filed 21st July, 1900.)

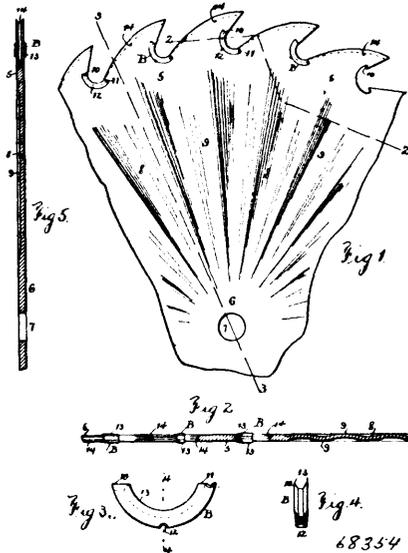
*Claim.*—1st. A telephone writing desk of the character described, comprising a desk, supporting brackets secured to the rear end and sides thereof and to a wall plate, releasable fastenings for said brackets, a transverse paper roll journaled underneath and at the front of said desk, hanger bearings with outer openings to support said roll, a weight with slotted ends on said roll, rear transverse rollers journaled in bearings secured to the sides of desk and paper from the front roll to pass through said rollers, a transverse knife secured to the underside of the desk and projecting past the lower crank roller, and tension springs loosely attached to the journals of said rollers, as described. 2nd. A telephone writing desk comprising a paper roll journaled to the underside and at the front of the desk, hangers with upper openings to allow said journals to be taken out, rear rollers journaled in side bearings, of the desk, a crank on the lower roller journal to revolve said rollers to the rear and downwards, a transverse knife secured to the underside of the desk, and underneath said crank roller, to cut the paper, tension springs loosely attached to the journals of said rear rollers, a double parallel rod bent to form a lip at the continued end to fasten to the

cover of a telephone battery box, said rod extending over said cover and provided with a flange with under lip, to clip said cover, said



ends extending through sockets secured to the underside of the desk, nuts at the ends of the rod to screw against said desk, and fasten the same, as described.

No. 68,354. Saw. (Saw.)

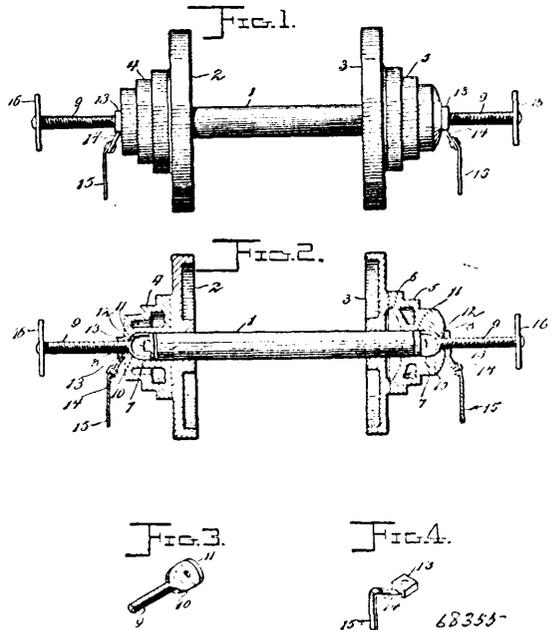


Dewey Phillips, East Arlington, Vermont, U.S.A., 4th August, 1900; 6 years. (Filed 12th June, 1900.)

Claim.—1st. A circular saw plate of uniform thickness adjacent to the eye and at the rim or nearly so, and with the intermediate portion thinner and provided with undulations that form the thin portion of the saw into springs that allow the exterior of the saw to expand if it becomes warm without throwing the saw out of line, substantially as set forth. 2nd. A circular saw plate of uniform thickness adjacent to the eye and at the rim or nearly so, and with the intermediate portion thinner and provided with radial undulations that form the thin portion of the saw into springs that allow the exterior of the saw to expand if it becomes warm without throw-

ing the saw out of line, substantially as set forth. 3rd. The circular saw having recesses in the throats of the teeth and detachable throat pieces inserted in the recesses and secured therein, the concave sides of such throat pieces being grooved or channelled so that the edges of the detachable throat pieces become cutters for smoothing the surfaces of the wood at the kerf, substantially as set forth.

No. 68,355. Friction Clutches. (Embrayage à friction.)



Jophthah P. Duvall, Waverly, Iowa, U.S.A., 4th August, 1900; 6 years. (Filed 9th June, 1900.)

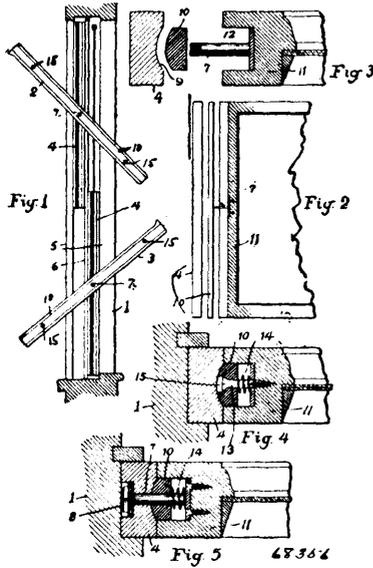
Claim.—1st. A friction clutch, comprising a fast wheel or pulley, a loose pulley adapted to frictionally engage the fast wheel or pulley, a clamping nut arranged to engage the outer face of the loose pulley, and a screw receiving the nut and extending longitudinally of and having a swivelled connection with the hub of the fast wheel or pulley, said screw being provided with threads arranged to advance the nut towards the loose wheel or pulley when the said nut is turned in a direction opposite to that of the rotation of the fast wheel or pulley, substantially as described. 2nd. A friction clutch, comprising a shaft, a fast wheel or pulley mounted thereon, a loose wheel or pulley, a clamping nut arranged to engage the outer face of the loose wheel or pulley, and a screw threaded in the nut and extending longitudinally of and having a swivel connection with the shaft, and provided with screw threads arranged to advance the nut towards the loose wheel or pulley when the said nut is turned in the direction opposite that of the rotation of the shaft, whereby the movement of the fast wheel or pulley will release the clutch when the screw is held stationary, substantially as described. 3rd. A friction clutch, comprising a shaft, a fast wheel or pulley mounted thereon, a loose wheel or pulley, a screw extending longitudinally of the shaft and having a swivel connection therewith and provided at its outer end with a grip, and a clamping nut provided with an arm having a strap attached to it, said nut being arranged on the screw, the latter being provided with threads to advance the nut towards the loose wheel or pulley when the said nut is turned in a direction opposite to that of the rotation of the shaft, substantially as described.

No. 68,356. Reversible Window. (Fenêtre tournante.)

George Otis Dean, San Francisco, California, U.S.A., 4th August, 1900; 6 years. (Filed 12th July, 1900.)

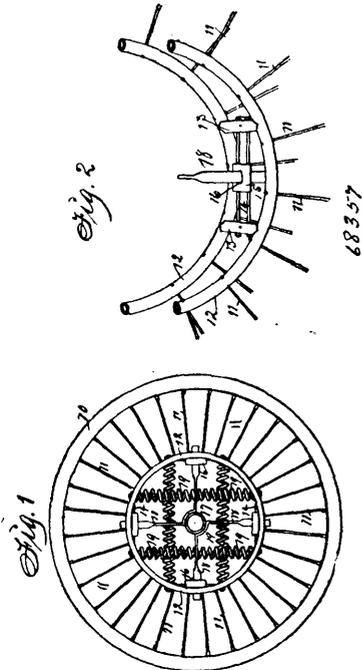
Claim.—In a reversible swinging and sliding window, the combination with the sash having grooved stiles, of the yielding locking strips having rounded outer faces and fitted in the grooved stiles to move therein, the adjustable stop screws fixed in the sash stiles at intervals apart in the length thereof and adjustably attaching the locking strips to the stiles, said stop screws having enlarged heads countersunk into the outer faces of the strips, the springs adapted to press the latter members outward uniformly for the whole length thereof under the adjustment of the stop screws, the slidable shoes

fitted to the sash runs in the window frame, pivot bolts uniting the sash to the shoes and forming the pivots for the sash to swing on,



and the counterweights connected to the shoes to balance the sash, as described.

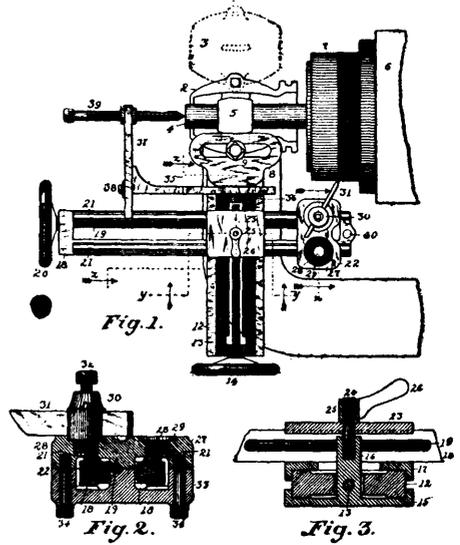
**No. 68,357. Elastic Wheel for Vehicles.**  
(*Roue en caoutchouc pour véhicules.*)



Jacob H. Peterson, Des Moines, Iowa, U.S.A., 4th August, 1900 ; 6 years. (Filed 18th June, 1900.)

*Claim.*—1st. In a vehicle wheel, the combination of a hub, a series of radial arms fixed thereto, two springs fixed to each radial arm, on opposite sides thereof and extended at right angles therefrom, a rim arranged concentrically of the hub, means connected with the rim and designed to receive the radial arms and permit their circumferential movement but prevent a lateral movement thereof, said rim having each of said springs fixed thereto, for the purpose stated. 2nd. A vehicle wheel, comprising an outer rim, an inner rim composed of two tubular rings, spokes for connecting the outer and inner rims and cross-pieces for connecting the said rings, parallel rods between the cross-pieces, a sliding block on each pair of rods, a hub, radial arms fixed to the hub and passed through said blocks, and springs fixed to the radial arms and cross-pieces, substantially as and for the purposes stated.

**No. 68,358. Machine for Truing Commutators.**  
(*Machine à ajuster les commutateurs.*)



68358

Edgar Carr, Acron, Ohio, U.S.A., 4th August, 1900 ; 6 years. (Filed 4th June, 1900.)

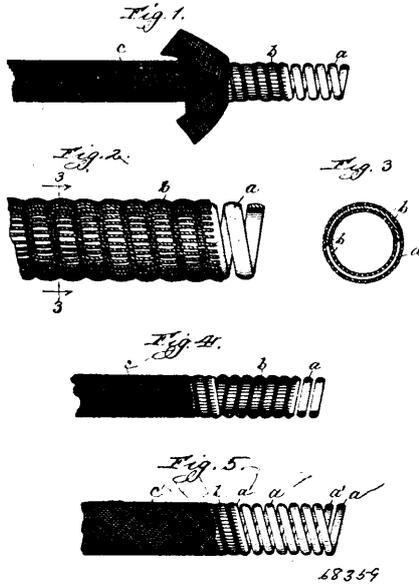
*Claim.*—1st. In a truing device for commutators, the combination of an arm arranged to be adjustably secured to the dynamo housing at substantially a right angle with the axis of the armature shaft, parallel guide ways transverse to and arranged to slide on said arm, bearing a sliding carriage, a tool post thereon, and a screw in said guide ways to move said carriage, substantially as shown and described. 2nd. In a truing device for commutators, the combination of an arm arranged to be adjustably secured to the dynamo housing at substantially a right angle with the axis of the armature shaft, parallel guide ways transverse to and arranged to slide on said arm, a screw parallel with said arm arranged to move said guide ways thereon, a sliding carriage on said guide ways with a tool post, and a screw in said guide ways to move said carriage, substantially as shown and described. 3rd. In a truing device for commutators, the combination of an arm arranged to be adjustably secured to the dynamo housing at substantially a right angle with the axis of the armature shaft, parallel guide ways transverse to and arranged to slide on said arm, bearing a sliding carriage and tool post and a screw to move it along said ways, of means for securing said arm and ways together at any desired position, substantially as shown and described. 4th. In a truing device for commutators, the combination with an arm arranged to be adjustably secured to the dynamo housing, and parallel guide ways transverse to and arranged to slide on said arm, bearing a sliding carriage and tool post, of an adjustable supporting device beneath said guide ways, to rest on said housing and steady said ways, substantially as shown and described. 5th. In a truing device for commutators, the combination with an arm arranged to be adjustably secured to the dynamo housing at substantially a right angle therewith, and adapted to support transverse parallel guide ways with a sliding carriage and tool post of a bar connected with and depending from the end of said arm nearest the housing and provided with a screw to engage said housing and regulate the horizontal adjustment of said arm, substantially as shown and described. 6th. In a truing device for commutators, the combination with an arm arranged to be adjustably secured to the dynamo housing at substantially a right angle therewith, and adapted to support transverse parallel guide ways with a sliding carriage and tool post, of a bar connected with the first arm and transverse to it, with a cross bar detachably secured to one end thereof, bearing at one end a pointed set screw to press the centre of the armature shaft, and having the other end arranged to be slotted to afford transverse adjustment, substantially as shown and described.

**No. 68,359. Flexible Conduit.** (*Conduit flexible.*)

Harry Gould Osburn, Hoboken, New Jersey, U.S.A., 4th August, 1900 ; 6 years. (Filed 18th June, 1900.)

*Claim.*—1st. A conduit consisting of a series of circumferentially extending elements of semi flexible material and binding material interwoven therewith, substantially as described. 2nd. A conduit consisting of a helix of semi-flexible material and a binding material interwoven therewith, substantially as described. 3rd. A conduit consisting of a helix of semi-flexible material and a flexible material interwoven therewith, substantially as described. 4th. A conduit consisting of a skeleton of semi-flexible material and

pliable or flexible material, as cotton, interwoven therewith, substantially as described. 5th. A conduit consisting of a series of



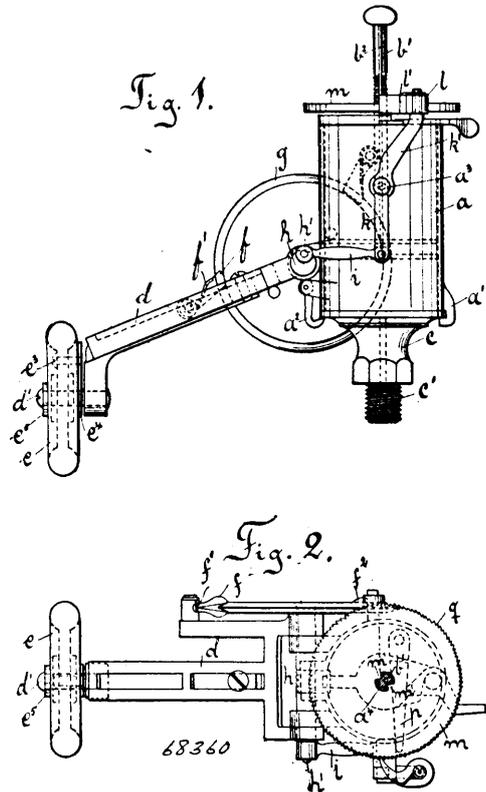
circumferential woofs of semi-flexible material and a series of warps interwoven therewith, substantially as described. 6th. A conduit consisting of a helical woof of semi-flexible material and a series of wraps interwoven therewith, substantially as described. 7th. A conduit consisting of a series of circumferentially extending elements of semi-flexible material, a binding material interwoven therewith and an outer covering or sheath, substantially as described. 8th. A conduit consisting of a series of circumferentially extending elements of semi-flexible material, a binding material interwoven therewith and a braided covering inclosing the same, substantially as described. 9th. As a new article of manufacture, a helical coil of material having sufficient rigidity of structure to prevent collapsing under the usual conditions of use, and binding material interwoven therewith to impart strength in a longitudinal direction to the structure, substantially as described. 10th. As a new article of manufacture, a tube like structure comprising circumferentially extending elements of material having sufficient rigidity of structure to prevent collapsing under the usual conditions of use, and binding material interwoven therewith to impart strength in a longitudinal direction to the structure, substantially as described. 11th. As a new article of manufacture, a helical coil of material having sufficient rigidity of structure to prevent collapsing under the usual conditions of use, and pliable or flexible material interwoven with the convolutions of said helical coil to impart strength to the structure in a longitudinal direction, substantially as described. 12th. As a new article of manufacture, a flexible conduit formed of circumferentially extending elements of binding material interwoven therewith to impart strength to the structure in a longitudinal direction, the whole forming a tube like structure having sufficient rigidity to prevent collapsing under the usual conditions of use, substantially as described.

**No. 68,360. Lubricator. (Graisseur.)**

Aktiebolaget Lubrikator, assignee of Isak I. Eklund, both of Stockholm, Sweden, 7th August, 1900; 6 years. (Filed 5th December, 1898.)

*Claim.*—1st. In an automatic lubricator for solid lubricants, the combination of a revolving shaft, a closed cylinder attached to the bearing of said shaft, a rocking lever bearing an eccentrically pivoted roller receiving motion from said shaft, a ratchet wheel on the rocking lever shaft, a catch on the rocking lever engaging with said wheel, a crank on the end of the rocking lever shaft, a link connecting the said crank to one arm of the second double lever, the other arm whereof bears a catch, a threaded piston rod passing through a matrix in the lubricator cover, a spur wheel on the piston rod engaging with the said catch, projections on the spur wheel engaging with grooves on the piston rod, and a piston rigidly attached to the piston rod. 2nd. In an automatic lubricating device for solid lubricants, the combination with the grease cup, of a frame or lever hinged to the grease cup, an eccentrically supported roller on the free end of said lever, a pawl attached to said lever, a spur wheel with which said pawl engages, a crank pin fixed at the end of the axle of said spur wheel, a double armed lever attached to the said crank pin, a second pawl carried by the free arm of said double armed lever, a piston rod screwed through the cover of said grease cup and provided with a longitudinal groove, and a ratchet wheel slidably mounted on said piston rod and engaging with said groove and

second pawl, substantially as and for the purpose set forth. 3rd. In an automatic lubricating device for solid lubricants, the combination



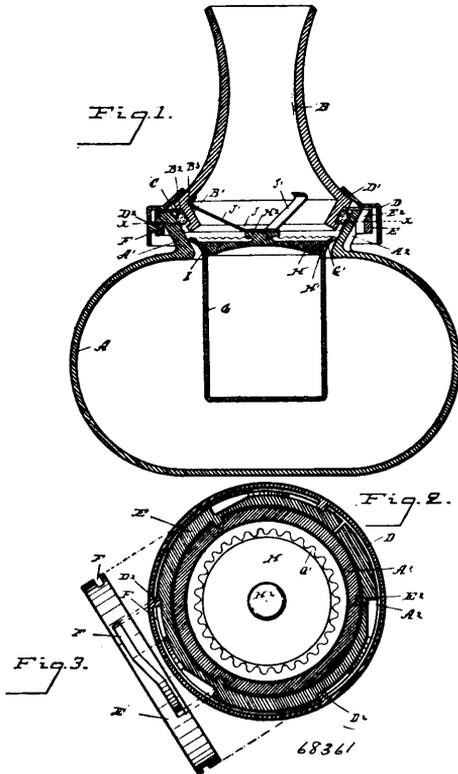
with the grease cup, of a frame or lever hinged to the grease cup, a pin fastened to the free end of said lever, a box journaled on said pin, a sliding piece fastened to said box, a roller having a slot in which said sliding piece is adjustably fixed, a pawl attached to said lever, a spur wheel with which said pawl engages, a crank pin fixed at the end of the axle of said spur wheel, a double armed lever attached to the said crank pin, a second pawl carried by the free arm of said double armed lever, a piston rod screwed through the cover of said grease cup and provided with a longitudinal groove, and a ratchet wheel slidably mounted on said piston rod and engaging with said groove and second pawl, substantially as and for the purpose set forth. 4th. In an automatic lubricator for solid lubricants, the combination with a mechanism for forcing out the lubricant of a spur wheel having a portion of its periphery elongated in the form of a wedge, and a catch engaging the said wheel in its slotted end, said catch being set at an acute angle to a plane passing through the respective axes of revolution of the catch and spur wheel. 5th. In an automatic lubricator for solid lubricants, the combination with the lubricator cover of the top *a*<sup>1</sup>, and the oscillating lever *p*, and means for engaging the said lever with the lubricator piston, substantially as described.

**No. 68,361. Water Bottle. (Bouteille à eau.)**

Ezra D. Beckwith, of Little Falls, assignee of William B. Fenn, of West Wingfield, both in New York, U.S.A., 7th August, 1900; 6 years. (Filed 23rd March, 1900.)

*Claim.*—1st. In a water bottle, the combination with the body having an outwardly tapering notched rim and a packing seat formed on the inner side of said rim, the detachable neck having a lower flange abutting against said seat, a packing ring seated in a groove in said flange, a coupling band engaging the lower portion of the detachable neck, said band being provided on its inner side with inwardly projecting studs, a yielding ring mounted inside the coupling band, said ring being provided with peripheral grooves adapted to receive the said studs, the end portions of each groove being situated at different elevations, the upper end portions having inclined bottoms adapted to engage the studs, the inner side of the yielding ring being bevelled and provided with inwardly projecting lugs adapted to engage the notches on the rim of the bottle proper, substantially as described. 2nd. In a bottle proper, the combination with the body and the detachable neck, a coupling band engaging the lower portion of the neck, a non-rotating yielding ring mounted inside said coupling band and adapted to engage the body, means for contracting the yielding ring upon the rotation of the coupling

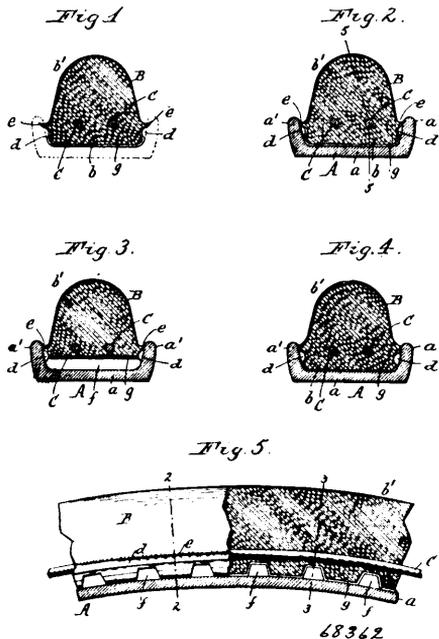
band, substantially as described. 3rd. A coupling device comprising an outer band, an inner non-rotating yielding ring, means for



contracting the yielding ring upon the rotation of the outer band, substantially as described. 4th. In combination with a water bottle having separable sections, an ice receptacle removably suspended in the bottle proper, substantially as described.

**No. 68,362. Rubber tire for wheels.**

(*Bentlage en caoutchouc pour roues.*)



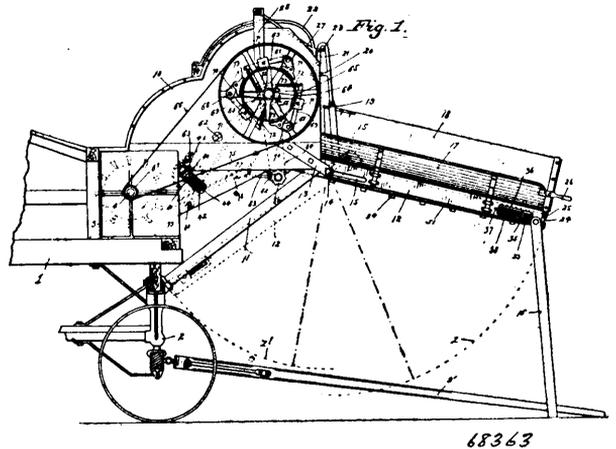
Frank Richardson, assignee of John Marshall Sweet, both of Batavia, New York, U.S.A., 7th August, 1900; 6 years. (Filed 26th May 1900.)

*Claim.*—1st. The combination with a channeled wheel rim, of a rubber tire arranged with its base portion between the side flanges

of the channeled rim and having in the side of its base portion a longitudinal groove or depression which forms an open space between the side of the base and the adjacent rim flange, and a fastening wire, rod or band arranged in an opening formed in the base of the tire, substantially as set forth. 2nd. The combination with a channeled wheel rim, of a rubber tire arranged with its base portion between the side flanges of the channeled rim and having in the side of its base portion a longitudinal groove or depression which forms an open space between the side of the base and the adjacent rim flange and having above or outside of such groove or depression a lip which when unrestrained projects laterally beyond the inner side of the adjacent rim flange and which is pressed tightly against the inner side of the adjacent flange upon drawing the tire into the channeled rim, and a fastening wire, rod or band arranged in an opening formed in the base of the tire, substantially as set forth.

**No. 68,363. Band cutter and feeder.**

(*Coupe-hert et alimentateur.*)

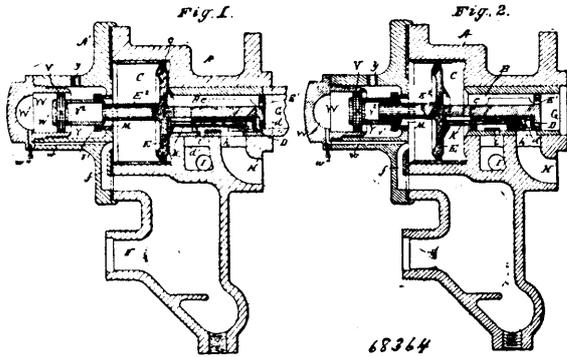


James N. Wilson, George W. Whitworth and O. H. Leonard, all of Cedar Falls, Iowa, U.S.A., 7th August, 1900; 6 years. (Filed 19th July, 1900.)

*Claim.*—1st. In a feeder, the combination with a feeding conveyor, of a toothed rotary retarder, embraced by the delivery end of said feeding conveyor, with the slats of said conveyor and the rows of teeth on said retarder so spaced and related that the retarding teeth will rise between the slats of the over running fold of the conveyor, and into the stock thereon, substantially as and for the purposes set forth. 2nd. In a feeder, the combination with a feeding conveyor, of a toothed rotary retarder, embraced by the delivery end of said conveyor, with the slats of said conveyor and the rows of teeth on said retarder so spaced and related that the retarding teeth will rise between the slats of the over running fold of the conveyor into the stock thereon, for their retarding action on the stock, and that said retarding teeth will withdraw from the under running fold of said conveyor adjacent to said slats, whereby the slats strip the teeth and prevent the stock from winding about the retarder, substantially as described. 3rd. In a band cutter and feeder, the combination with an over hanging rotary band cutter having feathering knives, substantially as described, of a feeding conveyor underlying said band and over running a deck which affords a base of resistance to the said band cutter, and a toothed retarding cylinder having sprockets engaged by the chains of said conveyor at its delivery end, with the slats on said conveyor and the rows of teeth on said retarding cylinder so spaced and related that said retarding teeth will rise into the stock between the slats of the conveyor, and will withdraw from the conveyor against the slats, all substantially as and for co-operation with the threshing cylinder and concave, as set forth. 4th. In a feeder, the combination with a feeding conveyor having a delivery section which is adjustable to bring the delivery end thereof nearer to more or remote from the threshing cylinder, of a rotary retarder embraced by the delivery end of said feeding conveyor, with the slats of the conveyor and the rows of teeth on the retarder spaced and related as described for the retarding and the clearing actions, as stated, and which retarder is mounted for adjustment with the delivery end of said feeding conveyor relative to the threshing cylinder, for co-operation with the threshing cylinder, as described. 5th. In a band cutter and feeder, the combination with a rotary band cutter, of spring fingers co-operating therewith to prevent the return of stock under the normal feeding actions, but yielding to permit the return of stock to the front of the band cutter when desired for throwing back outward uncut bundles or other over accumulations of stock behind the band cutter. 6th. The combination with the rotary band cutter having the feathering knives, with pointed heels as described, of the underlying feeding conveyor and deck sections disposed substantially as described, the toothed retarding cylinder having sprockets embraced by the chains of said

conveyor with the slats of the conveyor and the teeth of the retarder spaced and related as described, and both the delivery end of the conveyor and the retarder adjustable together to vary the distance between the retarder and the threshing cylinder, and the spring fingers 74 co-operating with the feathering knives of the band cutter, substantially as described.

**No. 68,364. Valve for Air Brakes.**  
(*Souape pour freins à air.*)



William Brayton Mann, Baltimore, Maryland, U.S.A., 7th August, 1900; 6 years. (Filed 23rd July, 1900.)

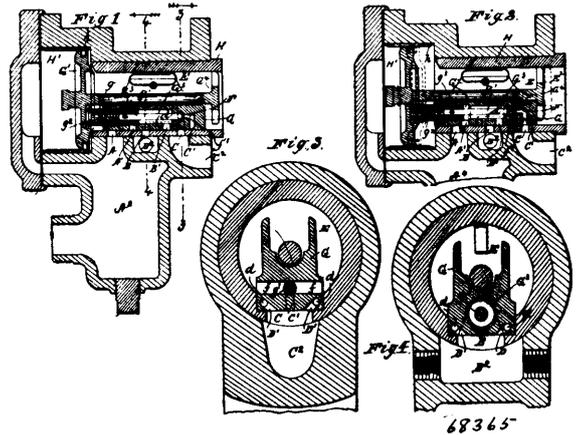
*Claim.*—1st. The combination of a train pipe, auxiliary reservoir, brake cylinder and a by-passage in communication with the brake cylinder, with a triple valve chamber in communication with the auxiliary reservoir, said chamber having ports opening to the brake cylinder, to the atmosphere, to the by-passage and to the train pipe, a valve having two independent ducts therein one of which communicates solely with the brake cylinder port and the exhaust port and the other communicating solely with the train pipe and by-passage ports, and a piston operatively connected to but having motion independent of said valve, and a graduating valve controlled by said piston. 2nd. The combination of the train pipe, auxiliary reservoir, brake cylinder and by-passage in communication with the brake cylinder, with a valve chamber having separate ports opening to the train pipe, the by-passage, the atmosphere and the brake cylinder, a valve having a duct communicating only with the train pipe and the by-passage ports, a second duct communicating only with the atmosphere and the brake cylinder ports and a third duct communicating solely with the auxiliary reservoir and the brake cylinder and a graduating valve controlling said third duct, substantially as described. 3rd. The combination of the train pipe, auxiliary reservoir, brake cylinder and by-passage in communication with the brake cylinder, with a valve chamber having separate ports opening to the train pipe, the by-passage, the atmosphere and the brake cylinder, a valve having a duct communicating only with the train pipe and the by-passage ports, a second duct communicating only with the atmosphere and the brake cylinder ports and a third duct communicating solely with the auxiliary reservoir and the brake cylinder, a piston operatively connected with said valve and controlled solely by fluid pressure and means operated by said piston and controlling said third duct, substantially as described. 4th. The combination of the train pipe, auxiliary reservoir, by-passage and brake cylinder communicating with said passage, with a valve chamber having separate ports opening to the train pipe, the by-passage, the atmosphere and the brake cylinder, a valve having three independent ducts, one communicating solely with the train pipe and by-passage ports, a second connecting the brake cylinder and the atmosphere ports, and the third communicating with the auxiliary reservoir and the brake cylinder port, a piston operatively connected to said valve to shift the same, and a graduating valve also operated by said piston and controlling said third duct, substantially as described.

**No. 68,365. Valve.** (*Souape.*)

William Brayton Mann, Baltimore, Maryland, U.S.A., 7th August, 1900; 6 years. (Filed 23rd July, 1900.)

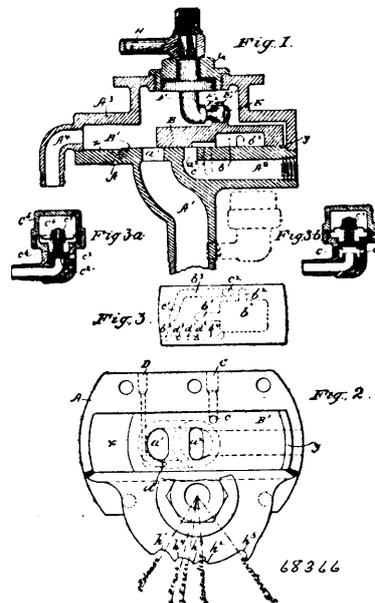
*Claim.*—1st. The combination of a train pipe, brake cylinder and auxiliary reservoir, with a main valve which while shifting from release to emergency position opens communication between the train pipe and the atmosphere so as to vent the train pipe and secure quick serial action and then closes such communication and opens a passage from the auxiliary reservoir to the brake cylinder. 2nd. The combination of a train pipe, brake cylinder and auxiliary reservoir, with a main valve through which, before it has completed its emergency throw, a passage is opened and closed whereby the train pipe is vented sufficiently to cause quick serial action. 3rd. The combination of the train pipe, auxiliary reservoir and brake cylinder, with a main valve, having a duct therein opening and closing a passage from the train pipe to the atmosphere while the

valve is shifting to emergency position, an operating piston for said main valve, and a valve connected to said piston and controlling



said duct. 4th. The combination of the train pipe, auxiliary reservoir and brake cylinder, with a main valve, having a duct therein conducting air from the train pipe while the valve is shifting to emergency position, an operating piston for said main valve, a valve connected to said piston and controlling said duct, and a graduating valve operated by said piston and controlling a graduating duct in the main valve. 5th. The combination of a train pipe, brake cylinder and auxiliary reservoir, with a valve casing having ports leading to the train pipe, and the atmosphere, with a main valve having a duct which, while the valve is making its emergency throw, connects the train pipe and atmosphere ports so as to cause quick serial action, and disconnects said ports before the valve has completed its emergency throw. 6th. The combination of the train pipe, auxiliary reservoir, and brake cylinder, with a main valve having two connecting chambers therein, an operating piston for said main valve, a valve connected to said piston and normally closing communication between said chambers but opening when the piston shifts toward train pipe pressure, and a port in each of said chambers, one of which ports opens to the train pipe and the other of which opens to the atmosphere while the main valve is shifting to emergency position.

**No. 68,366. Valve.** (*Souape.*)



William Brayton Mann, Baltimore, Maryland, U.S.A., 7th August, 1900; 6 years. (Filed 23rd July, 1900.)

*Claim.*—1st. The combination of a train pipe, an engineer's valve and its casing, a wave discharge valve and its casing communicating with the train pipe only through the engineer's valve, with means opening the train pipe and the wave discharge valve casing to the

atmosphere when the engineer's valve is in graduating position, and means connecting the train pipe to the wave discharge valve casing when the engineer's valve is moved from graduating to lap position.

2nd. The combination of an engineer's valve casing and a wave discharge valve casing, having a suitable passage connecting them, said engineer's valve casing having ports leading to the main reservoir, the train pipe and the atmosphere, with an engineer's valve and a wave discharge valve in their respective casings, said engineer's valve having ducts therein simultaneously connecting the train pipe and the wave discharge valve casing to the atmosphere when the engineer's valve is in graduating position and a third duct capable of connecting the train pipe and the wave discharge valve casing.

3rd. The combination of a valve casing having ports leading to the main reservoir, the train pipe, the atmosphere, the pump governor and a wave discharge valve, with a slide valve in said casing having ducts which, in one position of the valve, simultaneously connect the train pipe, the pump governor and the wave discharge ports to the atmosphere port and which in a different position connect the train pipe and the wave discharge ports, and the pump governor and the atmosphere ports.

4th. The combination of an engineer's valve and its casing, a wave discharge valve and its casing, said wave discharge valve normally seating against a train pipe pressure, with a movable wall attached to but not exceeding in area the wave discharge valve, said wall being exposed when the engineer's valve is in lap position to the train pipe pressure on one side and to a less pressure on the other, and means venting the pressure on said wall to the atmosphere when the engineer's valve is in graduating position.

5th. In an engineer's valve, the combination of a valve casing, having a valve seat formed therein, a duct formed in said casing and leading to the pump governor and having a port opening into said valve seat, and an engineer's valve sliding in said seat and having two ducts formed therein, one of which connects the pump governor port in said seat to main reservoir pressure when the engineer's valve is in blank position, and the other of which connects said port to the atmosphere when said valve is in graduating or excess positions.

6th. The combination of a train pipe having a port leading therefrom to the atmosphere, a wave discharge valve normally closing said port against the train pipe pressure, a movable wall or abutment attached to but exceeding the wave discharge valve in area, a duct leading from the train pipe to an inclosed space behind said wall, thereby exposing said wall to a train pipe pressure, on one side and a chamber on the opposite side of said wall in which the pressure is less than the train pipe pressure.

7th. The combination of a train pipe having a port opening to the atmosphere, a valve normally closing said port, a piston attached to said valve by a suitable stem, said piston exceeding said valve in area, a large duct conducting train pipe pressure to the valve space, a restricted duct conducting train pipe pressure to the opposing space of the piston, and a duct connecting the space between the valve and piston to the atmosphere.

8th. In an engineer's valve, the combination of a valve casing, in free communication with the main reservoir, and having ports leading to the train pipe, the atmosphere, the pump governor and to a wave discharge valve, with a sliding valve in said casing moving over said ports and having ducts therein which simultaneously connect the train pipe, pump governor and wave discharge port to the atmosphere port in one position, and the train pipe port to the wave discharge port and the pump governor port to the atmosphere port in another position.

9th. In an engineer's valve, the combination of a valve casing in free communication with the main reservoir, and having ports leading to the train pipe, the atmosphere, the pump governor and to the wave discharge valve, with a sliding valve in said casing moving over said ports and having ducts therein which simultaneously connect the train pipe, pump governor and wave discharge ports to the atmosphere ports in one position, and connecting the pump governor port to the main reservoir port and to the train pipe port with the wave discharge port in still another position.

10th. The combination of the valve casing having ports leading to the main reservoir, the train pipe, the atmosphere, the pump governor and the wave discharge valve, with a slide valve having ducts controlling communication between said ports, a revolving spindle having telescopic connection with an arm projecting from said slide valve and a handle attached to said spindle and moving in the arc of a circle.

11th. An engineer's valve casing having train pipe pump governor and exhaust ports, means simultaneously connecting the train pipe and pump governor port, and means for disconnecting the train pipe and exhaust ports while leaving the pump governor and exhaust ports still connected.

12th. The combination of an engineer's valve casing, having exhaust and pump governor ports, with an engineer's valve having means for connecting and disconnecting said ports while the valve is in running position.

13th. The combination of an engineer's valve casing, having ports leading to the exhaust and to the pump governor with means connecting the pump governor and exhaust ports while the engineer's valve is shifting from release to emergency position.

14th. The combination of an engineer's valve casing, having a train pipe, pump governor, wave discharge valve and atmosphere ports, with an engineer's valve having a duct connecting the pump governor and atmosphere ports in one position but disconnecting them in another position, and a second duct connecting the train pipe and wave discharge ports in both said positions.

15th. The combination of an engineer's valve casing having exhaust and pump governor ports, with an engineer's valve having means for connecting and disconnecting said ports while the valve is in lap position.

No. 68,367. Brake. (Frein.)

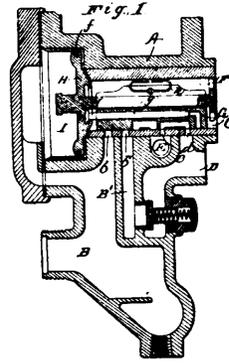


Fig. 2.



68367

William Brayton Mann, of Baltimore, Maryland, U.S.A., 7th August, 1900; 6 years. (Filed 23rd July, 1900.)

Claim.—1st. The combination of a train pipe, an auxiliary reservoir, a brake cylinder, a triple valve and a piston having a partial and full traverse for operating the same, with an exhaust valve closing a port leading from the train pipe to the atmosphere, means whereby said exhaust valve is held to its seat by train pipe pressure, means whereby a column of air exceeding train pipe pressure is applied to open the exhaust valve when the triple valve is thrown to emergency positions, and means whereby the pressure of said column of air is quickly reduced and the exhaust valve closed, substantially as described.

2nd. The combination of a train pipe, an auxiliary reservoir, a brake cylinder, a triple valve and its operating piston, with a valve closing a port between the train pipe and the atmosphere, a differential piston normally holding said valve seated and means increasing the air pressure on the smaller side of said differential piston when the triple valve is thrown to its emergency position, substantially as described.

3rd. The combination of the train pipe, auxiliary reservoir, brake cylinder, triple valve and operating piston therefor with the exhaust valve, the differential piston attached thereto and normally exposed to train pipe pressure on both sides, and means for increasing the pressure on one side of said differential piston to a point above train pipe pressure, whereby the differential piston is actuated to open the exhaust valve, substantially as described.

4th. The combination of the train pipe, auxiliary reservoir, brake cylinder, triple valve and operating piston therefor, with the exhaust valve, the differential piston attached thereto and normally exposed to train pipe pressure on both sides, means actuated on the emergency throw of the triple valve piston to increase the pressure on one side of said differential piston to a point above train pipe pressure, whereby the exhaust valve is opened and means reversing the preponderance of pressure whereby the exhaust valve is closed, substantially as described.

5th. The combination with the train pipe, auxiliary reservoir, brake cylinder, triple valve and its operating piston, of a valve controlling a port leading from the train pipe to the atmosphere and normally held seated by the train pipe pressure, and means for securing air pressure exceeding and overcoming said train pipe pressure and opening said valve when the triple valve is thrown to its emergency position, substantially as described.

6th. The combination with the train pipe, the auxiliary reservoir, the brake cylinder, the triple valve and its operating piston, of a valve controlling a port leading from the train pipe, to the atmosphere, a differential piston normally holding said valve seated against train pipe pressure and means for increasing the air pressure on the train pipe side of said piston and opening said valve when the triple valve is thrown to its emergency position, substantially as described.

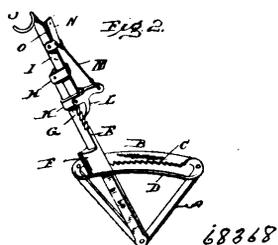
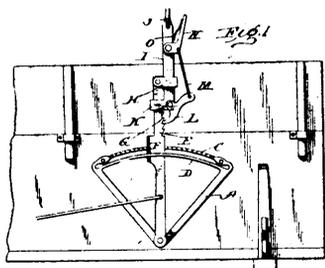
7th. The combination of the exhaust valve, the differential piston exposed to air pressure on both sides and the hollow piston stem, with the triple valve piston and the plunger thereon entering said hollow piston stem, substantially as described.

8th. The combination with a cylinder having an open port leading to the atmosphere, a port leading to the train pipe, a valve closing the same, and a restricted passage connecting said chamber with the train pipe, of a differential piston in said cylinder between the open port and the mouth of the restricted passage, a hollow stem connecting said piston and valve and a plunger attached to the triple valve piston and loosely fitting said hollow stem, substantially as described.

9th. The combination of the train pipe, auxiliary reservoir, brake cylinder, triple valve and its operating piston, with an exhaust valve controlling a port between the train pipe and the atmosphere, a differential piston attached to said valve, means alternating the preponderance of pressure on the opposite sides of said differential piston whereby the exhaust valve is opened

and closed, and adjustable means regulating the length of time during which said exhaust valve remains open, substantially as described.

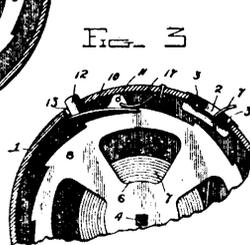
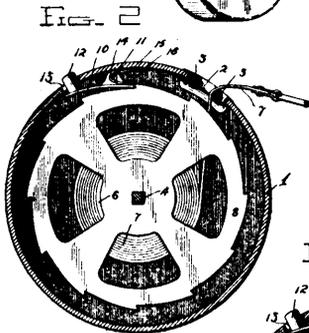
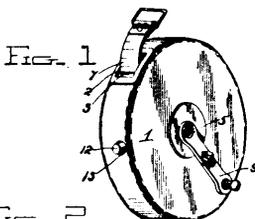
**No. 68,368. Brake Lever.** (*Levier de frein.*)



William L. Morford, of Maitland, and George E. Ambrose, of Skidmore, both in Missouri, U.S.A., 7th August, 1900; 6 years. (Filed 30th June, 1900.)

*Claim.*—1st. In a wagon brake, an extension lever comprising two sections held together by loops, of the upper section adapted to slide up and down, and means for securing the same in the desired position, substantially as shown and described. 2nd. In a wagon brake, in combination with a frame, having a segmental plate provided with ratchet teeth, on an extension lever pivoted to the base of the said frame, the lower section of the said lever having a lug and ratchet teeth upon its edge, of the upper section secured to the lower section and adapted to slide freely up and down, of a pawl upon the upper section adapted to engage the teeth upon the lower section, said pawl operated by a rod and hand lever, substantially as shown and described.

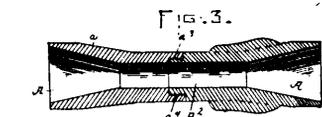
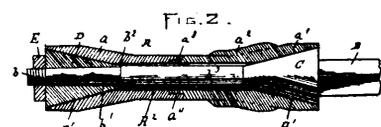
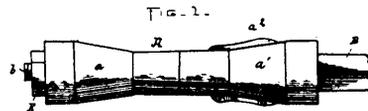
**No. 68,369. Tape Measure.** (*Mesure en ruban.*)



John Jasper Brunello, of Maybeury, West Virginia, U.S.A., 7th August, 1900; 6 years. (Filed 3rd July, 1900.)

*Claim.*—A tape measure comprising the case, provided with an opening in its periphery, a frame fitted to the walls of the opening and secured in the casing, guide rollers journaled in said frame, the reel shaft journaled in said casing, the tape reel secured within the casing to said reel shaft, an operating handle secured to the said shaft, a ratchet wheel secured to said shaft, a spring dog pivoted in the casing, one end of said dog being engaged with the stud that projects through an aperture in the casing, while the other end of the dog is adapted to engage the ratchet wheel, and the measuring tape secured to said reel and leading out from the casing between the said rollers, substantially as and for the purpose set forth.

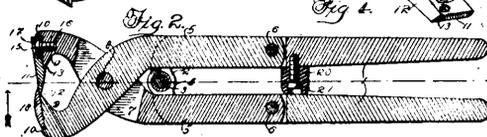
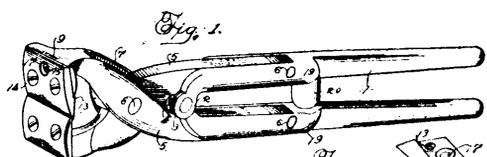
**No. 68,370. Axle.** (*Essieu.*)



Pleasant C. Foskett, of Arkansas, City, Kansas, U.S.A., 7th August, 1900; 6 years. (Filed 4th July, 1900.)

*Claim.*—The combination with an axle box, in sections screw threaded together and each section having at one end a cone shaped socket, and a cylindrical bore, of an axle having an integral cone fitted to the inner socket, a cylindrical portion of less diameter than the diameter of the cylindrical bore of the box, a polygonal portion beyond the cylindrical portion with shoulder at the junction therewith, and a reduced screw threaded portion beyond the polygonal portion, a cone independent of the axle, and having a polygonal passage therethrough to receive the polygonal portion of the axle, and an axle nut on the threaded end of the axle and bearing against the outer end of the said outer cone, all substantially as herein shown and described.

**No. 68,371. Hoof Trimmer.** (*Appareil à déganchir les cercles.*)

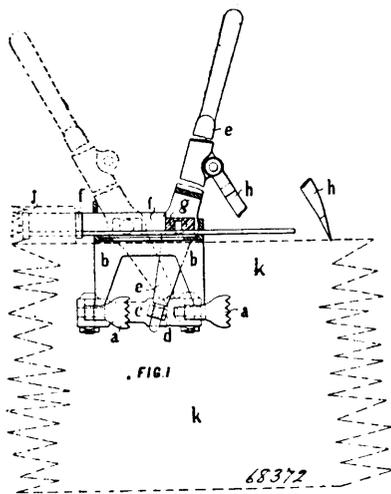


Jerry D. Decelle, of Fort Collins, Colorado, U.S.A., 7th August, 1900; 6 years. (Filed 21st July, 1900.)

*Claim.*—1st. In an implement of the class described, comprising a pair of operating levers bifurcated longitudinally at the pivoted or hinged ends thereof, and a pair of auxiliary levers having cutting or trimming jaws, said auxiliary levers being pivoted within the respective bifurcations of the operating levers and adapted to be received longitudinally within said bifurcations as the operating levers are forced together, substantially as and for the purpose set

forth. 2nd. In an implement of the class described, the combination with a pair of operating levers bifurcated longitudinally at their inner ends, the latter being provided with inwardly off-set bearing eyes, a pivot pin pivotally connecting said eyes, and a sleeve encircling the pin and spacing the eyes apart, of a pair of auxiliary levers having cutting or trimming jaws at their outer ends and pivoted at their inner ends within the bifurcations of the operating levers, whereby said auxiliary levers are adapted to be received within the bifurcations as the operating levers are forced together, substantially as and for the purpose set forth. 3rd. In an implement of the class described, the combination with a pair of levers having a pair of jaws, of an adjustable cutting or trimming plate having an opening formed therethrough and fitted to one of the jaws, a screw carried by the said jaw and accessible through the opening in the plate, whereby the screw may be adjusted to regulate the inclination of the cutting plate, substantially in the manner shown and described. 4th. In an implement of the class described, the combination with a pair of operating levers having a pair of jaws, of a cutting or trimming plate carried by one of the jaws and provided with a smooth opening countersunk upon its inner face, and a screw adjustable in the countersunk screw threaded opening provided in said jaw, the opening in the plate being smaller than the head of the screw and aligned therewith so as to expose the screw and permit of the same being operated to adjust the inclination of the plate, substantially in the manner shown and described.

**No. 68,372. Cramp. (Serre.)**



Joseph Woodhead, South Brisbane, Colony of Queensland, Australia, 7th August, 1900; 6 years. (Filed 13th October, 1899.)

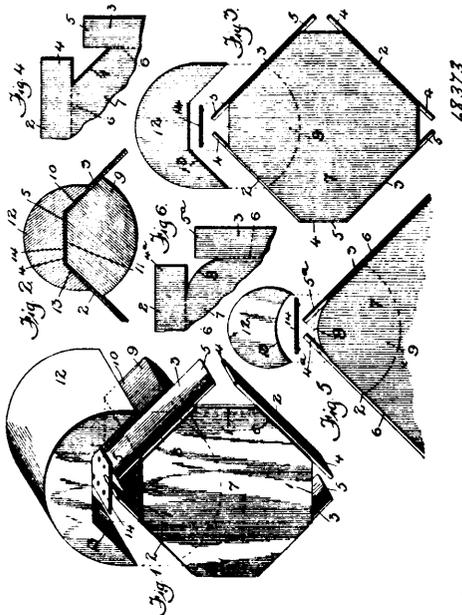
*Claim.*—1st. In flooring cramps, the combination of a frame, a lever, a ram connected with said lever, a grip pivoted at a point intermediate of its length to the frame, and having one end adapted to engage the beam, and a connection between the opposite end of the grip and the lever, substantially as described. 2nd. In combination, the frame, the grip pivoted thereto, the couplers connecting the grips, the lever connected to the couplers at the lower end, and the ram connected to the lever, substantially as described.

**No. 68,373. Paper Box. (Boite en papier.)**

Harry Bridgman Smith, of Brooklyn, New York, U.S.A., 7th August, 1900; 6 years. (Filed 21st March, 1900.)

*Claim.*—1st. In the manufacture of paper boxes from blanks having the corners thereof cut away on a curved line, the herein described method of shaping and securing together the adjacent corner flaps of the blank, consisting in bending the said flaps towards each other so as to cause them to conform to the curved cut away corners of the blank, and simultaneously applying a fastening strip to said flaps over the line of jointure, the whole being performed by pressure at a single operation, substantially in the manner specified. 2nd. In the manufacture of paper boxes having cut away corners, the herein described method of shaping and securing together the adjacent corner flaps of the box blank, consisting in bending the corner flaps towards each other so as to cause them to conform to the cut away portion of the corner of the blank and their edges to abut, and simultaneously attaching a fastening device to said flaps over the line of jointure, the whole being performed by pressure at a single operation, substantially in the manner specified. 3rd. In combination with an anvil having diverging side walls and an upper working face intersecting said side walls, a die provided with a longitudinal groove corresponding to the shape of the working face of

the anvil and co-operating therewith, substantially as described. 4th. In combination with an anvil having a rounded projecting



portion, a die having a rounded groove corresponding to the shape of the projecting portion of the anvil and co-operating therewith, substantially as described.

**No. 68,374. Garment Cutting Scale.**

(Echelle pour tailler les vêtements.)

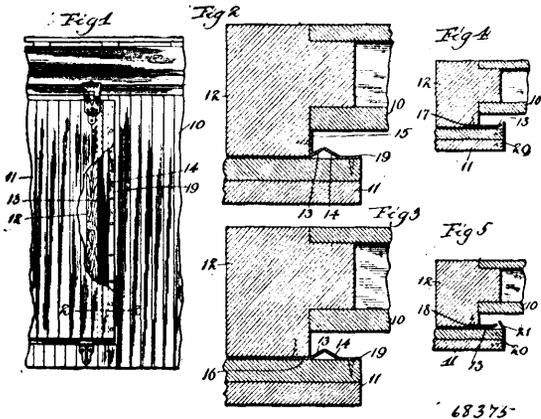
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| 0  | 0  | 0  |    | 0  | 0  |
| 18 | 17 | 16 | 24 | 24 | 24 |

Henrietta Peterson Evan, of Winneconne, Wisconsin, U.S.A., 7th August, 1900; 6 years. (Filed 20th June, 1900.)

*Claim.*—1st. A scale for drafting ladies' and children's garments having the face thereof divided by thirty-one equidistant lines of graduation, and bearing a scale number equal to three times the number of inches of the actual length between the bottom and top lines of graduation. 2nd. A scale for drafting ladies' and children's garments having a face thereof divided by thirty-one equidistant lines of graduation, and bearing a scale number equal to three times the number of inches of the actual length between the bottom and top lines of graduation, together with a small marginal scale comprising a series of dots arranged one-eighth of an inch apart, and consecutively numbered by numbers and half numbers, and extending from a number practically equal to one-third of the scale number, and ending with said scale number, and said small marginal scale being so arranged with relation to the main scale that the seventeenth line of graduation of the latter is nearest in line with the dot numbered with the whole or half number representing practically two-thirds of the scale

number. 3rd. A scale for drafting ladies' and children's garments divided into thirty divisions by thirty-one graduations upon the opposite faces thereof, all the graduations on either of the faces being equidistant, but the space between each two adjacent graduations on one face differing from the space between each two adjacent graduations on the other face, and said scale bearing a scale number equal to three times the number of inches of the length between the bottom and top graduations on the front side of the scale.

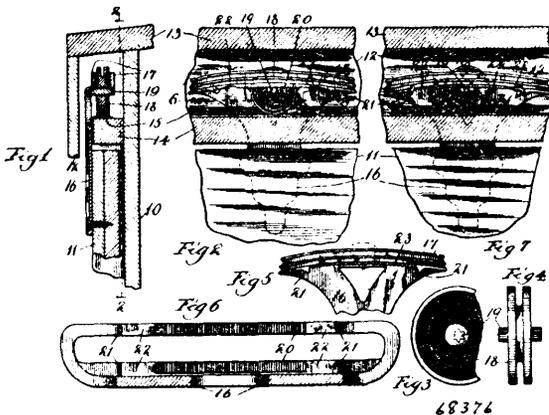
**No. 68,375. Weather Guard for Freight Car Doors.**  
(*Bourrelet pour portes de chars à marchandises.*)



Sterling H. Campbell, Chicago, Illinois, U.S.A., 7th August, 1900 ; 6 years. (Filed 23rd July, 1900.)

*Claim.*—1st. In a weather guard for sliding car doors, a plate adapted for attachment to a door post and to incline backwardly and inwardly from the front face thereof. 2nd. In a freight car, in combination, an outwardly projecting door post, and a plate attached thereto, and having a leaf inclined backwardly and inwardly from the front face thereof. 3rd. In a freight car, in combination, an outwardly projecting door post, and a plate attached to the front face thereof, and extending backwardly and inclined inwardly. 4th. In a freight car, in combination, an outwardly projecting door post, a sliding door, a plate secured to the post and extending backwardly and being inclined inwardly from the front face thereof, and a plate secured to the door at its rear end and extending inwardly beyond the plate of the inner face of the door to substantially cover the first-named plate. 5th. In a freight car, in combination, an outwardly projecting door post, a sliding door, a plate secured to the post and extending backwardly and being inclined inwardly from the front face thereof, and a plate secured to the door at its rear end and extending inwardly and being inclined forwardly beyond the plane of the inner face of the door to substantially cover the first-named plate.

**No. 68,376. Door Hanger.** (*Ferrure de porte.*)

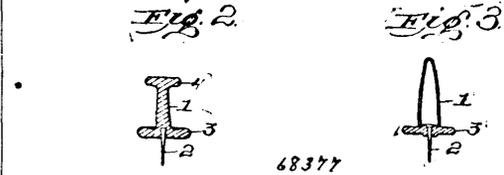


James M. Hopkins, Chicago, Illinois, U.S.A., 7th August, 1900 ; 6 years. (Filed 23rd July, 1900.)

*Claim.*—1st. In a hanger for car doors, in combination, a longitudinally and vertically slotted rider bar having its bearing edges arched and provided with gear racks, and a wheel adapted to enter the slot of the rider bar, and having a toothed axle upon which the rider bar is supported. 2nd. In a hanger for car doors, in combina-

tion, a longitudinally and vertically slotted rider bar having its bearing edges provided with gear racks through a portion of their length, and a wheel adapted to enter the slot of the rider bar, and having a toothed axle upon which the rider bar is supported. 3rd. In a hanger for car doors, in combination, a longitudinally and vertically slotted rider bar having its bearing edges provided with gear racks through a portion of their length, and having plane portions at each end of each rack, and a wheel adapted to enter the slot of the rider bar and having a toothed axle upon which the rider bar is supported. 4th. In a hanger for car doors, in combination, a longitudinally and vertically slotted rider bar having its bearing edges provided with gear racks through a portion of their length, and having plane portions at each end of each rack, and a stop lug at the outer end of each of such plane portions, and a wheel adapted to enter the slot of the rider bar and having a toothed axle upon which the rider bar is supported. 5th. In a hanger for car doors, in combination, a longitudinally and vertically slotted rider bar having its bearing edges provided with gear racks through a portion of their length, and having plane portions at each end of each rack, and a stop lug at the outer end of each of such plane portions, and a wheel adapted to enter the slot of the rider bar and having a toothed axle upon which the rider bar is supported.

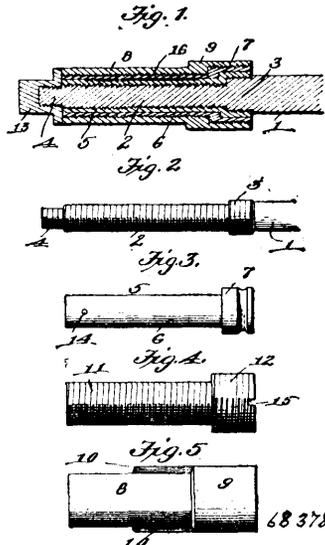
**No. 68,377. Push pin.** (*Punaise.*)



Edwin Moore, Philadelphia, Pennsylvania, U.S.A., 7th August, 1900 ; 6 years. (Filed 24th July, 1900.)

*Claim.*—A push pin comprising a body portion having a flange near the inner end of the roof, said flange projecting laterally from and extending entirely about the same, and a pin extending longitudinally from the said body portion, substantially as described.

**No. 68,378. Vehicle Axle Bearing.**  
(*Coussinet d'essien de véhicules.*)

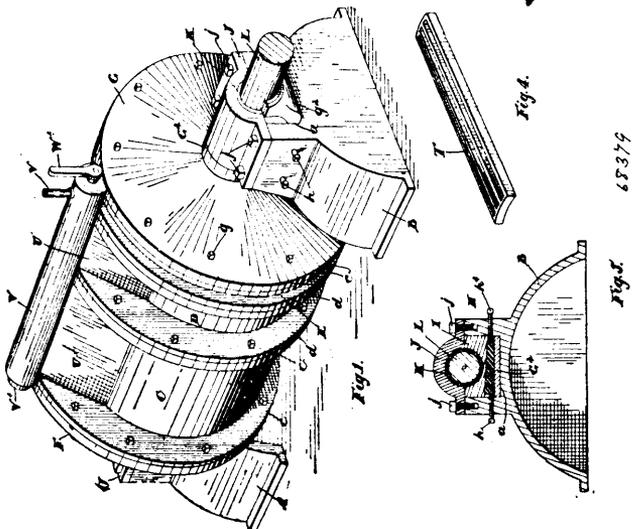


Adolph Daniel Bloch, Mobile, Alabama, U.S.A., 7th August, 1900 ; 6 years. (Filed 20th July, 1900.)

*Claim.*—1st. The combination with an axle spindle provided at its inner end with an integral cylindrical enlargement, said spindle and

enlargement being continuously threaded from end to end externally, of an axle-sleeve provided at its inner end with a cylindrical enlargement said sleeve and enlargement being continuously threaded from end to end internally and made perfectly smooth externally, the sleeve being constructed to screw over the spindle and be secured thereto at every point, substantially as described and for the purpose specified. 2nd. The combination with an axle box having a cylindrical enlargement at one end and provided externally with means for securing the box in a hub, said box and its enlargement being correspondingly threaded from end to end internally, of a bushing provided with a cylindrical enlargement at its inner end, said bushing and its enlargement being correspondingly threaded from end to end externally and made perfectly smooth internally, the bushing being constructed to screw into the box and be secured thereto at every point, substantially as described.

**No. 68,379. Compound Rotary Engine.**  
(Machine rotative.)

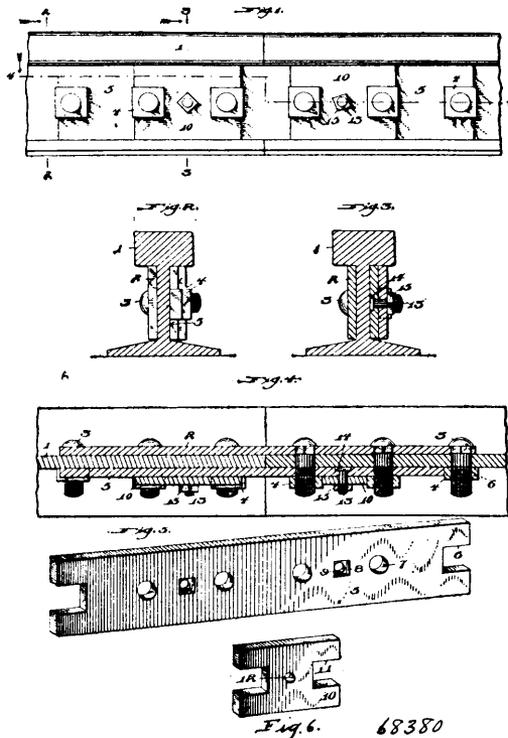


William Oliver Taylor, of Princeton, assignee of Ebner Blake Tree, Woodstock, both in Ontario, Canada, 8th August, 1900; 6 years. (Filed 21st July, 1900.)

*Claim.*—1st. In a compound rotary engine, the combination with the standards and the stationary cylinders suitably connected together and the ends thereof suitably connected to the cylinders and provided with longitudinally extending portions resting on the standards and the inner rotating casing, the ends thereof provided with a hollow trunnion at one end and a shaft at the opposite end and suitably connected together, of the bearing blocks and the adjustable wedge shaped supporting blocks located beneath the inclined ends of the lower bearing blocks as and for the purpose specified. 2nd. In a compound rotary engine, the combination with the standards and the stationary cylinders suitably connected together and the ends thereof suitably connected to the cylinders and provided with longitudinally extending portions resting on the standards and the inner rotating casing, the ends thereof provided with a hollow trunnion at one end and a shaft at the opposite end and suitably connected together, of suitable bearings for the shaft at one end and the hollow trunnions at the other, a crank pin or axle having the off-set or end portions extending into recesses in the shaft at each end, the sleeve on the major portion of the crank pin or axle, the rings dividing the cylinders and suitably secured in the ends thereof and the wings journalled on the crank pin and extending through recesses in the rotating inner cylinder as and for the purpose specified. 3rd. In a compound rotary engine, the combination with the standards and the stationary cylinders suitably connected together and the ends thereof suitably connected to the cylinders, and provided with a hollow trunnion at one end and a shaft at the opposite end and suitably connected together, of suitable bearings for the shaft at one end and the hollow trunnion at the other, the crank pin or axle having the off-set or end portions at one end extending into the recesses in the shaft and the off-set at the opposite end extending through the hollow trunnion and provided with a reduced end, clamping means for holding the crank pin securely in position, and the wings suitably journalled on the major portion of the crank pin or axle and extending through the recesses or slots in the rotatable casings, as and for the purpose specified. 4th. The combination with the ends of the stationary casings suitably held in position and the intermediate cylinders provided with flanges suitably connected at the ends and to each other leaving annular recesses, the shaft and trunnions suitably journalled in the ends of the stationary casing, the end discs of the casings attached to or forming part of the shaft and trunnions, the inner rotatable cylinders or casings provided with flanges and means for connecting the flanges together and the

flanges to the ends, the crank pin or axle having the minor off-set extending into recesses in the axle and trunnions at each end, the annular rings dividing the stationary casing into several parts and extending into recesses between the flanges of the stationary casings, suitable packing rings for the rings in the stationary casing, and the wings suitably journalled on the shaft and extending through slots in the rotatable casing, as and for the purpose specified. 5th. The combination with the stationary cylinder having suitable ends provided with trunnions and the rotatable cylinder: provided with suitable ends extending through the trunnions of the stationary cylinder and having the periphery thereof extending into a recess in the stationary cylinder corresponding to the arc of the rotatable cylinder, the wings journalled on the crank shaft and extending through the slots in the rotatable cylinder and the packing dog comprising a plurality of bars connected together at their ends and fitting into the corresponding recess in the stationary cylinder, as and for the purpose specified. 6th. The combination with the stationary cylinder provided with ends and the rotatable cylinder provided with ends and journalled in the ends of the stationary cylinder but leaving an annular space between the stationary and rotatable ends, of the equalizing passageway connecting such annular spaces, as and for the purpose specified. 7th. The combination with the stationary cylinders suitably connected together and the ends of the same suitably supported, of the rotatable cylinder located eccentrically to the stationary cylinder and provided with suitable shafts journalled in the stationary ends, the separating rings dividing the cylinders, the crank pin extending into the ends of the shaft, the wings journalled on the same and extending through slots in the rotating cylinders, the inlet pipe leading into a chamber so arranged that the steam passes through the inlet ports at one side against the wings and exhausts through the outlet port into the receiver or chamber between succeeding cylinders and thence into the next succeeding cylinder and so on until it finally exhausts from the last cylinder, as and for the purpose specified. 8th. The combination with the rotatable cylinder and the stationary cylinder suitably packed and the crank shaft, of the wings, the flanges by which the rotatable cylinder is connected together, the inwardly projecting arc shaped lugs in the rotatable cylinder, the cylindrical plugs fitting the same and provided with slots through which their wings extend, the packing at each side of the slot in the plugs and the packing in the arc-shaped projections abutting the plugs on the outside, as and for the purpose specified.

**No. 68,380. Nut Lock.** (Arrête-écrou.)



Edward Ling, of Pittsburg, Pennsylvania, U.S.A., 8th August, 1900; 6 years. (Filed 5th July, 1900.)

*Claim.*—The combination with the fish plate 2, and a series of bolts 3, 3, and nuts 4, 4, of the retaining plate 5, provided in its ends with the recesses 6, 6, adapted to receive the end nuts of the series, said plate being further provided with apertures 7, 7 and 9, 9, and with recesses 8, 8, locking plates 10 having a central aperture 12

registering with the apertures 9 and 12, with their heads engaging the recesses 8 in the retaining plate, the ends of said locking plates 10 being cut away to receive the nuts 4, 4, adjacent to said ends, substantially as described.

**No. 68,381. Drinking Cup. (Gobelet.)**

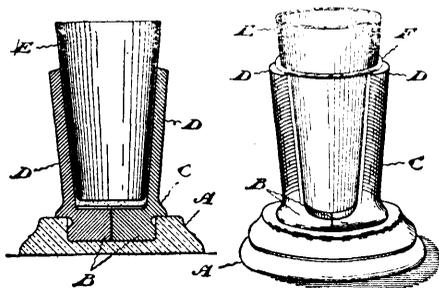


Fig. 1.

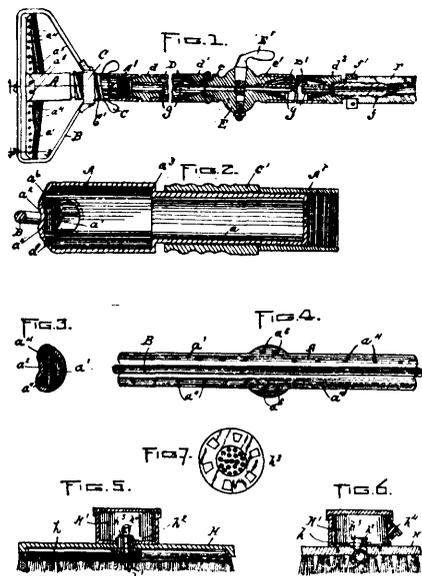
Fig. 2.

68381

Herbert A. Parkyn, of Chicago, Illinois, U.S.A., 8th August, 1900; 6 years. (Filed 25th July, 1900.)

*Claim.*—1st. A drinking cup formed of magnetized metal, substantially as described. 2nd. A drinking cup formed of magnetized metal and some other non-magnetic substance, substantially as described. 3rd. A drinking cup comprising a magnet and a drinking bowl, the poles of the magnet being shaped to form a receptacle for the bowl, substantially as and for the purpose specified. 4th. A drinking cup comprising a magnet and a non-magnetic drinking bowl, the poles of the magnet being shaped to form a receptacle for the bowl, substantially as described. 5th. A cup comprising a two part holder of metal, each part consisting of a base and part of a bowl receptacle, in combination with a drinking bowl, and a wooden base adapted to receive and hold in place the metal bases of the parts of the holder, substantially as described. 6th. A cup comprising a two part holder of metal, each part consisting of a base and part of a bowl receptacle, the upper extremity of one part being magnetized positively and the other negatively, in combination with a drinking bowl, and a wooden base adapted to receive and hold in place the metal bases of the parts of the holder, substantially as described. 7th. A drinking cup comprising a magnet and a drinking bowl, the poles of the magnet being shaped to form a receptacle for the bowl, in combination with a ring or keeper of magnetizable metal adapted to encircle the bowl and engage the poles of the magnet when the cup is not in use, substantially as described. 8th. A drinking cup comprising a wooden base, a magnet supported therein, and a drinking bowl of glass, the poles of the magnet being shaped to form a receptacle for the bowl, substantially as described.

**No. 68,382. Cleaning Device. (Appareil à nettoyer.)**

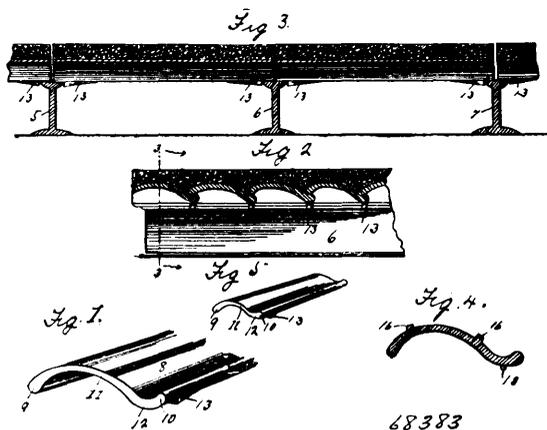


68382

Mikael Nasberg, Florence, Wisconsin, U.S.A., 8th August, 1900; 6 years. (Filed 24th July, 1900.)

*Claim.*—1st. The combination of a tubular handle with a mop holder, comprising a hollow T-shaped piece having openings in its transverse portion for the distribution of water, and the longitudinal depression  $a^2$  for the reception of the clamp, of a screw collar loosely mounted on the stem of the holder, a screw threaded collar engaging said screw collar, and a clamp secured at its ends to the outer collar and extending longitudinally over the transverse portion of the holder, substantially as described. 2nd. The combination with a mop holder, comprising a hollow T-shaped piece having openings in its transverse portion, a screw collar loosely mounted on the stem of the holder, a screw threaded collar engaging said screw collar, a clamp secured at its ends to the outer collar and extending longitudinally over the transverse portion of the holder, of a hollow handle connected at one of its ends to the stem of the holder and at its other end to a source of water supply, and a valve located in the handle to regulate the flow of the water, substantially as described.

**No. 68,383. Flooring. (Plancher.)**



68383

Adam L. Wymer, Youngstown, Ohio, U.S.A., 8th August, 1900; 6 years. (Filed 24th July, 1900.)

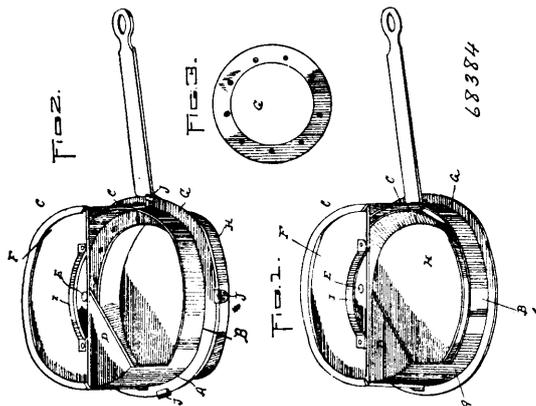
*Claim.*—1st. A floor plate, having a downturned edge and having an upturned edge terminating short of the height of the body of the plate to form a groove to receive the downturned edge of a similar plate, and lugs upon the lower face of the plate adjacent to the upturned edge. 2nd. A compoundly curved floor plate, having a lug upon a convex portion. 3rd. A floor plate, compoundly curved transversely, and having lugs upon a convex portion thereof. 4th. A compoundly curved floor plate, comprising a major curve and a minor curve, and lugs upon the minor portion. 5th. A compoundly curved floor plate, comprising a major curve and a minor curve, and lugs upon the convex face of the minor curved portion. 6th. A compoundly curved floor plate, having upwardly and downwardly projecting thickened edges, the upwardly projecting edge thereof being adapted to receive the downwardly projecting edge of a similar plate, and lugs upon the plate adjacent the upturned edge. 7th. A compoundly curved floor plate, having lugs upon its convex portions. 8th. The combination with supports, of a plurality of compoundly curved plates, each disposed upon the supports with an edge within the curvature of an adjacent plate, and lugs upon the plates lying against the supports to hold the plates from movement in a direction at an angle to the curvature thereof. 9th. The combination with supports, of a plurality of compoundly curved floor plates disposed upon the supports, the adjacent edges of the plates being interlocked, lugs upon the plates engaging the supports, and a filling disposed upon the plates.

**No. 68,384. Culinary Device for Frying or Roasting Meats. (Ustensile de cuisine.)**

Robert M. Austin, Derby, Connecticut, U.S.A., 8th August, 1900; 6 years. (Filed 24th July, 1900.)

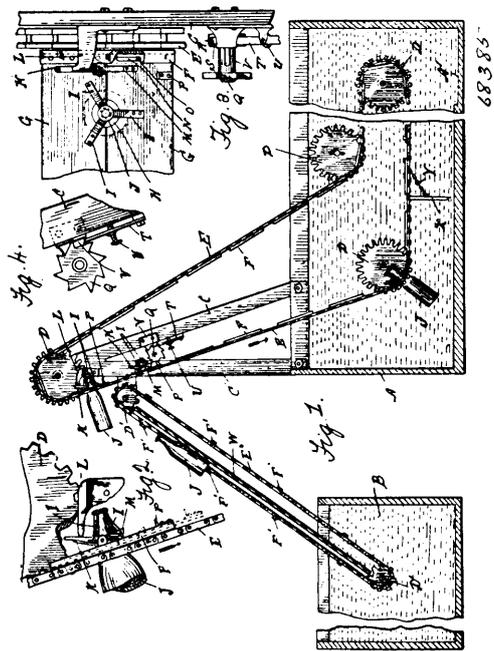
*Claim.*—1st. A cover composed of two substantially semi-cylindrical members pivotally connected together, whereby one of said members is adapted to serve as a door to admit the pan to the interior of said cover, one of said members having a slot or recess to closely fit the pan handle extending through it. 2nd. A cover

composed of two substantially semi-cylindrical parts or members, each member having a head or top, the two heads being pivoted



together and one of said members being provided with means for rotating it relatively to the other, whereby a complete cylindrical cover may be formed.

**No. 68,385. Bottle Washing Machine.**  
(Machine à laver les bouteilles.)

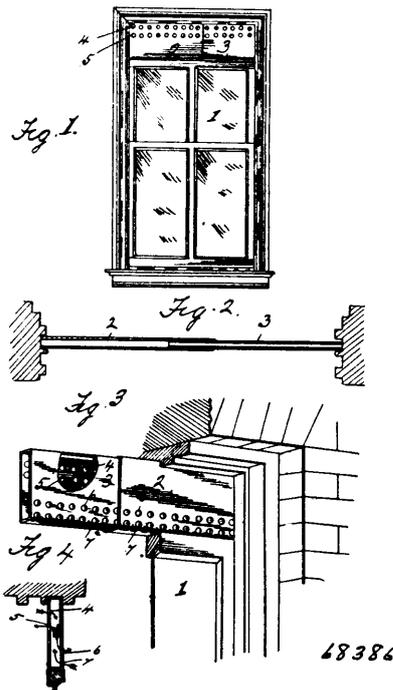


Adolph Goetz, Grand Rapids, Michigan, U.S.A., 8th August, 1900; 6 years. (Filed 24th July, 1900.)

*Claim.*—1st. The combination of a tank, a sprocket chain in the tank and extending above the same, a plate connected to the chains in fixed relation thereto, a second plate connected to the chains and movable relative thereto, said plate having their edges adjacent and provided with semi-circular opposing recesses, radial springs adjacent to said recesses and adapted to engage the neck of a bottle, means for holding the plates in close relation, means for releasing the same to permit the plates to separate and release the bottles, and means for restoring the plates to position again, substantially as described. 2nd. The combination of a tank, sprocket chains movable therein, and extending upward therefrom, strips connected to the respective chains, a plate rigidly attached to said strips, a second plate movably attached to said strips, the edges of said plates being provided with opposing semi-circular recesses, and radial springs adjacent to the recesses, a latch on one of said plates, and a lug on the other plate engaged by the latch, a fixed arm to engage the latch, and release the same, and means for restoring the movable plate to close relation with the other plate, substantially as described. 3rd. The combination of a tank, sprocket chains and wheels at each side of the tank, said chains extending above the tank, grooved strips attached to said chains, a plate rigidly attached to the respec-

tive strips, a second plate slidably in the grooves and provided with transverse slots, stop pins to engage said slots, means on said plates for holding and carrying bottles, a latch to hold the plates in close relation, an arm to engage and release the latch, a yielding obstruction to engage the movable plate and restore it to closed position, substantially as described. 4th. The combination of a tank, having sprocket chains at each side thereof and extending above the same, grooved strips attached to the respective chains, a plate rigidly secured at each end to said strips, a plate movable in said grooves and provided with transverse slots, stop pins engaging said slots, a latch engaging a lug on the movable plate, an arm engaging and releasing the latch, springs on the plate to hold a bottle, a second lug on the movable plate, a ratchet wheel in the path of said lug, a brake wheel connected to the ratchet wheel, and a brake engaging the brake wheel, substantially as described. 5th. In combination with a tank, sprocket chains movable in the tank and extending above the same, and means for releasing and holding bottles connected to said chains, a second tank, and inclined table to receive the bottles, sprocket chains at each side of the table and transverse bars attached to the sprocket chains at each side of the table and means for moving all the said sprocket chains, substantially as described. 6th. The combination of a tank adapted to contain a cleaning solution, sprocket chains at each side of the tank and extending above the same, plates attached to said chains at intervals in fixed relation thereto, and plates attached to said chains in movable relation thereto, said plates having semi-circular recesses in their adjacent sides, and radial springs adjacent to the recesses, latches to hold the plates in close relation, arms to release the latches, means for restoring the plates in close relation, a second tank containing a washing liquid, an inclined grooved table, sprocket chains surrounding the table, transverse bars connecting the sprocket chains and traversing the table, and means for imparting motion to all the said sprocket chains, substantially as described. 7th. The combination of a tank adapted to contain a cleaning liquid, sprocket chains at each side of the tank, a frame at one end of the tank, sprocket wheels at the top of the frame, endless chains at each side of the tank and engaging said sprocket wheels, plates attached to said chains and having means for holding and releasing the bottles, an arm near the top of the frame to operate the releasing mechanism, a ratchet wheel, a brake wheel and a brake attached to the frame, to raise the lower plate of the bottle holding mechanism to place, an inclined table to receive the bottles when released, sprocket chains traversing the table, transverse bars attached to the sprocket chains, and a second tank containing a liquid for removing the cleansing solution from the bottles, substantially as described.

**No. 68,386. Window Ventilator.** (Ventilateur de fenêtre.)

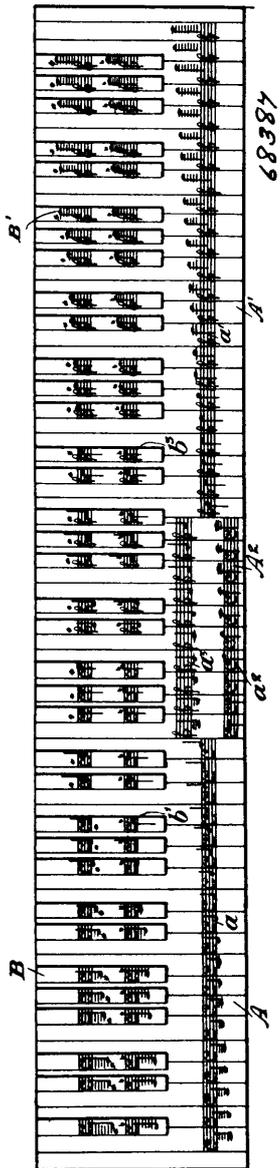


Henry A. Miller, Hoagland, Indiana, U.S.A., 8th August, 1900; 6 years. (Filed 24th July, 1900.)

*Claim.*—The combination with a window frame and sash, of a ventilator consisting of a rectangular hollow casing formed in two telescoping sections, and closed on all sides save that the inner and

outer walls are provided with perforations along the upper edge of the inner wall and the lower edge of the outer wall, said casing being insertable between the end of a sash and one end of the window frame, substantially as described.

**No. 68,387. Separable Object Lesson Key Board.**  
(*Clavier.*)

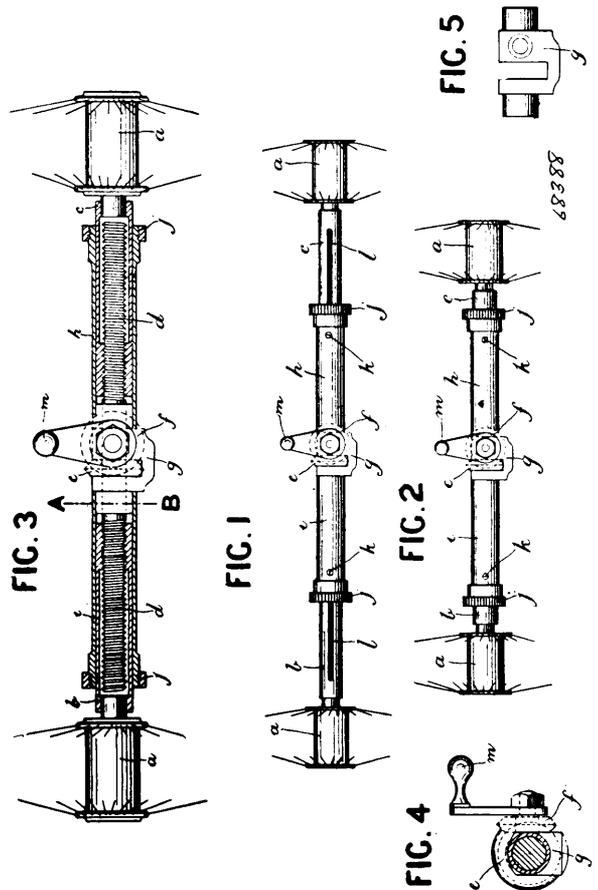


Evelyn Ashton Fletcher, Toronto, Ontario, Canada, 8th August, 1900; 6 years. (Filed 12th April, 1897.)

*Claim.*—1st. A device for teaching pianoforte comprising the separable white and black keys having the staves and notes of the musical notation indited thereon, depending projections on the white keys, a base, longitudinal strips thereon with holes to receive the depending projections, depending projections on the black keys, the rear strip provided with holes between the white keys designed to receive the projections on the black keys and a longitudinal strip supported on the base and designed to form a rest for the front ends of the black keys as and for the purpose specified. 2nd. In combination the separable white and black keys, the base for supporting the same, a cover board provided with intervening blocks to fit between the black keys and rest upon the white keys at the rear and a longitudinal strip attached to the cover designed to rest upon the white keys immediately in front of the black keys and means for holding the cover to the key board so as to retain the keys in position as and for the purpose specified. 3rd. In combination the separable white and black keys, the base for supporting the same constructed in two parts and hinged together, a cover board formed in two parts,

a flexible elongated loose connection between the parts designed to allow of the two parts of the base being folded on each other and fastening devices for connecting the free ends of the cover and base together as and for the purpose specified.

**No. 68,388. Tricycle and other Velocipedes.**  
(*Tricycle et velocipèdes.*)



John Thomas Milson Hircock, Birmingham, Warwick, England, 8th August, 1900; 6 years. (Filed 13th November, 1899.)

*Claim.*—1st. A tricycle or other velocipede embracing in its construction and axle consisting of two oppositely moving sections and a screw mechanism for expanding or contracting the sections to respectively increase or diminish the width of the tread of the wheels, substantially as specified. 2nd. A tricycle or other velocipede embracing in its construction two hollow screw threaded sections, a screw threaded spindle working in the sections, a sleeve for the sections, a lug connected to the middle of the sleeve, a gear wheel fixed on the screw threaded spindle, a gear wheel mounted in the lug meshing with the gear wheel on the spindle and means for operating the gearing to extend or contract the hollow sections, substantially as specified. 3rd. A tricycle or other velocipede embracing in its construction two hollow screw threaded sections, a screw threaded spindle working in the sections, a sleeve for the sections a lug connected to the middle of the sleeve, a gear wheel fixed on the screw threaded spindle, a gear wheel mounted in the lug meshing with the gear wheel on the spindle and means for operating the gearing to extend or contract the hollow sections, longitudinal slots formed in the hollow sections and guide pins connected to the sleeves entering the slots to guide the movement of the sections, substantially as specified.

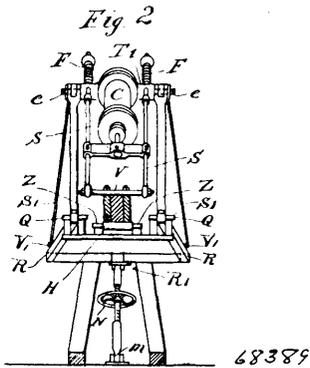
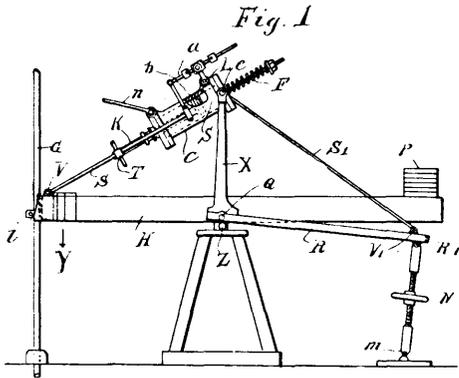
**No 68,389. Deep Boring Machinery.** (*Machine à percer.*)

Heinrich Lapp, Aschersleben, Kingdom of Prussia, (German Empire, 8th August, 1900; 6 years. (Filed 1st June, 1900.)

*Claim.*—1st. Machinery for deep boring, comprising a counter-balanced boring lever H, fulcrumed on a frame and attached at one end to the boring rod G, and to spring rods S, operated by the piston rod K, of a piston head b, working in a stem cylinder C, having a valve L, and a valve gear a, whereby steam is admitted to said cylinder, thus actuating the boring rod, and then cut-off and the exhaust opened, whereupon the piston returns to its first position,

under the influence of said spring rods S, all substantially as and for the purposes hereinbefore set forth. 2nd. Machinery for deep

travel to and from the path of said parison and finishing mould sections, and means for simultaneously moving said parison and



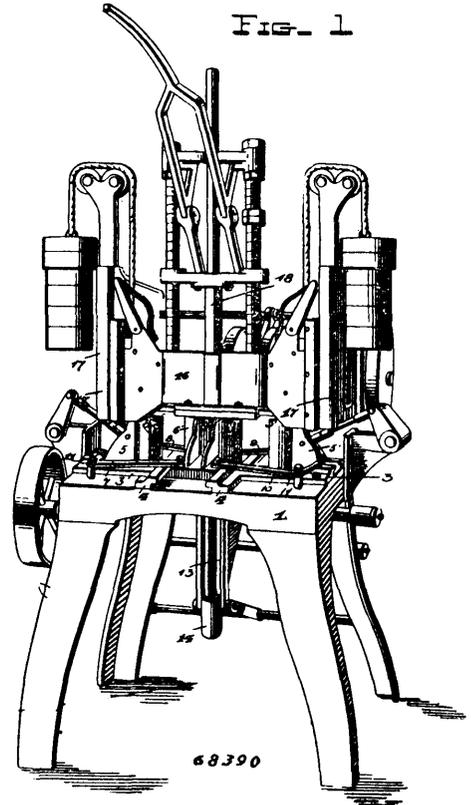
boring, comprising a counter balanced boring lever H, fulcrumed on a frame and attached at one end to the boring rod G, and to spring rods S, operated by the piston rod K, of a piston head b, working in a steam cylinder C, having a valve L, and a valve gear a, whereby steam is admitted to said cylinder, thus actuating the boring rod, and then cut-off and the exhaust opened, whereupon the piston returns to its first position, under the influence of said spring rods S, in combination with a screw adjustment device N, hinged to an anchor plate, and at R', on the one hand to frame bars R, resting at the fulcrum Z, of the lever H, at which the cylinder is supported, and on the other hand to stays S', attached to the cylinder, whereby on operating the said adjustment device, the boring lever H, and with it the steam cylinder C, and attachments are caused to be turned about the fulcrum Z, all substantially as and for the purposes, hereintofore set forth.

**No. 68,390. Machine for making Glass Vessels.**

(Machine pour la fabrication de vaisseaux en verre.)

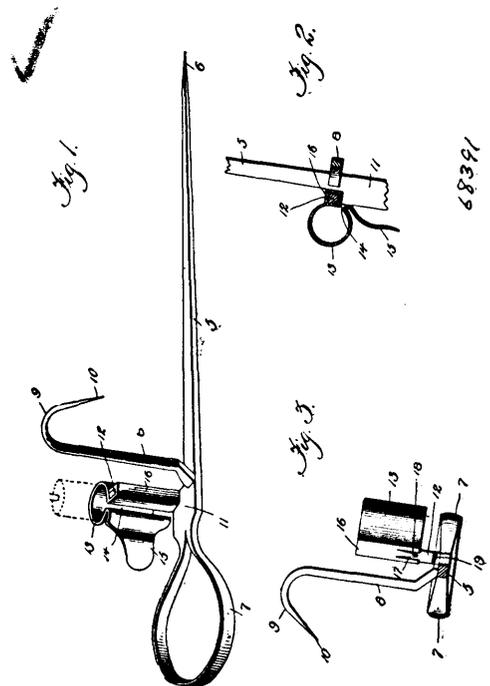
Robert Good and Robert Good jr., both of Poughkeepsie, New York, U.S.A., 8th August, 1900; 6 years. (Filed 4th June, 1900.)

Claim.—1st. In a machine for forming glass vessels, the combination with the supporting table having the central orifice, the series of guide rails arranged at right angles across the face of said table, the parison and the finishing mould sections adapted to travel in opposite directions on said guide rails, of the bottom mould section, and means for causing said bottom mould section to travel through said central orifice in the table, to and from said finishing mould sections, substantially as and for the purpose set forth. 2nd. In a machine for forming glass vessels the supporting table having the central orifice, the series of guide rails arranged at right angles across the face thereof, the parison and the finishing mould sections mounted on said rails, the bell crank levers fulcrumed on said table in the form of a rectangle and operatively connected to said mould sections, in combination with the reciprocating bottom mould section, and means for conveying said bottom mould section to and from said finishing mould sections. substantially as and for the purpose set forth. 3rd. In a machine for forming glass vessels, the combination with a three part finishing mould comprising the two laterally and the bottom vertically reciprocating sections, of a two part parison mould arranged to reciprocate at right angles to the path of said finishing mould sections, substantially as set forth. 4th. In a machine for forming glass vessels, the supporting table having the central orifi e, the series of guide rails mounted at right angles across the face thereof, the parison and the finishing mould sections mounted thereon, the bottom mould section adapted to



finishing mould sections in opposite directions, and a reciprocating press head adapted to travel to and from said parison and finishing mould sections, substantially as set forth for the purpose described.

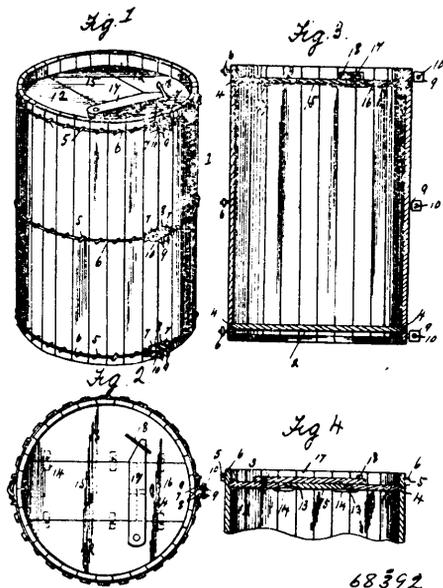
**No. 68,391. Candlestick. (Chandelier.)**



James Young Walker, Rossland, British Columbia, Canada, 8th August, 1900; 6 years. (Filed 9th June, 1900.)

*Claim.*—1st. In a candlestick, an improved thimble made or struck up in a single piece of metal and provided with a slip having a fastening device, substantially as described. 2nd. A candlestick, provided with an upstanding stem, and a thimble fitted removably to the stem and having detachable interlocking engagement therewith, substantially as described. 3rd. A candlestick, having an upstanding stem provided with a transverse notch, and a thimble having at one edge a clip and at its other edge a finger piece, said clip adapted to fit removably on the stem and provided with a locking lip arranged for engagement with the notch of said stem, substantially as described.

**No. 68,392. Barrel. (Barril)**



68392

Isabel A. Porter, Pittsburg, Kansas, U.S.A., 8th August, 1900; 6 years. (Filed 24th July, 1900.)

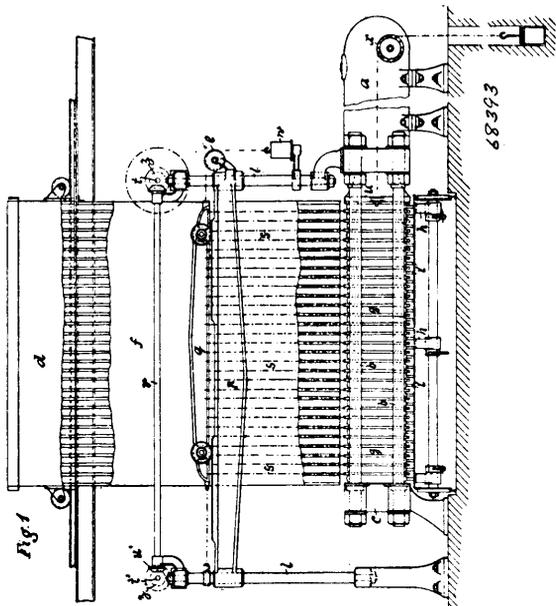
*Claim.*—A collapsible barrel, comprising a plurality of staves having recesses in their end faces near their upper and lower ends, means for connecting the staves together, a bottom section secured in the lower recesses and a top section secured in the upper recesses, said top section consisting of the side pieces 12 12, having curved outer edges and straight inner or adjacent edges which are bevelled, the sections 15, 16, the combined length of which corresponds to the greatest diameter of the barrel, the longitudinal edges of said sections being bevelled to correspond with the bevelled inner edges of the sections 12 12, cleats 14, secured to the underside of the sections 12 12, and projecting laterally beyond the bevelled edges thereof, a turn button pivoted to one of the sections 12, and a loop or bail into which the free end of the turn button is adapted to swing to secure the parts forming the top together, said turn button when in its locked position lying over the joint formed by the abutting ends of the sections 15, 16.

**No. 68,393. Hydraulic Press. (Presse hydraulique.)**

Henri Ruperti, of 37 Kaiser Wilhelmstrasse, Dusseldorf, German Empire, 8th August, 1900; 6 years. (Filed 20th June, 1900.)

*Claim.*—1st. A press for expressing water from peat and the like with automatic adjusting arrangement for the press plates, characterized by the press plates *g*, for automatic adjustment to the size or thickness of the cakes, connected by ropes *s*, or the like, to vertically reciprocating carriers *q*, which at the forward motion of the press plunger *u* are lowered so far as to allow the press plates *g* during the action of pressing to advance unhindered, while during the return of the press plunger the said carriers *q* are raised so far as to cause the press plates *g* to swing and to automatically set themselves at correct distances to each other for the introduction of new press cakes, substantially as described. 2nd. A constructional form of the press in which the press plates *g* are connected together by a chain *k* one end of which is connected with the pressure piston *u*, while the other end is connected with the head *c* of the press, substantially as described. 3rd. A constructional form of the press in which the press plates are connected with the piston *u* and the head *c* by means of pivotally connected links *n*, substantially as described. 4th. A constructional form of the press in which the piston *u* is drawn back into its original position by means of a hydraulic piston *m* connected with wire ropes *o* passing over rollers *x*, substantially as described. 5th. A constructional form of press

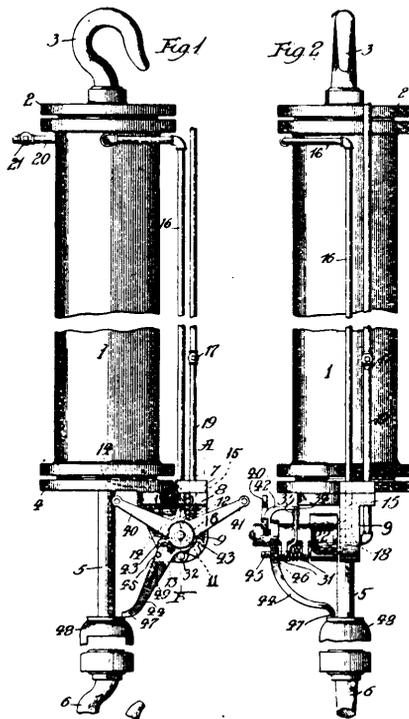
characterised by the guide *f* with vertical parallel passages open at top and bottom and corresponding to the press chambers between



the plates *g* and into which are dropped the press cakes from a truck *d* above, having a corresponding number of vertical compartments, so that any one of the cakes falls between two press plates *g* and then finds a rest upon bars *i* of a lower truck *h* for a time until the cakes are retained by pressure in the press chambers, substantially as described.

**No. 68,394. Fluid Pressure Hoist. (Ascenseur à pression hydraulique.)**

(Ascenseur à pression hydraulique.)



68394

Riels Anton Christensens, of Milwaukee, Wisconsin, U.S.A., 8th August, 1900; 6 years. (Filed 26th July, 1900.)

*Claim.*—1st. A fluid pressure hoist comprising a cylinder having a piston, a valve governing the admission and release of pressure to

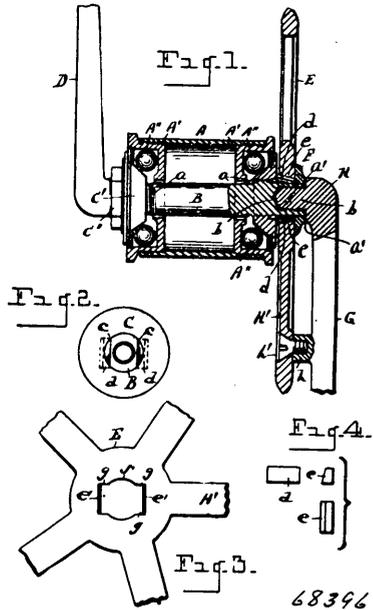
and from the cylinder and a spring exerting its tension upon the valve to normally keep it in lap position and to restore it to such position after movement in one direction to application position or after movement to release position. 2nd. A fluid pressure hoist comprising a fluid pressure actuated piston travelling in a cylinder, a valve casing having a valve governing the admission and release of pressure to and from the cylinder and tension mechanism mounted on the casing and co-operating with such valve to normally keep it in lap position and to restore it to that position after movement to a position on either side of lap position. 3rd. A fluid pressure hoist comprising a cylinder having a piston, a valve governing the admission and release of pressure to and from the cylinder, an operating stem for the valve provided with an arm or horn and a spring directly engaging such horn and exerting its tension against rotation of the valve stem. 4th. A fluid pressure hoist comprising a cylinder having a piston, a valve governing the admission and release of pressure to and from the cylinder, a stem for the valve, a hub secured to the stem and having operating lever arms, a horn on the hub intermediate of the arms, and a spring whose free ends are arranged on either side of the horn to maintain the valve in normal position. 5th. A fluid pressure hoist comprising a cylinder having a piston, a valve governing the admission and release of pressure to and from the cylinder, a casing for the valve and having a lug on one side, a spring pivoted on the opposite side of the casing with its free ends extending around either side of the casing and resting on either side of said lug but projecting slightly therebeyond, and a hub secured on the valve stem and having a horn positioned between said projecting ends of the spring. 6th. A fluid pressure hoist comprising a cylinder having a piston, a valve governing the admission and release of pressure to and from the cylinder, a casing for the valve, a hub secured to the valve and having operating lever arms, and a pair of projecting arms on the hub adapted to contact the casing in full release position and also in full application position. 7th. In a hoist, the combination with a cylinder having a piston travelling therein, of means for admitting fluid pressure into the cylinder against one side of the piston and exhausting that pressure into the cylinder on the other side of the piston, such cylinder being cut off from the outside air. 8th. In a hoist, the combination with a cylinder having a piston travelling therein, of means for controlling the admission and release of pressure to and from the cylinder and for exhausting into the cylinder on the other side of the piston before finally exhausting to atmosphere, and means for permitting such final exhaust but preventing the entrance of any outside air. 9th. In a hoist, the combination with a cylinder having at one end a port for the admission of fluid pressure, and near the other end an inlet port and a check valve governed outlet port a piston travelling in such cylinder and means for admitting fluid pressure into the cylinder on one side of the piston and for exhausting that admitted pressure through said inlet port, into the cylinder on the other side of the piston and finally exhausting such pressure to the atmosphere through said outlet port. 10th. In a hoist, the combination with a valve device for controlling fluid pressure to and from the hoist, of means for automatically closing the valve device against the pull exerted by the operator. 11th. In a hoist, the combination with a cylinder and piston therein, of a valve governing fluid pressure to and from the cylinder and means actuated by the movement of the piston towards the completion of its upward stroke to close said valve. 12th. In a fluid pressure hoist, the combination with a cylinder and its piston, of a valve governing the fluid pressure to and from the hoist, tension mechanism normally maintaining the valve in lap position and means in aid of such mechanism to close the valve on the upward stroke of the piston. 13th. In a hoist, the combination of a cylinder, a piston therein having a piston rod, a valve governing fluid pressure to and from the cylinder, levers for operating the valve to admit or release the pressure, and a swivelled depending arm whose lower end is contacted by the piston rod near the end of the piston's upward stroke and which when raised closes said valve. 14th. In a hoist, the combination of a cylinder, a piston therein having a piston rod, a valve device governing fluid pressure to and from the cylinder, levers for operating the valve to admit or release the pressure, a movable depending arm provided with two lateral lugs and which is raised by the piston rod near the end of the piston's upward stroke to cause said lug to contact one of such levers and close the valve, and a projection on the valve device against which projection the other of said lugs strikes to limit the downward movement of such arm.

**No. 68,395. Composition of Matter for Preserving and Curing Meats.** (*Composition de matieres pour conserver les viandes.*)

William James Taylor and Robert Harrington, both of Toronto, Ontario, Canada, 8th August, 1900; 6 years. (Filed 11th June, 1900.)

*Claim.*—1st. The herein described composition of matter consisting of sulphur, brimstone, salt-peter, manganese binoxide and cotton wicking, substantially as described and for the purpose specified. 2nd. The herein described composition of matter for preserving and curing meats, consisting of sulphur, brimstone, salt-peter, manganese binoxide and cotton wicking, substantially as described.

**No. 68,396. Means for Attaching Sprocket Wheels to Crank Shafts.** (*Moyen d'attacher les roues aux essieux.*)



Burton W. Scott, Edgar S. Wheeler and Lemuel H. Foster, all of Detroit, Michigan, U.S.A., 9th August, 1900; 6 years. (Filed 23rd June, 1900.)

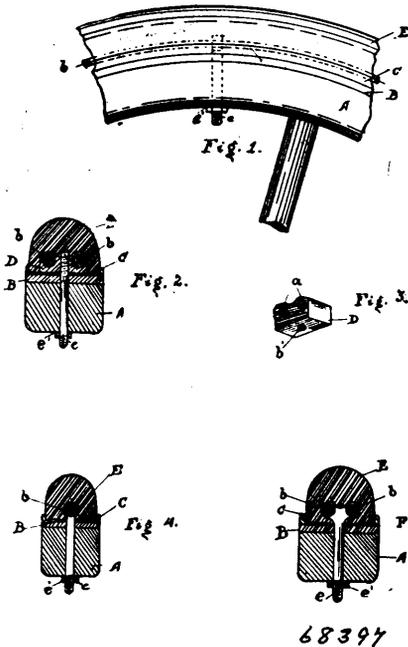
*Claim.*—1st. The combination of a crank shaft of a bicycle, said shaft having a flattened face, a bevelled key adapted to lie with its straight side against the flat face of said shaft, a sprocket wheel apertured to receive the shaft and having a recess which receives said bevelled key, and a crank secured upon the projecting end of said shaft and bearing forcibly against the outer face of the sprocket wheel. 2nd. The combination with the crank shaft of a bicycle having a flattened face and a threaded bore in the end thereof, a cone threaded upon said shaft, a bevelled key lying against the flat face of the shaft and bearing upon said cone, a sprocket wheel apertured to receive the shaft and having a recess in which said bevelled key is adapted to lie, a washer fitting on the outer end of the shaft and lying against the face of the sprocket wheel, a crank adapted to be screwed into the threaded bore of the shaft and to bear forcibly against said washer, and means for locking said crank.

**No. 68,397. Rubber Tire.** (*Bandage de caoutchouc.*)

Ira Poffenberger, Stephen B. Payne, and T. J. Frank, all of Urbana, Ohio, U.S.A., 9th August, 1900; 6 years. (Filed 26th June, 1900.)

*Claim.*—1st. In a tire for wheels comprising a rubber tread, having longitudinal openings, and slots provided at predetermined intervals on the inner circumference of said rubber tread, the combination of a flange intermediate the tread and wheel felly, and a block having transverse holes and a screw-threaded opening at right angles to said transverse openings, said block inserted in the slots in said tread and the transverse holes registering with the longitudinal openings in the rubber tread, with a shank screw-threaded at both ends and adapted to pass through the wheel felly and flange and screw into said block, the protruding end adapted to receive a nut, and wire passing through said longitudinal opening in the tread and the transverse opening in the block, substantially in the manner and for the purpose described. 2nd. In a portable tire for wheels comprising a rubber tread having longitudinal openings, and slots at predetermined intervals on the inner circumference of said tread, with one or more sections of wire passing through said longitudinal openings in the tread, the combination of a convex flange intermediate the tread and steel tire, said flange provided with burs on the side adjacent the steel tire and surrounding the bolt openings, with an eye block inserted in the lot in the tread, and the eye arranged to register with the longitudinal opening in the tread for the passage of the wire, said eye bolt adapted to receive a screw-threaded shank, the opposite end protruding through the flange and felly to receive the nut to secure the parts together, substantially as shown and in the manner specified. 3rd. In a rubber tire for wheels, the combination of a rubber tread, having longitudinal openings therein and one or more sections of wire passing through said openings, a flange intermediate the tread and wheel felly, said flange provided with holes at predetermined intervals and the holes having burs on the side adjacent the felly, and blocks having a screw-threaded opening registering with the tire

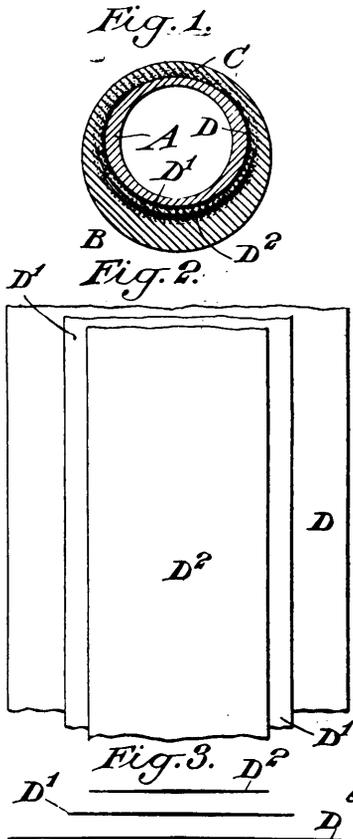
bolt holes in the felly, said block adapted to be inserted in the rubber tread and having transverse openings in the tread for the passage of



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the wires, with a screw-threaded shank passing through the felly and flange and screwing into the block and adapted to be held in place by a nut, substantially as shown and in the manner specified.

No. 68,398. Tire. (Bandage.)

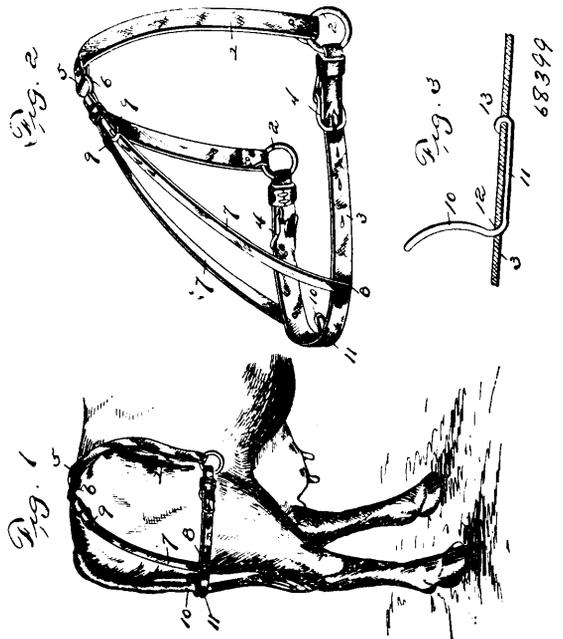


68398

Henry Adam Middleton, Erie, Pennsylvania, and Charles A. Rohde, Milwaukee, Wisconsin, U.S.A., 9th August, 1900; 6 years. (Filed 30th June, 1900.)

Claim.—1st. The combination with a pneumatic tire, of a punctureless strip inserted in its wall, the said strip comprising a fabric impregnated and coated with a layer of comminuted fibre, rubber, a toughening material, such as litharge and a binder, such as sulphur or antimony. 2nd. A punctureless strip for tires, comprising a fabric impregnated and coated with a mixture composed of comminuted fibre, rubber, a toughening material, such as litharge, and a binder, such as sulphur or antimony. 3rd. A punctureless strip for tires, comprising a fabric impregnated and coated with a mixture composed of comminuted fibre, rubber, litharge, antimony, sulphur and lime. 4th. A punctureless strip for tires, comprising a fabric impregnated and coated with a mixture composed of comminuted fibre, rubber, a toughening material, such as litharge, antimony and sulphur. 5th. A punctureless strip for tires, comprising a fabric impregnated and coated with a mixture composed of comminuted fibre, rubber, a toughening material, such as litharge, antimony, and a colouring material, such as vermilion. 6th. In a pneumatic tire, comprising a tubular sheath, an air tube and one or more layers of fabric interposed between the sheath and air tube, the said air tube having its side walls materially thickened to strengthen the tire at those points, substantially as set forth. 7th. A pneumatic tire, comprising a tubular sheath, an air tube and one or more layers of fabric interposed between the sheath and the air tube, the said air tube having in cross section, a circular inner wall and an elliptical outer wall for producing thickened portions at the sides of the air tube, substantially as set forth.

No. 68,399. Cow Tail Holder. (Porte-queue de vache.)



Pleasant T. Brock and Joseph E. Corrin, both of Troy, Idaho, U.S.A., 9th August, 1900; 6 years. (Filed 21st July, 1900.)

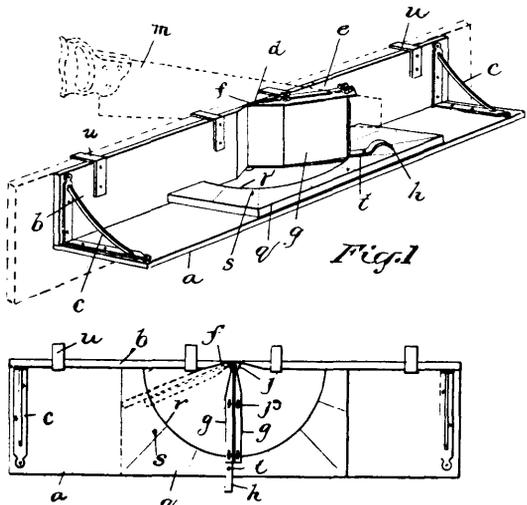
Claim.—1st. A cow tail holder, comprising a harness to be supported upon the cow, and a tail engaging device, which embraces one side only of the tail, and is located upon the inner side of the harness. 2nd. A cow tail holder, comprising a harness to be supported upon a cow, and a hook located upon the inner side of the harness and forming a tail engaging device, which embraces one side only of the tail. 3rd. A cow tail holder, comprising a harness for application to an animal, and a tail engaging device, located upon the inner side of the harness and formed from a single length of wire bent intermediate of its ends into a loop-shaped hook, the opposite end portions being brought together into a shank, the opposite ends of which are passed through openings in a portion of the harness, the outer end of the shank being upset against said harness.

No. 68,400. Carpenter's Mitre Box. (Boîte à onglet.)

John Robert Smith, Toronto, Ontario, Canada, 9th August, 1900; 6 years. (Filed 27th July, 1900.)

Claim.—1st. A carpenter's mitre box, embracing in its construction a base, a side at a right angle to the base, a vertical slot in the side, a saw guide pivotally connected to the base having a slot opposed to the vertical slot in the side, a gauge connected to the base, provided with a series of stops and a pointer connected to the saw guide adapted to be temporarily held by the stops on the gauge, substantially as specified. 2nd. A carpenter's mitre box,

embracing in its construction a base, a side rigidly held at a right angle to the base, a vertical slot in the side, a curved recess in the



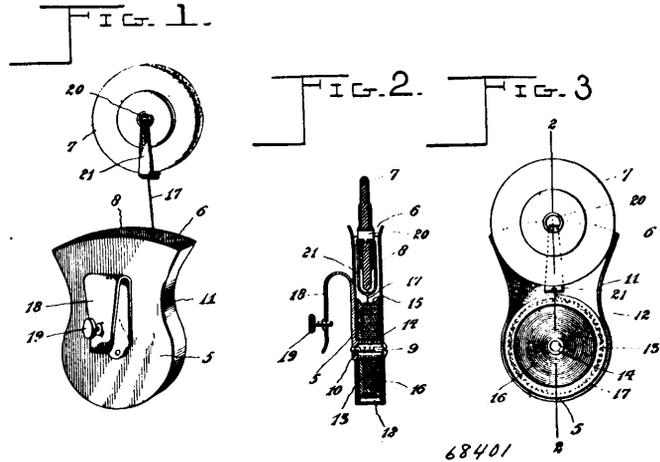
inner face of the side, contiguous to the slot, in combination with a saw guide embracing in its construction an oscillating strap provided at its inner end with a pivot pin to enter a socket in the base, opposed to the middle of the vertical slot, two vertical plates mounted on the oscillating strap, having a saw slot between them, straps located along the top of the plates, bolts passing through the upper and lower straps adjustably and rigidly holding the vertical plates in position, a pointer for the saw guide, a gauge mounted on the base provided with a series of upwardly directed stops to engage the pointer, substantially as specified. 3rd. A carpenter's mitre box, embracing in its construction a base, a side held rigidly at a right angle to the base, a vertical slot in the side, in combination with a saw guide embracing in its construction an oscillating strap provided at its inner end with a pivot pin to enter a socket in the base opposed to the middle of the vertical slot, two vertical plates mounted on the oscillating strap, having a saw slot between them, straps located along the top of the plates, bolts passing through the upper and lower straps adjustably and rigidly holding the vertical plates in position, the oscillating strap projecting beyond the vertical plates and serving as a pointer, and a gauge mounted on the base provided with a series of upwardly directed stops to engage the pointer, substantially as specified. 4th. A carpenter's mitre box, embracing in its construction a base, a side held rigidly at a right angle to the base, a vertical slot in the side, a curved recess in the inner face of the side contiguous to the slot, in combination with a saw guide embracing in its construction an oscillating strap provided at its inner end with a pivot pin to enter a socket in the base opposed to the middle of the vertical slot, two vertical plates mounted on the oscillating strap having a saw slot between them, straps located along the top of the plates, bolts passing through the upper and lower straps adjustably and rigidly holding the vertical plates in position, the oscillating strap projecting beyond the vertical plates and serving as a pointer, and a gauge mounted on the base provided with a series of upwardly directed stops to engage the pointer, and hangers connected to the side to engage the material, substantially as specified.

**No. 68,401. Clasp. (Aqrafe.)**

Agnes Anastasia Colfer, Point St. Charles, Quebec, Canada, 9th August, 1900; 6 years. (Filed 28th July, 1900.)

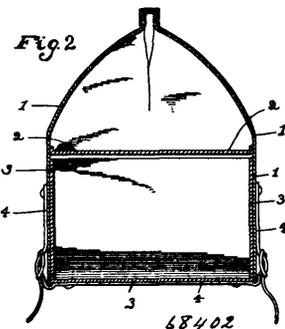
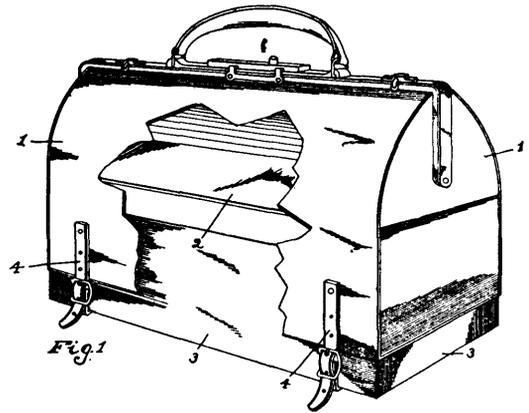
*Claim.*—1st. As a new article of manufacture, a clasp for erasive rubbers, comprising a casing, an automatic take-up spool therein, a cord or its equivalent connected to the spool, and a clamping device on one side of the casing, substantially as described. 2nd. As a new article of manufacture, a clasp for erasive rubbers, comprising a

casing having an open mouth, an upstanding arm projecting from one side of the casing, a clamping screw carried by said arm, a



spring-actuated spool journaled in the casing, and a cord or tape coiled on the spool and connected to a clip, substantially as and for the purposes described. 3rd. As a new article of manufacture, a clasp for erasive rubbers, comprising a casing having a flared mouth and a tubular spindle, a removable face plate secured to one side of the casing, a clamp on a permanent side of the casing, a spring-actuated drum journaled on the spindle, a clip, and a cord or tape coiled on the spool and attached to the clip, substantially as described.

**No. 68,402. Valise or Hand Satchel. (Valise, etc.)**

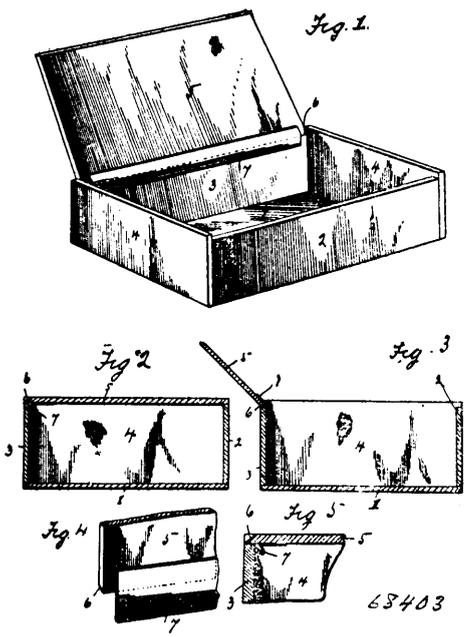


Charles La Fayette Gilbert, Cleveland, Ohio, U.S.A., 9th August, 1900; 6 years. (Filed 11th June, 1900.)

*Claim.*—1st. A valise or hand satchel consisting of the body portion hinged at its upper portion to swing outward, with a fixed partition beneath and in proximity to the hinges, and walls depending below the said partition, and a lower compartment having

means attached thereto for engaging means on the outer walls of the depending portion for adjustably securing the same within the open lower end of the said body portion, substantially as shown and described. 2nd. A valise or hand satchel consisting of the body portion having the upper portions of its sides adapted to open outward, with a fixed partition below and in proximity to the pintles of the hinges and walls depending below said partition and open at the bottom, a lower compartment adapted to be inserted within the open bottom of said body to telescope therewith, and straps secured to the bottom of the lower compartment and adapted to engage means on the outer walls of the body portion, substantially as and for the purpose specified.

**No. 68,403. Display Box. (Boite d'etalage.)**



Joseph H. Weeks, Battle Creek, Michigan, U.S.A., 9th August, 1900; 6 years. (Filed 5th April, 1900.)

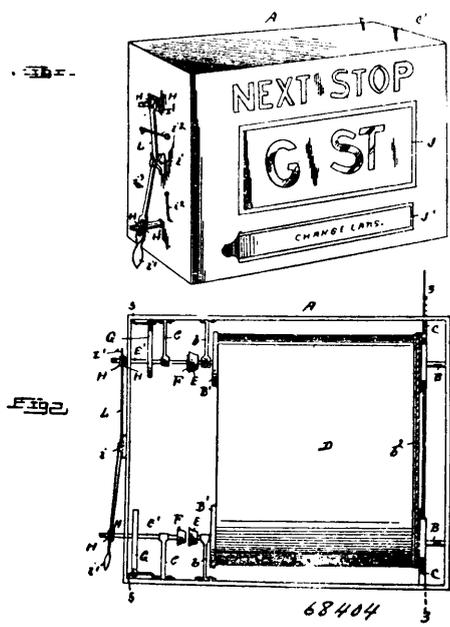
*Claim.*—1st. The combination with a box, one side of which has a square or horizontal top edge, of a lid connected at or near one edge thereto and having that edge where the connection occurs chamfered or bevelled on the outer side, substantially as and for the purpose specified. 2nd. The combination with a box, one side of which has a square of horizontal upper edge, of a lid having an exteriorly chamfered edge and a flexible strip connecting the chamfered edge of the lid with said side of the box, substantially as described. 3rd. The combination with a box, of a lid having an edge chamfered on the outer side, and a flexible strip secured to the inner surfaces of the box and lid and unattached to the chamfered edge of the lid, substantially as described. 4th. The combination with a box, one side of which has a square or horizontal upper edge, of a lid hinged thereto and having its hinged edge chamfered on the outside and arranged to co-operate with the square edge of said side, substantially as and for the purpose described. 5th. The combination with a box, of a lid having one edge chamfered, on a flexible strip secured to and connecting the chamfered edge of the lid and the box, sufficient slack or looseness being left in said strip to allow the lid to rest at its chamfered edge upon the edge of the adjacent side of the box, substantially as described. 6th. The combination with a box, of a lid having a chamfered edge, and a flexible strip secured to the lid and box near their meeting edges, the strip being left unattached to said parts immediately adjacent their meeting edges, whereby a relative sliding movement is permitted in the operation of closing the lid and said meeting edges adapted to co-operate for sustaining the lid at an angle to the side of the box, substantially as described.

**No. 68,404. Indicator. (Indicateur.)**

George B. French, Fremont, Nebraska, U.S.A., 9th August, 1900; 6 years. (Filed 9th April, 1900.)

*Claim.*—1st. In an indicator of the class described, the combination, with the case, of the cylinder shafts mounted therein, cylinders secured directly to the shaft, a scroll secured to the cylinders, teeth at one end of the cylinders, detents normally engaging said teeth and means for alternately operating said cylinders, substantially as described. 2nd. In an indicator of the class described, the combination with the case, of the shafts therein, cylinders secured directly to the shafts, a scroll secured to the cylinders, teeth upon one end of each

cylinder, a spring detent normally engaging with the teeth, means for releasing said teeth, and means for automatically and alternately



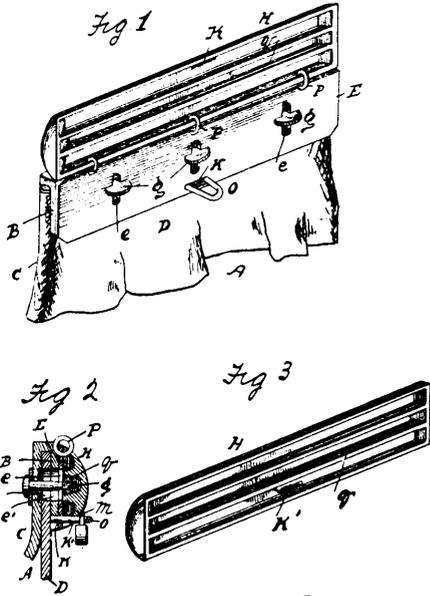
imparting motion to said cylinders, substantially as described. 3rd. In an indicator of the class described, the combination with the case, of the shafts, cylinders secured directly to said shafts, a scroll secured to the cylinders, driving shafts mounted in the case outside, and on a line with the center of said cylinders, and capable of longitudinal movement, means for automatically revolving said shafts, and a lever for throwing the inner ends of said shafts alternately into frictional contact with the cylinders, substantially as described. 4th. In an indicator of the character described, the combination with the case, of the shafts, cylinders secured directly to said shafts, friction cups secured to the inner ends of said cylinders, driving shafts also mounted in said casings and outside, and on a line with the center of said cups, friction cones upon the inner ends of said shafts, means mounted on said driving shafts for imparting motion to the cones, and means for throwing said cones into frictional contact with the cups, alternately, substantially as described. 5th. In an indicator of the class described, the combination with the case, of the shafts, cylinders secured directly to said shafts, friction cups secured to the inner ends of said cylinders, driving shafts also mounted in said case and on a line with the center of the cups, a friction cone on the inner end of each driving shaft and movable in but one direction thereon, a spring mounted on each of said shafts for imparting motion thereto, and a lever for throwing the cones of each of the shafts into frictional contact with said cups, alternately, substantially as described. 6th. In an indicator of the class described, the combination with the case, of the cylinders mounted therein, teeth upon one end of each of said cylinders, spring detents normally engaging with said teeth, means for withdrawing them from engagement therewith, friction cups secured to the inner ends of said cylinders, driving shafts also mounted within the case and having longitudinal movement therein, a cone mounted on the inner end of each driving shaft, a pawl on each cone engaging with teeth upon the shaft thereof, a spring mounted on each shaft for imparting motion thereto, and means for throwing said cones, alternately, into frictional contact with their respective cups, substantially as described.

**No. 68,405. Mail Bag Closure. (Fermeture de sac postal.)**

William Bennett, Sharon, Vermont, U.S.A., 9th August, 1900; 6 years. (Filed 19th April, 1900.)

*Claim.*—In a closure for mail bags and the like, the combination of a bag having a folding flap provided with a series of slots and similar slots in its front side adjacent to the mouth thereof, said slots being arranged with their longest axes in a vertical line or transversely of the flap and longitudinally of the bag, turn-buttons on the rear side of the bag adapted to be passed through said slots and turned at right angles thereto to hold the flap and upper end of the front side of the bag closed, a keeper hinged or pivoted at one side to the flap and provided upon its inner side with one or more

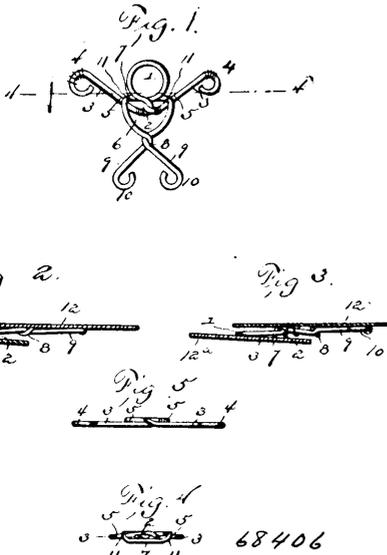
longitudinal channels to receive turn-buttons, whereby said turn-buttons and slots will be inclosed and shielded, and means for



68405-

securing the free side of the keeper to the flap, substantially as described.

**No. 68,406. Hooks and Eyes. (Agrafe et willet.)**



68406

Benjamin Franklin Orenier, Cleveland, Ohio, U.S.A., 9th August, 1900; 6 years. (Filed 11th July, 1900.)

*Claim.*—1st. A garment fastener consisting of an eye member constructed of a single length of wire bent upon itself, forming a segmental eye, of which the side portions are connected at their front ends by the transverse portion, and having its side portions brought together and interlocked by half twists, and having the end portions diverging and terminating in thread seats, and a hook member formed of a single length of wire bent to provide a ring or circular bill having its external diameter slightly greater than the internal diameter of said eye, and having the side portions interlocked by half twists, and having the end portions exterior, extending forward and terminating in thread seats, said front transverse portion of the eye being of a length equal with the diameter of the eye and being arranged throughout in a common plane with said end portions of the hook member, and the sides of said eye, adjacent to the extremities of said transverse portion, being deflected to form off-set stops 11, substantially as specified. 2nd. A garment fastener, consisting of an eye member constructed of a single length of wire bent upon

itself, forming a segmental eye of which the front portion is straight, is equal in length with the diameter of the eye, and is depressed to arrange its upper surface in the plane of the under surfaces of the side portions of the eye, said eye having its side portions brought together and interlocked by half-twists, and having the end portions diverging and terminating in thread seats, and a hook member, formed of a single length of wire bent to form a ring or circular bill of which the external diameter is slightly greater than the internal diameter of the eye, and having the side portions interlocked by half-twists, and having the end portions exterior, and extending forward, and terminating in thread seats, the side portions of the eye being deflected to form off-set stops 11, for the contact with the said end portions of the hook member, to limit the rearward movement of the eye member, and the sides of the ring or circular bill, in a perpendicular plane of said transverse portion of the eye, being spaced apart, and being in common plane parallel with said end portions of the hook member, and with their under surfaces in the plane of the upper surfaces of said end portions, substantially as specified. 3rd. In a garment fastener, a hook member constructed of a length of wire doubled upon itself, and bent to form a ring or circular bill, and having its side portions interlocked by intermeshing half-twists to provide for the contraction and expansion of the circular bill, and extended, forming arms at the sides of the circular bill, and spaced therefrom, and terminating in thread seats, in combination with an eye member having a segmental eye of which the sides bear upon said attaching arms, are deflected in front of said attaching arms to form opposite stops 11, and are connected by a straight transverse front portion, arranged throughout its length in the plane of the said attaching arms slightly less in length than the external diameter of the ring or circular hook bill, and bearing against the under surface of said hook bill in front of the intermeshing half-twists thereof, and held from rearward displacement by the engagement of said off-set stops with the attaching arms, the under surfaces of the portions of the sides of the ring or circular bill which are engaged by said transverse portion of the eye being in the plane of the upper surfaces of the portions of the attaching arms which are engaged by the sides of the eye, substantially as specified. 4th. In a garment fastener, an eye member constructed of a length of wire doubled upon itself and bent to form an eye, the front portion of which is deflected from the plane of the side portions, is of a length equal with the diameter of the eye, and is straight throughout its length, and having the side portions brought together, and interlocked by half-twists to permit contraction and expansion of the ring, and the end portions diverging and bent inward to form threadseats, the upper surface of said front portion of the eye being, throughout its length, in the plane of the under surfaces of the side portions of the eye, substantially as specified. 5th. In a garment fastener, a hook member constructed of a length of wire doubled upon itself and bent to form a ring or circular bill, and having the end portions interlocked by intermeshing half-twists, to provide for the contraction and expansion of the circular bill, and extended, forming shanks which project forward, to leave spaces at opposite sides of the bill, and terminating in thread seats, the sides of the bill adjacent to said intermeshing half-twists being arranged with their under surfaces in the plane of the upper surfaces of the transversely opposite spaced end portions, substantially as specified. 6th. A garment fastener, comprising a hook member having a hook bill 1, of which single thickness side portions are arranged in a common plane, and attaching arms 3, of which spaced bearing points 5 are arranged in a common plane parallel with the said side portions of the hook bill, and an eye member having an eye of which the sides rest upon said spaced bearing points 5, are provided with off-set stops 11, which engage the front sides of the attaching arms, and are connected by a transverse bar 7, which is arranged throughout in a common plane with said attaching arms and passes under said single thickness side portions of the hook bill, substantially as specified. 7th. A garment fastener, comprising a hook member constructed of a single blank of wire, and having a hook bill 7, of which single thickness side portions are separated and arranged in a common plane, and connected attaching arms 3, of which spaced bearing points 5, are arranged at opposite sides of the hook bill in a common plane parallel with said side portions of the hook bill, the upper surfaces of the attaching arms at said points 5, being in the plane of the under surfaces of said side portions of the hook bill, and an eye member having an eye of which the sides rest upon said spaced bearing points 5, are provided with downwardly off-set stops 11, which engage the front sides of the attaching arms, and are connected by a straight transverse bar 7, which, between said stops, is of a length slightly less than the external diameter of the hook bill, is arranged throughout its length in a common plane with said attaching arms, and passes under said single thickness side portions of the hook bill, the upper surface of said transverse bar 7, being in the plane of the under surfaces of the sides of the eye, substantially as specified.

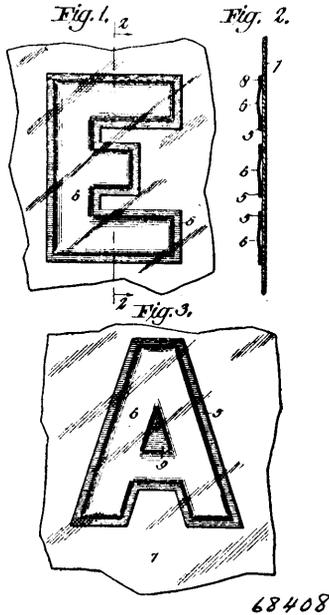
**No. 68,407. Method of Condensing Steam in Steam Engines. (Méthode de condenser la vapeur.)**

Adraimus Anthonic Wilton, Van Reede, (Cornelius Zoon), Dortrecht, Holland, 9th August, 1900; 6 years. (Filed 12th May, 1900.)

*Claim.*—1st. A method of condensing steam in steam engines, wherein the condensation of the exhaust steam of the engine in the

condenser is effected under a pressure of more than one atmosphere, that is to say without the use of an air pump, substantially as set forth. 2nd. In employing the method of condensation characterized in the first claim the cooling of the condenser by means of air, whereupon the heated air is led underneath the fires of the furnaces, substantially as set forth. 3rd. The herein described method of condensing the exhaust steam of steam engines, which consists in subjecting the steam to the action of a condenser in which the pressure is greater than one atmosphere. 4th. The herein described method of condensing the exhaust steam of steam engines, which consists in cooling the condenser by air, and in conducting the air from the condenser to the boiler furnace to be utilized in the draft thereof.

**No. 68,408. Letter Symbols, etc., Attaching Devices.**  
(*Lettre symbole, etc., appareil à attacher.*)



68408

Emil Caesar, New York City, New York, U.S.A., 9th August, 1900; 6 years. (Filed 21st May, 1900.)

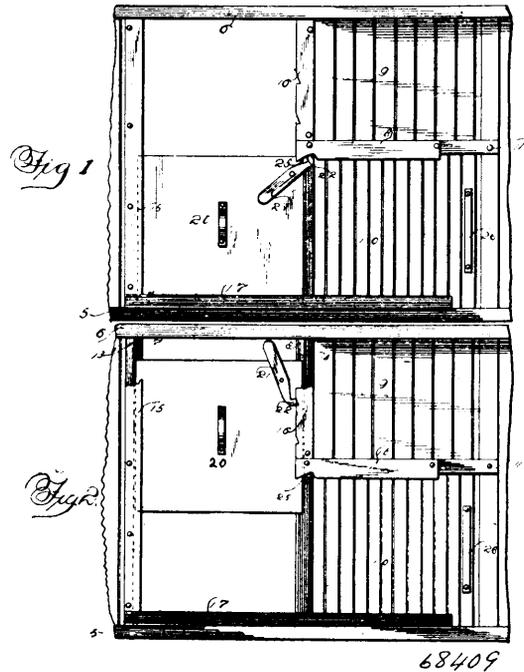
*Claim.*—1st. A mat for securing letters, symbols and emblems to a transparency, the same being attached to the said transparency separately from the device it is adapted to hold, and being provided with an aperture adapted to receive and hold said device, said aperture being so proportioned in size that the walls thereof will form a bearing for the edges of said device, substantially as and for the purpose herein set forth. 2nd. A mat for securing letters, symbols and emblems to a transparency, the same being formed of yielding material, and being attached to the said transparency separately from the device it is adapted to hold, and being provided with an aperture adapted to receive and hold said device, said aperture being so proportioned in size that the walls thereof will form a bearing for the edges of said device, substantially as and for the purpose herein set forth. 3rd. The combination with a letter, symbol or emblem, of a device for securing it to a body or given plane, comprising a mat conforming in contour to said letter, symbol or emblem, and provided with a retaining aperture that is proportioned in size so that the walls thereof will form a bearing for the edges of said letter, symbol or emblem, substantially as and for the purpose herein set forth. 4th. The combination with a letter, symbol or emblem, of a device for securing it to a body or given plane, comprising a mat formed of yielding material, and conforming in contour to said letter, symbol or emblem, said mat being provided with a retaining aperture that is proportioned in size so that the walls thereof will form a bearing for the edges of said letter, symbol or emblem, substantially as and for the purpose herein set forth.

**No. 68,409. Grain Door.** (*Porte à grain.*)

James C. Munroe, William J. Munroe and Roland A. Munroe, all of Sedro Wooley, Washington, U.S.A., 9th August, 1900; 6 years. (Filed 28th July, 1900.)

*Claim.*—1st. In a car, the combination with guideways disposed at an angle to each other, of a door disposed for slidable movement in the guideways successively, and a single latch for holding the door from movement in either guideway. 2nd. In a car, the combination with guideways disposed at an angle to each other, and each comprising a notched plate, of a latch lever pivoted upon the door and

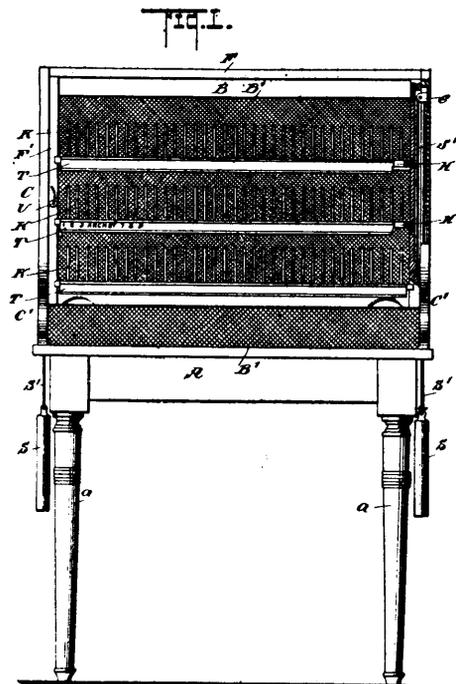
adapted for engagement with the notches of both plates, interchangeably. 3rd. In a car, the combination with guideways dis-



68409

posed at an angle to each other, of a door slidably disposed for movement through both guideways, each of said guideways comprising a notched plate, and a gravity operated lever pivoted to the door for engagement with the notches of each plate, alternately.

**No. 68,410. Arranging Filing Tables for Post Offices.**  
(*Table et case pour matières postales.*)



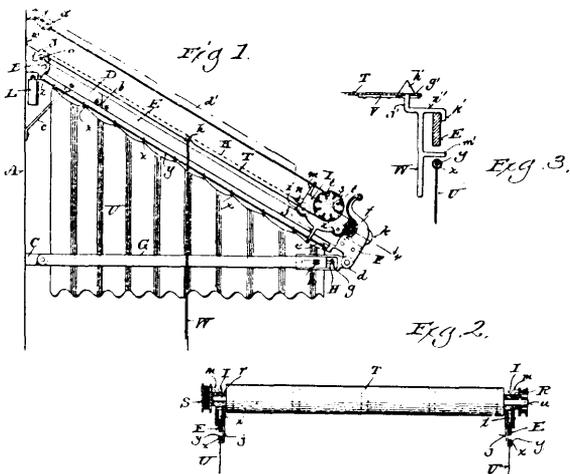
68410

Marcellus Smith Field, Boston, Massachusetts, U.S.A., 9th August, 1900; 6 years. (Filed 30th May, 1900.)

*Claim.*—1st. In an arranging, filing or routing table and case for post offices, a table or base, a frame supported by said table or base, and an arranging, filing or routing case adapted to slide substan-

tially vertically in said frame and over the table, whereby that portion of the surface of the table which is below the case is rendered available for mail matter, substantially as set forth. 2nd. In an arranging, filing or routing table and case for post offices, a table or base, a frame supported by said table or base, an arranging, filing or routing case adapted to slide substantially vertically in said frame and over the table, and means for locking said case at different heights above the surface of the table, substantially as described. 3rd. The herein described improved arranging, filing or routing table and case for post offices, comprising a table or base, a frame, comprising the end walls C and a suitable rear connecting wall B, B', said end walls being formed with vertical slideways, and the routing case, comprising top, bottom, ends, shelves and compartments, said ends F' being formed to engage with and slide in said slideways, whereby the routing case may be moved vertically with relation to the frame and render the entire surface of the table available for mail matter, substantially as set forth.

No. 68,411. Awnings. (Tente.)



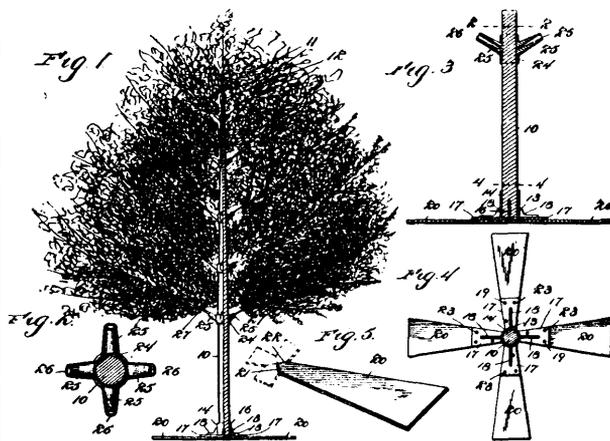
68411

Charles Hans Hansen, Racine, Wisconsin, U.S.A., 9th August, 1900; 6 years. (Filed 10th May, 1900.)

Claim.—1st. The combination with a pair of suitably supported traveller bars, of travellers adapted to move back and forth upon said bars, a transverse roller supported by said travellers, and an awning made stationary at its upper end and secured to said roller at its lower end, and adapted to roll up on said roller as the latter is drawn towards the stationary end of the awning, or to unwind from said roller as the latter is carried outward by the movement of said travellers. 2nd. The combination with a supporting structure and a pair of suitably supported inclined traveller bars extending therefrom, of travellers adapted to move back and forth upon said bars, a transverse roller having journals or arbors mounted in said travellers, spools fast on the projecting ends said journals or arbors, sprocket wheels on the supports of said traveller bars, sprocket chains attached at their forward ends to said travellers and passing over said sprocket wheels, counterbalance weights at the rear ends of said chains, a series of pulleys attached to the supporting structure, cords attached to said spools and in engagement with said pulleys, and an awning secured at one end to said supporting structure and at the other end to said transverse roller. 3rd. The combination with a supporting structure and a pair of suitably supported inclined traveller bars extending therefrom, of a pair of cords supported beneath and parallel with said traveller bars, a pair of awning wings or side pieces suspended from said cords by rings secured to the upper edges of said wings, a pair of travellers adapted to move back and forth upon said bars and having downward extending arms terminating in outwardly projecting ends extending beneath said cords, a transverse roller journaled in said travellers, an awning secured at one end to said supporting structure and at the other end to said transverse roller, and cords secured to said roller for drawing the said travellers upward and thereby simultaneously rolling up the awning on said roller and drawing up the said awning wings on the suspension cords. 4th. The combination with a supporting structure and a pair of inclined traveller bars connected thereto, of a pair of support bars, also connected to said structure and adjustably connected to said traveller bars, a pair of travellers movable upon said traveller bars, a transverse roller journaled in said travellers, an awning secured at its upper end to said structure and at its lower end to said transverse roller, and means for drawing said travellers upward and thereby winding up said awning on said roller. 5th. The combination with a supporting structure and a pair of inclined traveller bars pivotally secured thereto, a pair of brackets secured to the lower ends of said bars and having curved upward projecting portions, a pair of support bars pivotally connected to said structure and adjustably connected to said brackets,

a pair of travellers movable upon said traveller bars, and having forked branches at their lower ends for engagement with the upper projecting portions of said brackets, a transverse roller journaled in said travellers, an awning secured at its upper end to said structure and at its lower end to said transverse roller, and operating cords for drawing said travellers upward and thereby winding up said awning on said roller. 6th. The combination with a supporting structure of a pair of suitably supported traveller bars extending therefrom, a pair of travellers movable upon said bars, a transverse roller journaled in said travellers, an awning secured at its upper end to said structure and at its lower end to said transverse roller, said awning being formed with angular slots adjacent to each edge thereof, weighted rods having angular heads adapted to pass through said slots, and lateral projections adapted to extend above and below said traveller bars, and operating cords for drawing said travellers upward and thereby winding up said awning on said roller. 7th. The combination with a supporting structure of upper and lower brackets extending therefrom, a pair of inclined two-part traveller bars pivotally attached to said upper brackets, hinge plates uniting the two parts of each traveller bar, brackets rigidly secured to the lower ends of said traveller bars, a pair of two-part support bars pivotally attached to the lower brackets on said supporting structure, the two parts of each support bar being adjustably united by slot and bolt connection, and the outer part of each support bar being pivotally connected to the brackets on the lower ends of the traveller bars, a pair of travellers movable upon said traveller bars and having forked branches at their lower ends for engagement with the brackets on the lower ends of the traveller bars, a longitudinally adjustable transverse roller journaled in said travellers, a longitudinally adjustable shaft journaled in the upper brackets on the supporting structure, sprocket wheels on said shaft, sprocket chains attached to said travellers, and passing over said sprocket wheels, counterbalance weights on the free ends of said chains, an awning secured at one end to said supporting structure and at the other end to said roller, and operating cords for drawing said travellers upward, and thereby winding up said awning on said roller. 8th. The combination with a supporting structure of a pair of suitably supported traveller bars extending therefrom, a pair of travellers movable on said bars, and a longitudinally adjustable awning roller comprising the telescoping sections, having outer end discs provided with arbors journaled in said travellers, the said sections being formed of series of T-shaped bars, internal supporting discs and external bands, and the bars of one section being connected to the bars of the other section by a series of clips, each clip having a pair of T-slots to receive one bar of each section.

No. 68,412. Artificial Tree. (Arbre artificiel.)



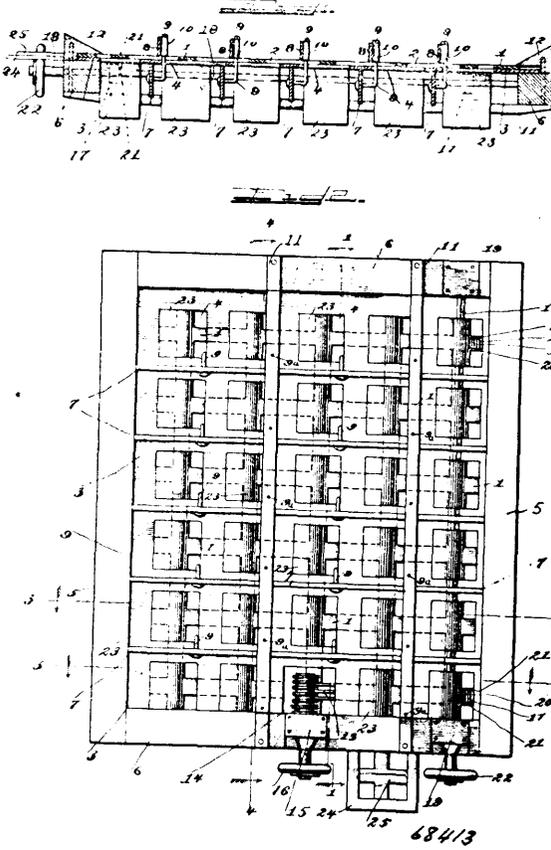
68412

Annas Hummel, Huntingdon, Pennsylvania, U.S.A., 9th August, 1900; 6 years. (Filed 13th July, 1900.)

Claim.—1st. A device of the character described, consisting of a tapered staff and a series of different sized collars fitted thereon for frictional wedging engagement with said staff, each collar having a series of tapered sockets, substantially as described. 2nd. A device of the character described, consisting of a tapered staff and a series of different sized collars fitted on the staff by wedging engagement therewith, each collar provided with a series of radial socketed arms disposed in inclined positions to the vertical axis of the staff, substantially as described. 3rd. A device of the character described, consisting of a staff, a foot piece fitted to the lower end of the staff and provided with a socket and flanges, and a sectional base having its members fastened detachably to the flanges of the foot piece, substantially as described. 4th. An artificial tree, consisting of a staff, a series of collars or sleeves fitted to said staff to hold themselves in place thereon by a wedging action and spaced at proper intervals

along the staff, and boughs or branches fitted removably to each sleeve or collar, substantially as described. 5th. An artificial tree, consisting of a tapered staff, a series of collars fitted to said staff to hold themselves in place by a wedging action and each provided with radial socketed arms arranged in inclined positions to the vertical axis of the staff, and removable boughs having wedging engagement with the socketed arms of each collar, substantially as described. 6th. In a device of the character described, a foot piece provided with a socket and a series of radial flanges, a sectional base, the members of which are bevelled at their inner meeting ends and fitted below the flanges of the foot piece, and means for fastening the base members individually to said flanges of the foot piece, substantially as described.

**No. 68,413. Thresher Screen. (Tamis de moissonneuse.)**



Jens Hansen Jensen, of Minden, Nebraska, U.S.A., 9th August, 1900; 6 years. (Filed 27th July, 1900.)

*Claim.*—1st. In a screen the combination of two apertured plates arranged face to face and relatively adjustable, stringers arranged under and supporting one of said plates and means for adjusting one of said plates with relation to the other, substantially as set forth. 2nd. In a screen, the combination of two relatively adjustable apertured plates arranged face to face, bars arranged across the upper one of said plates for holding it down and bars arranged under the lower one of said plates for holding it up, substantially as set forth. 3rd. In a screen, the combination of two relatively adjustable apertured plates face to face, bars supporting the lower one of said plates and bars supported upon said first bars and extending along the face of the upper one of said plates, substantially as set forth. 4th. In a screen the combination of two relatively adjustable apertured plates arranged face to face, stringers arranged across the face of the upper one of said plates and extending longitudinally of the screen, stringers arranged under the lower one of said plates longitudinally of the screen and means for connecting said stringers together, substantially as set forth. 5th. In a screen, the combination of two relatively adjustable apertured plates arranged face to face, bars secured under and supporting one of said plates, bars extending lengthwise of the upper one of said plates, for holding it down and connections between said bars extending through said plates, substantially as set forth. 6th. In a screen, the combination of two relatively adjustable apertured plates arranged face to face, bars secured under and supporting the lower one of said plates, bars

extending lengthwise of the upper one of said plates for holding it down and connections between the said upper and lower bars extending through the apertures of said plates, substantially as set forth. 7th. In a screen, the combination of two relatively adjustable apertured plates arranged face to face, bars secured under and supporting the lower one of said plates, bars arranged over the face of the upper one of said plates for holding it down and means for supporting said second bars upon said first bars independently of the upper one of said plates, substantially as set forth. 8th. In a screen, the combination of two relative y adjustable apertured plates arranged face to face, supporting bars arranged under the lower one of said plates, L-shaped bolts secured to the lower bars and passing upwardly through the apertures of said plates and adjustably secure to said upper bars, substantially as set forth. 9th. In a screen, the combination of two relatively adjustable apertured plates, cross beams arranged under the lower one of said plates, stringers extending over the upper one of said plates, hook shaped bolts secured to said beams and passing upwardly through said plates and having their hooks engaging said stringers, substantially as set forth. 10th. In a screen the combination of two relatively adjustable plates arranged face to face, and supported at their edges, means for supporting the lower one of said plates at intervals between its edges and means located at intervals between the edges of the upper one of said plates for holding it down in contact with the lower one of said plates, substantially as set forth. 11th. In a screen, the combination of two relatively adjustable apertured plates arranged face to face, a rack bar having transversely elongated teeth secured to one of said plates, a worm engaging said rack bar for moving said plates in one direction, a second rack bar also secured to said plate, a pinion engaging said rack bar and having its axis arranged lengthwise of the axis of said worm for moving said plate in another direction, substantially as set forth. 12th. In a screen, the combination of two relatively adjustable apertured plates arranged face to face, a rack bar secured to the bottom of one of said plates, a worm engaging said rack bar for moving said plate in one direction, a second rack bar also secured to the bottom of said plate and a shaft having a pinion engaging said second rack bar for moving said plate in another direction, substantially as set forth. 13th. In a screen, the combination of two relatively adjustable apertured plates arranged face to face, a pair of rack bars secured to one of said plates, a shaft, pinions rotatable with but movable longitudinally of said shaft and engaging said rack bars respectively for moving said plate in one direction, and means for moving said plate in another direction, substantially as set forth. 14th. In a screen, the combination of two relatively adjustable apertured plates arranged face to face, a pair of rack bars secured to one of said plates, a shaft, pinions engaging said rack bars respectively and rotatable with but movable longitudinally on said shaft, a third rack bar also secured to said plate and having its teeth arranged at an angle to the teeth of said pair of rack bars and a worm engaging said third rack bar, substantially as set forth. 15th. In a screen, the combination of two relatively adjustable plates, a frame for supporting said plates, a projection extending through said frame and representing the apertures in one of said plates and a projection extending from the other of said plates and overlapping said first projection and representing the apertures in the latter said plate for constituting a gauge indicating the size of mesh of the screen, substantially as set forth. 16th. In a screen, the combination of two relatively adjustable apertured plates and the inclined shields 12, overlapping the edges of the adjustable one of said plates, substantially as set forth. 17th. In a screen, the combination of a plate forming the mesh of the screen, bars arranged under said plate and supporting the same at intervals and the supporting beams 11, arranged transversely of and supporting said cross bars, substantially as set forth. 18th. A thresher sieve, consisting of the frame A, the fixed lower screen B, the movable upper screen C, the bar D, having the threaded lug d, the fixed plate F, secured to frame A, and having horizontal slot f, the screw E, swivelled adjustably in said slot and working in said lug, the racks G, secured to the screen C, and the crank shaft I, rotating and sliding in bearings on said frame, the said shaft being provided with the pinions H H, as and for the purpose set forth. 19th. In thresher sieves, the frame A, having vertical, horizontally slotted plate F, secured thereto, the screen B, made fast thereto, the movable screen C, the bar D, secured to screen C and having threaded lug d, at one end, and the adjusting screw E, engaging said lug and the slot in plate F, in combination with means substantially as described for adjusting screen C, at right angles to bar D, in the manner set forth. 20th. In a thresher screen, the combination of two screens each having quadrangular openings and each individual opening being of greater area than the material surrounding it and means for effecting a relative adjustment between the openings in said screens both longitudinally and laterally with relation to each other, substantially as set forth. 21st. In a thresher screen the combination of two screens arranged face to face, and each having square openings, each individual opening in said screens being of greater size than the area of the material surrounding it, and means for adjusting one of said screens both laterally and longitudinally whereby each of said openings may be divided into two or four openings of various sizes of the same formation, substantially as set forth. 22nd. In a thresher screen the combination of two apertured relatively adjustable plates, means for adjusting said plates and a lock for holding said plates against relative movement, substantially as set forth.



and extending from one side of said oil hole around and in the direction of the length of the bearing and returning to the other side of said oil hole. 2nd. A journal bearing having its wearing surface composed of two dissimilar metals, an oil hole formed therein, one or more strips of one of said metals extending from one side of said oil hole around and in the direction of the length of the bearing and returning to the other side of said oil hole, and an oil groove or grooves formed in said strips and conforming thereto. 3rd. In a journal bearing, an outer shell or casing for insertion in a journal box, an inner shell forming part of the wearing surface, and an intermediate layer of fusible metal holding said shells together and also forming part of the wearing surface.

**No. 68,417. Ledger. (Grand livre.)**

Fig. 1

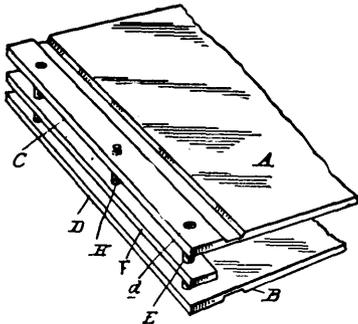
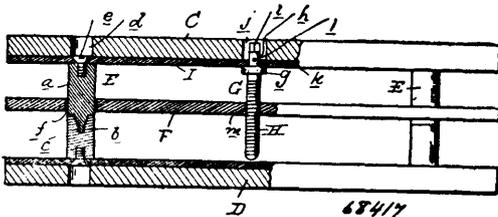


Fig. 2



Charles F. Backus, Detroit, Michigan, U.S.A., 10th August, 1900; 6 years. (Filed 17th May, 1900.)

*Claim.*—1st. A binder comprising independent top and bottom covers, each having a hinged strip at its rear edge, a multiple of upright posts connected at their ends to the upper and lower strips an independent clamping plate intermediate the said covers, and means for locking the plate to, and at different distances from one of the covers. 2nd. A binder comprising independent top and bottom covers each having a hinged strip at its rear edge, a multiple of upright posts connected at their ends to the upper and lower strips, an independent clamping plate intermediate the said covers and slidingly engaging the posts and means for locking the plate to and at different distances from one of the covers. 3rd. A binder comprising independent top and bottom covers each provided with a rigid hinged strip, a multiple of upright sectional posts connected at their ends to the upper and lower strips, the post ends being flush with the covers, an independent clamping plate slidingly engaging the posts intermediate the strips, and means for locking the plate to, and at different distances from one of the covers. 4th. A binder comprising independent top and bottom covers each having a hinged rigid strip at its rear edge, a multiple of upright sectional posts connected at their ends to the strips, an independent clamping plate intermediate the strips and slidingly engaging the posts, and a threaded bolt swivelled in one of the strips and having a threaded engagement with the clamping plate, adapted when operated to move and lock the plate at different distances from one of the covers.

**No. 68,418. Geometric and Ornamental Figure and Pattern Producing device. (Patron.)**

Isaac Meigs Bragg Thompson, Wayne, Pennsylvania, U.S.A., 10th August, 1900; 6 years. (Filed 14th April, 1900.)

*Claim.*—1st. A device employed in the production of polygonal and other figures, consisting of a body, a plane of which is provided with a series of concentric circles, and a series of long radial lines, each crossing a number of said circles, the outer ends of which radial

lines terminate as to some at one and as to others at another, distance from the centre, said radial lines serving to indicate by their

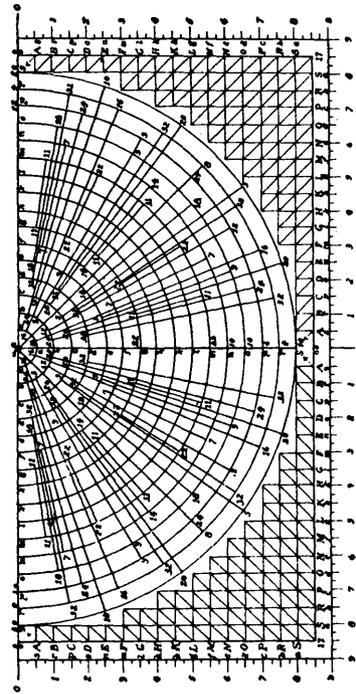
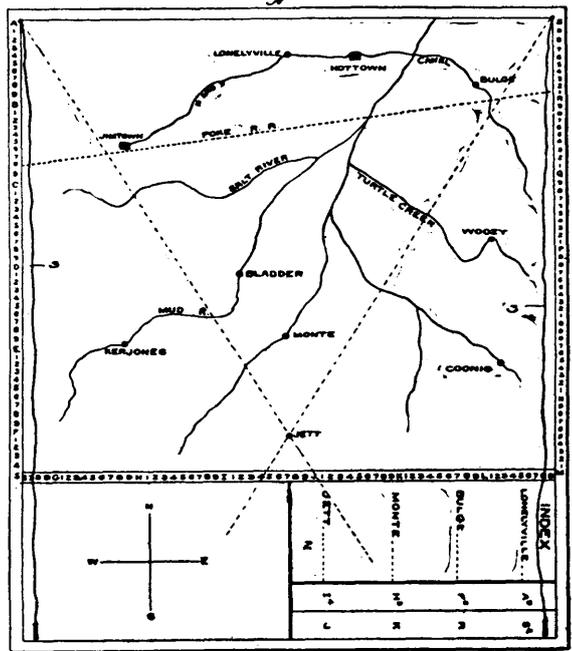


Fig. 1. 68418

intersections with the circles, the points from which geometric figures may be developed, substantially as set forth. 2nd. A device employed in the production of polygonal and other figures, consisting of a body, a plane of which is provided with a series of concentric circles, a group of equi-distant radial lines, which cross a number of the circles, and which terminate as to their outer ends at one of the circles, and a second group of equi-distant radial lines, differing in distribution from the series first-mentioned, which cross a number of the same circles crossed by the radial lines of the first group, and terminate at a circle other than that at which terminate the lines of the first group, substantially as set forth. 3rd. A device employed in the production of polygonal and other figures, consisting of a body, a plane of which is provided with a series of concentric circles, a group of equi-distant radial lines which cross a number of the circles and which terminate as to their outer ends at one of said circles, a second group of equi-distant radial lines differing in distribution from the series first-mentioned, which cross a number of the same circles crossed by the radial lines of the first group, and terminate at a circle other than that at which terminate the lines of the first group, indicating marks applied at the ends of the lines of the first group, other indicating marks applied at the ends of the lines of the second group, substantially as set forth. 4th. A device employed in the production of polygonal and other figures, consisting of a body, a plane of which is provided with a series of concentric circles, a group of equi-distant radial lines which cross a number of said circles and terminate as to their outer ends at one of the circles, a second group of equi-distant radial lines differing in distribution from the series first-mentioned, the outer extremities of which terminate on a circle other than the last above referred to, a series of numbers applied at the ends of the first series of radial lines, and a series of other numbers applied at the ends of the second series of radial lines, the highest number on a given circle indicating the whole number of radial lines terminating on such circle and other numbers on said circle being divisors of said highest number, substantially as set forth. 5th. A device employed in the production of polygonal and other figures, consisting of a body, a plane of which is provided with a series of concentric circles, a group of equi-distant radial lines which terminate as to their outer ends at one of said circles, a second group of equi-distant radial lines differing in distribution from the series first-mentioned, the outer extremities of which terminate on a circle other than that last above referred to, numbers applied on the circle at the end of the first series of radial lines, other numbers applied on the circle at the ends of the second series of radial lines, the highest number applied to a given circle representing the whole number of radial lines terminating on such line, other numbers on said line being divisors of the highest number referred to, the numbers arranged in the ordered sequence, described, substantially as set forth. 6th. A chart containing a series of concentric circles, a diametric line extending across said

circles, indicators such as alphabetical letters applied along said line to each of said circles, a group or series of equi-distant radial lines, the outer ends of which terminate on one of the circles, other groups or series of radial lines, the members of each group being equi-distant from each other, and all the lines composing each of which respective groups or series terminate on a circle on which no other group of radial lines terminate, the distribution of the lines of each group or series being different from that of every other series, and figures applied to the outer ends of the radial lines, substantially as set forth. 7th. A chart containing a series of concentric circles, a diametrical line extending across said circles, indicators such as alphabetical letters applied along said line to each of said circles, a group or series of equi-distant radial lines the outer ends of which terminate on one of the circles, other groups or series of radial lines the members of each group being equi-distant from each other, all the lines composing each of which respective groups or series terminate on a circle on which no other group of radial lines terminate, the distribution of the lines of each group or series being different from that of every other group or series, the upper portion of the diametrical line being utilized as one radial line of each of the groups or series, and figures applied to the outer ends of the radial lines, substantially as set forth. 8th. A chart containing a series of concentric circles a diametrical line extending across such circles, indicators such as alphabetical letters applied along said line to each of said circles, a group or series of equi distant radial lines the outer ends of which terminate on one of the circles, other groups or series of radial lines the members of one group of which terminate on one circle, the members of another group of which terminate on another circle, and so on, a rectangular figure inclosing said circles, lines extending perpendicularly to the lines of said rectangular figure and spaced apart a distance equal to the distance from one concentric circle to the other, the inner ends of such last mentioned lines terminating in the vicinity of said circular figure, substantially as set forth. 10th. A chart consisting of a body provided with a series of concentric lines, a series of groups of radial lines, the members of one group of which terminate on one circle, the member of another group of which terminate on another circle, the member of another group of which terminate on another circle, and so on, figures applied to said lines, a rectangular figure inclosing said circles, inwardly extending lines perpendicular to the lines of said rectangular figure and spaced apart a distance equal to the distance from one circle to the other, such inwardly extending lines terminating in the vicinity of the circle, letters applied to the circles and corresponding letters applied to the inwardly extending lines, diagonal lines extending across the squares formed by said inwardly extending lines, and letters applied to the vicinity of such diagonal lines, substantially as set forth. 12th. A chart, consisting of a series of circles, divisions applied to one of said circles, numerals applied to the division points indicative of their relation to the circle, a rectangular figure inclosing said circles, points of division indicated on the lines of said rectangular figure, which points of division are spaced apart a distance corresponding to that which separates each circle from its neighbour, substantially as set forth. 13th. A chart, consisting of a series of circles, a sequence of indicating marks applied to the circles in successive order, points of division indicated on one of said circles, a rectangular figure inclosing said circles, points of division indicated on the lines of said rectangular figure at distances apart corresponding to the spaces between the circles, indicating marks applied to the divisions on the lines of the rectangular figures corresponding to the markings or indicators applied to the successive circles, substantially as set forth. 14th. A chart, consisting of a series of circles, divisions applied to one of said circles, numerals of different values applied to the division points in the arrangement specified, the highest number being the least common multiple of the others, a rectangular figure inclosing said circles, and points of division indicated on the lines of said rectangular figure, which points of division are spaced apart a distance corresponding to that which separates each circle from its neighbour, substantially as set forth.

No. 68,419. Map. (Carte.)

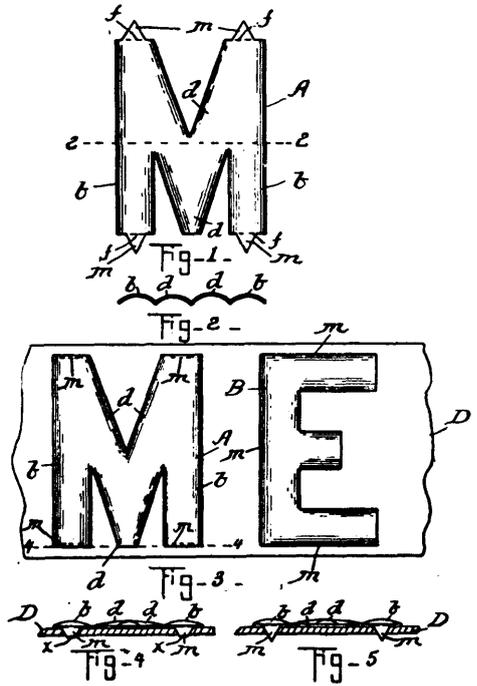


68419

Henry Lewis Bentley, Abilene, Texas, U.S.A., 10th August, 1900; 6 years. (Filed 3rd July, 1900.)

Claim.—As a new article of manufacture, a map, drawing or similar device provided with an index with the names of places or localities designed thereon, each name of a place in the index being accompanied by two distinguishing characters, rows of distinguishing numbers arranged along the edge or edges of the map or drawings or similar device, and an indicator secured to each upper right and left hand corner of the map and adapted to be crossed and indicate at their point of crossing the place desired to be located, substantially as and for the purpose set forth.

No. 68,420. Detachable Sign Letters. (Enseigne.)

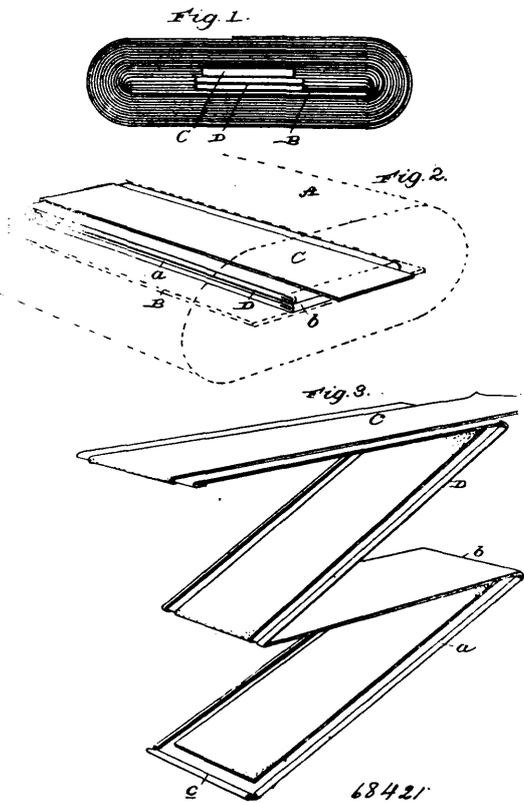


68420

Charles Frederick Johnston, Boston, Massachusetts, and Olney T. Inman, Burrillville, Rhode Island, both in the U.S.A., 10th August, 1900; 6 years. (Filed 4th June, 1900.)

*Claim* --1st. A domed surface metallic letter having projecting therefrom and intergral therewith a brad or tooth whereby said letter may be detachably secured to a backing. 2nd. A domed, enamel surface metallic block letter having attaching brads, or teeth, for securing said letter to a frictional backing, and so arranged that the normal surface of the letter alone is exposed after such attaching.

**No. 68,421. Sample Holder.** (*Porte échantillon.*)



68421

Herbert J. Breeze and Henry P. Riemenschneider, both of Port Huron, Michigan, U.S.A., 10th August, 1900; 6 years. (Filed 12th April, 1900.)

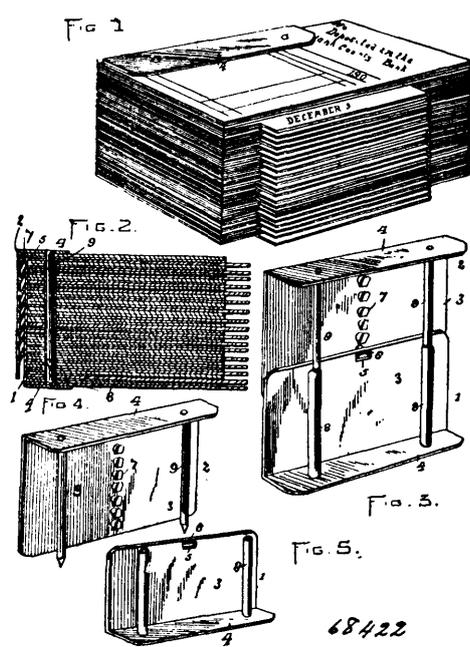
*Claim*.—1st. The combination with a bolt of goods, of a sample holder, removably arranged in the bolt and disposed lengthwise thereof, the said holder being formed of a continuous strip of material, and comprising a plurality of superposed folds, and having the bights of the alternate folds arranged at the opposite ends of the holder, and an end portion arranged at the outside of the holder, whereby the sample may be drawn from the holder as used without removing said holder from the bolt, substantially as specified. 2nd. As a new article of manufacture, the sample holder described made in one piece of sheet metal and having a plurality of superposed folds, formed by bending the piece of sheet metal upon itself whereby the bights of the alternate folds are arranged at opposite ends of the holder, and also having the lip *c* at one of its ends, substantially as specified.

**No. 68,422. Binding Device.** (*Appareil à lier.*)

Charles F. Snider, Mount Pleasant, Iowa, U.S.A., 10th August, 1900; 6 years. (Filed 11th July, 1900.)

*Claim*.—1st. A binder of the class described, comprising an extensible clamp having overlapping back pieces working one within the other said back pieces being provided with complementary locking elements held in engagement by the expansive pressure of the bound matter, substantially as set forth. 2nd. A binder of the class described, comprising an extensible clamp having overlapping back pieces working one within the other, one of said back pieces being provided with a single locking element, and the other back piece being provided with a series of transversely aligned locking elements co-operating with said single element and held interlocked therewith by the expansive pressure of the bound matter, substantially as set forth. 3rd. A binder of the class described comprising an extensible clamp consisting of a pair of separable members having overlapping back pieces working one within the other, the back piece of one clamp member being provided with a single locking slot or opening and the back piece of the other clamp member having a series of catch tongues, co-operating with said slot or opening, substantially as set forth. 4th. A binder of the class described consist-

ing of an extensible clamp comprising a pair of separable clamp members, each having a back piece and an offset clip flange at one

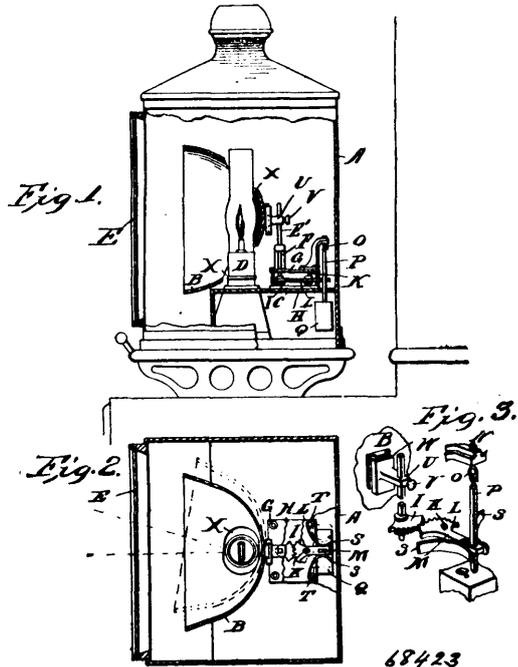


68422

edge of the back piece, one of said clamp members having projected from its clip flange one or more sleeves, and provided in its back piece with a single slot or opening, and the other clamp member having projected from its clip flange one or more pins telescoping within said sleeves and provided on its back piece with a transversely aligned series of laterally projecting catch tongues co-operating with said slot or opening, substantially as set forth.

**No. 68,423. Reflector for Headlights.**

(*Réfecteur pour fanaux.*)



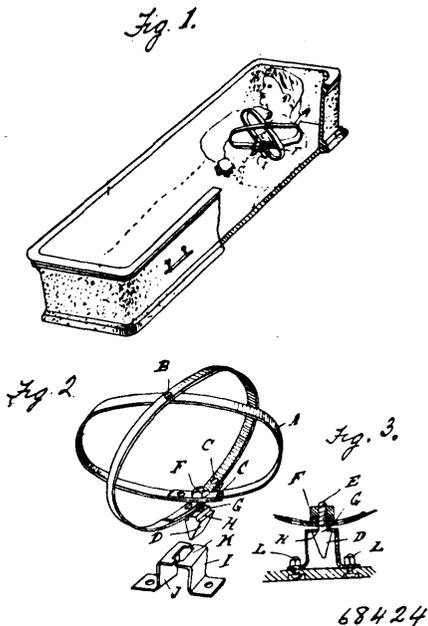
68423

Nathaniel Abbott Terrell and August Moser, both of Charlottesville, Virginia, U.S.A., 10th August, 1900; 6 years. (Filed 12th July, 1900.)

*Claim*.—1st. In an automatic reflector for headlights, the combination of the reflector *P*, adjustably secured to the posts *E*<sup>1</sup>, the

toothed segments I and L, secured to the post E and K, the leader M, secure I to toothed segment L, weight Q and springs S S permanently secured to posts T T, all arranged substantially as set forth. 2nd The combination of a fixed lamp D, a movable reflector B, the adjustable bracket V, the toothed segments I and L, the leader M and weight Q, substantially as set forth. 3rd. As an improvement in headlights, the combination of the base or bench, the supporting post stepped therein the lower end of said post carrying a tooth segment, the upper end carrying the reflector, said reflector post and segment being arranged to be moved up by swing of the weight caused by the movement of the tilting of the car on the track, substantially as described. 4th. An attachment for headlights for locomotives consisting of a framework of an upper and lower plate, a post stepped in said lowered plate and extending through and journaled in the upper plate, a shaft K stepped and journaled in and between said plates, the shaft carrying toothed, segment L and leader M, and the post toothed segment I, said post also carrying bracket U, said bracket having dovetailed slot W for carrying the movable reflector, substantially as described. 5th. The combination in an attachment for headlights consisting of a framework, the rotatable post and shaft, the toothed segments mounted thereon, the swinging weight Q adapted to impart motion to the reflector through the medium of said segments and a leader, the free end spring governor S S, all arranged for joint operation, as herein described. 6th. In an automatic reflector for headlights, the combination of the reflector B, adjustably secured to the post E, by means of the brackets U, the toothed segment I immovably secured to the post E, the toothed segment L secured to the post K, said post being journaled in the upper and lower plates G and H, said segment I meshing with the segment, and being provided with a leader M said leader being provided with a slot R for the purpose of receiving the hook rod P, the weight Q suspended below the leader M, the springs S S, secured to posts T T, and adapted to impart to the leader M, a horizontal motion in conjunction with the weight Q, substantially as described. 7th. As an improvement in headlights, the combination of the base or bench, the supporting post stepped therein, the lower end of said post carrying a toothed segment, the upper end carrying the reflector behind the lamp, said post and reflector being adjustably connected by means of the bracket U, and adapted to be moved by the action of the gravity on the weight Q, substantially as described. 8th. The combination in an attachment for headlights, consisting of a reflector B, of a framework, the rotatable posts E and K, the toothed segments I and L mounted thereon, the swinging weight Q adapted to impart motion to said reflector through the medium of the intermediate mechanism, said weight and mechanism being contained within the headlight box A, substantially as described.

No. 68,424. Coffin Attachment. (Appareil de cercueil.)



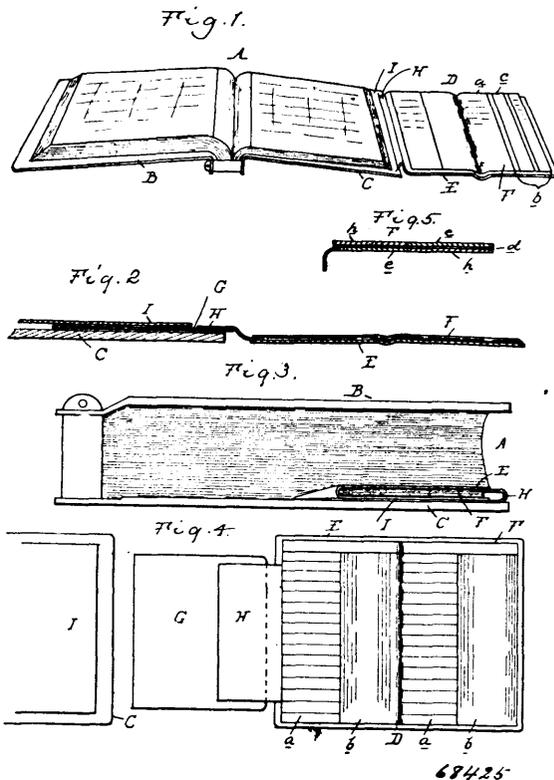
68424

Edward Miller, Vienna Cross Roads, Ohio, U.S.A., 10th August, 1900; 6 years. (Filed 31st July, 1900.)

Claim.—1st. In an attachment for coffins, the combination with a band having a hole at each end thereof, a wedge secured to said ends through said holes, said wedge having a shoulder thereon, and means secured to a coffin for engaging with the shoulder of said wedge, whereby the band is secured in position, all substantially as shown and described. 2nd. In an attachment for coffins, the com-

ination with a pair of bands, of a locking wedge secured to said bands, means carried by said coffin for engaging with said wedge, all substantially as shown and described. 3rd. In an attachment for coffins, the combination with a pair of bands crossing each other and secured together at such crossing, a locking wedge secured to said bands, locking means for engaging with said wedge to hold the wedge and bands in position, said locking means being secured to a coffin, all substantially as shown and described. 4th. In an attachment for coffins, the combination with a pair of bands secured together at their centres and crossing each other and having a series of holes at each of their ends, a wedge having a shank projecting therefrom for fitting within a pair of holes in each of said bands, a nut for screwing upon said shank for binding said bands to said wedge, a pair of spring clips secured to a coffin having a space between them, said locking clips adapted to engage with said wedge, whereby the bands and wedge are held firmly in position, all substantially as shown and described. 5th. In an attachment for coffins, the combination with a pair of bands secured to each other midway their length and adapted to cross each other, a series of holes in each end of said bands for adjusting the space embraced by said bands a locking wedge having a shank projecting therefrom adapted to pass through a pair of holes in each of said bands, a rectangular base at the lower end of said shank and upon said wedge of less width than the wedge, a locking nut for binding said bands upon said base, spring clips mounted adjacent to each other and having notches opposite each other, said clips engaging with the upper edges of said locking wedge when said wedge is passed between said clips, all substantially as shown and described.

No. 68,425. Index Leaves. (Feuille d'index.)



68425

William N. Winfield, Detroit, Michigan, U.S.A., 10th August, 1900; 6 years. (Filed 7th May, 1900.)

Claim.—The combination in an index balance book, of a leaf, of the tablets e, reinforcing the outer and inner portions of opposite sides, and the tablets h on the remaining portions of said leaf.

No. 68,426. Tablet Forming Machine.

(Machine à faire des tablettes.)

Abraham Rowland Morris, Philadelphia, Pennsylvania, U.S.A., 10th August, 1900; 6 years. (Filed 3rd May, 1900.)

Claim.—1st. In a machine of the character described, a lower reciprocating plunger, two adjusting brackets located on the shaft of said plunger, a second shaft, means for reciprocating said second shaft, and two take-ups each comprising a forked end portion sliding on the shaft of the plunger, a body portion and a split sleeve portion surrounding the second shaft and adapted to be clamped thereon, substantially as and for the purposes described. 2nd. In a machine



between the ends of the spindle, and a longitudinal bottom oil groove at the outer end of the spindle, a box fitting the spindle and cored near its outer end to form with the spindle, an oil chamber, the outer end of the bottom oil groove opening into said chamber, substantially as shown and described.

**No. 68,429. Overalls. (Pantalon d'ouvrier.)**



68429

Robert John Smith, Ottawa, Ontario, Canada, 10th August, 1900; 6 years. (Filed 26th July, 1899.)

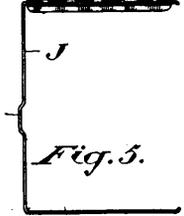
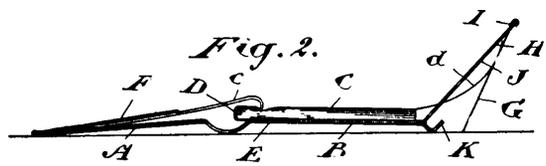
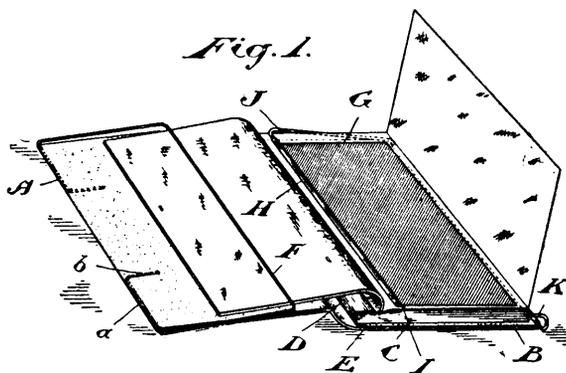
*Claim.*—1st. As an improved article of manufacture, a pair of overalls a semi-waistband divided vertically at the back, the back open to permit the overalls to be drawn over the pants of the wearer, said opening at the back cut to form overlapping flaps B, B, and sewn to said waistband, said overalls closed at the side seams, said flaps held closed by shoulder straps D, D, crossed at the back and attached to said bands and fastened to the front bib E, substantially as set forth. 2nd. As an improved article of manufacture, a pair of overalls having side seams closed at the waist and a seam open at the back, as set forth, said opening permitting the overalls to be drawn over the pants of the wearer. 3rd. As an improved article of manufacture, a pair of overalls, open at the back and provided with overlapping flaps B, B, to close the opening, as set forth.

**No. 68,430. Black Leaf Check Book. (Livre de chèques.)**

Cyrille Leveque, of Toronto, Ontario, Canada, 10th August, 1900; 6 years. (Filed 28th July, 1899.)

*Claim.*—1st. In a black leaf check book, the combination of the book, the covers, one of which has a pocket formed therein, and a U-shaped metal case embracing the back of the book, the underside of the case being sufficiently long to enter the said pocket, a black leaf holder comprising a U-shaped frame one side of which is journalled at the outer side of the said cover and the other of which holds the black sheet and is contiguous to the bound side of the book when a check is being made out, substantially as and for the purpose specified. 2nd. In a black leaf check book, and in the black leaf holder thereof, the plate I, bent over to form a long tube open at one side, in combination with the rod J, cut away at one side, substantially as and for the purpose specified. 3rd. In a black leaf check book, a U-shaped black leaf holder having one side journalled in a pocket at the outer edge of a cover in combination with means for attaching a black leaf to the other side of the U, which leaf is thus so carried by the holder that no bar interferes with the hand in turning it, substantially as and for the purpose specified. 4th. In a black leaf check book, the U-shaped black leaf holder one side of which is journalled in a pocket at the outer edge of a cover and which has its end bent to form a loop to come into contact with the counter when the holder is thrown outwardly so that pressure on the book will return the holder to its normal position, substantially as and for the purpose specified. 5th. In a black leaf check book the U-shaped black leaf holder, one side of which is journalled in a pocket at the

outer edge of a cover and which has a portion thereof bent to form a loop to come into contact with the counter when the holder is



68430

thrown outwardly so that pressure on the book will return the holder to its normal position, substantially as and for the purpose specified. 6th. In a black leaf check book, a U-shaped black leaf holder having one side journalled in a pocket at the outer edge of a cover in combination with means for attaching a black leaf to the other side of the U, which leaf is thus so carried by the holder that no bar interferes with the hand in turning it, and a loop formed on a convenient part of the holder for engagement by the thumb or finger, substantially as and for the purpose specified.

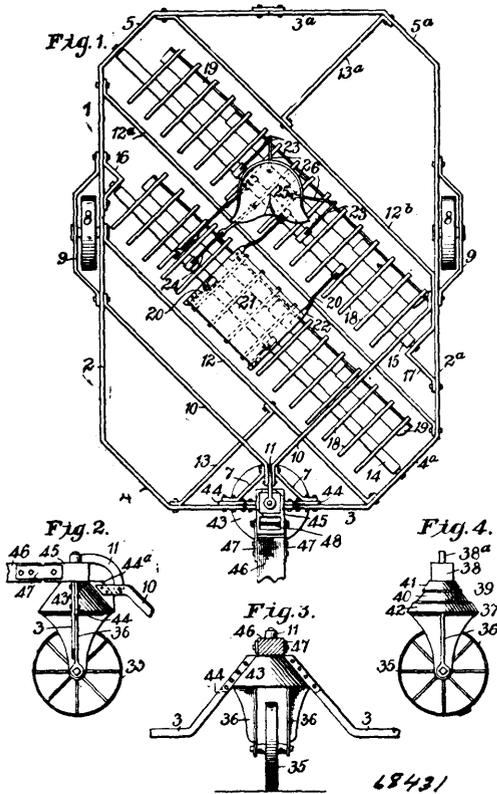
**No. 68,431. Street Scraping Machine.**

(Machine à nettoyer les rues.)

Lorin W. Towne, Keene, New Hampshire, U.S.A., 10th August, 1900; 6 years. (Filed 28th July, 1900.)

*Claim.*—1st. The combination with a skeleton frame provided with wheels and draft devices, of a plurality of rock shafts provided with spring arms, a seat, and means connecting said seat with said shafts to rock the latter simultaneously. 2nd. The combination with a skeleton frame provided with wheels and draft devices, of a plurality of rock shafts provided with spring arms, a foot rest and means between the same and said shafts for rocking the latter simultaneously upon their axis. 3rd. In a road or street scraping machine, the combination with a frame provided with supporting wheels and draft devices, of a plurality of diagonally arranged shafts and rods journalled in said frame, a plurality of scraper blades independently connected to said shafts by spring arms, means for rocking said shafts and rods simultaneously to raise or depress said scraper blades, and adjusting means for insuring different degrees of pressure upon the road surface by the two sets of scraper blades. 4th. The combination with a skeleton frame provided with wheels and draft devices, of a plurality of rock shafts provided with spring arms, a seat, means connecting said seat with said shafts to rock the latter simultaneously in one direction, a foot rest, and means between the same and said shafts for rocking the latter in the opposite direction. 5th. The combination with a frame provided with supporting wheels and draft devices, of a plurality of rock shafts journalled in said frame, a plurality of overlapping scraper blades independently supported by said arms, a seat and lever and link connections between the seat and said shafts whereby weight applied to the seat rocks the shafts rearwardly, a foot rest and lever and link connections between the same and the shafts whereby

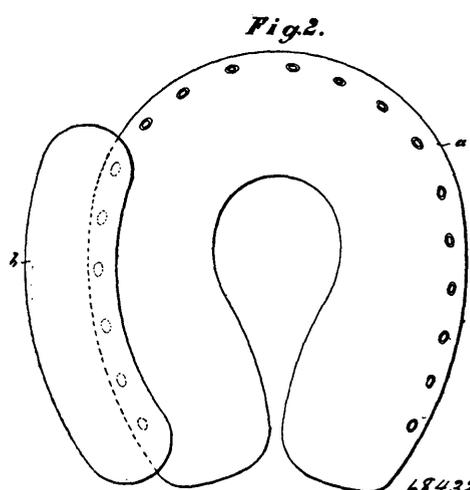
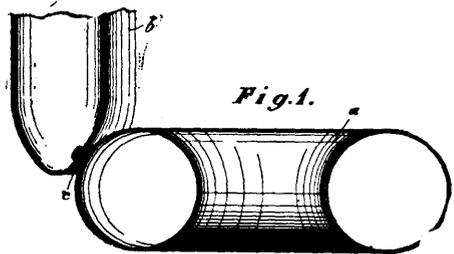
weight applied to said rest serves to rock said shafts forwardly. 6th. The combination with a skeleton frame provided with support-



ing wheels and draft appliances, of a plurality of diagonally arranged shafts journaled in said frame, a plurality of overlapping scraper blades independently connected to said shafts by spring arms, an upwardly projecting and rearwardly inclined lever arm attached to each shaft, a seat supported upon said lever arms, an upwardly projecting and forwardly inclined lever arm attached to each shaft and a foot rest supported upon said lever arms. 7th. The combination with a skeleton frame provided with supporting wheels and draft attachments, of diagonally arranged rock shafts journaled in said frame, overlapping scraper blades spring supported upon each shaft, rearwardly and forwardly inclined lever arms projecting upwardly from each shaft, a seat and a foot rest supported respectively upon the rearwardly and the forwardly inclined lever arms and a hand lever operatively connected to said shafts. 8th. The combination with a skeleton frame provided with supporting wheels and draft devices, of diagonally arranged rock shafts mounted in said frame, overlapping scraper blades spring supported on said shafts and means for utilizing the weight of the operator to depress and to elevate said scraper blades. 9th. The combination with a frame provided with supporting wheels and draft devices, of diagonally arranged rock shafts mounted in said frame, scraper blades spring supported on said shafts and means for utilizing the weight of the operator to depress and to elevate said scraper blades. 10th. The combination with a frame, supporting wheels therefor and a head supported upon at least one of said wheels and provided with conical bearing surfaces, of a conical hood carried by said frame and fitting over said said bearing surfaces. 11th. The combination with a frame, supporting wheels therefor and a head supported upon at least one of said wheels and having a conical bearing surface, of a conical hood rigidly connected to said frame and resting on said bearing surface. 12th. In a road or street scraper, the combination with a frame having scraper blades and rear supporting wheels, of a conical hood mounted in the front end of the frame and a front wheel having a conical head fitting into said hood. 13th. In a road or street scraper, the combination with a frame having adjustable scraper blades, and a conical hood, of supporting wheels one of which has a conical head that fits into and supports said hood. 14th. In a road or street scraper, the combination with a frame

having scraping blades adjustably supported thereby and a conical hood at one end, of supporting wheels one of which has a head that supports and projects through said hood, and a draft pole fastened to the projecting end.

**No. 68,432. Support for the Neck and Head.**  
(Support de tiles, etc.)



Charlotte Von Hillern-Flinsch, née Von Hillern, Hamburg, German Empire, 10th August, 1900; 6 years. (Filed 26th July, 1900.)

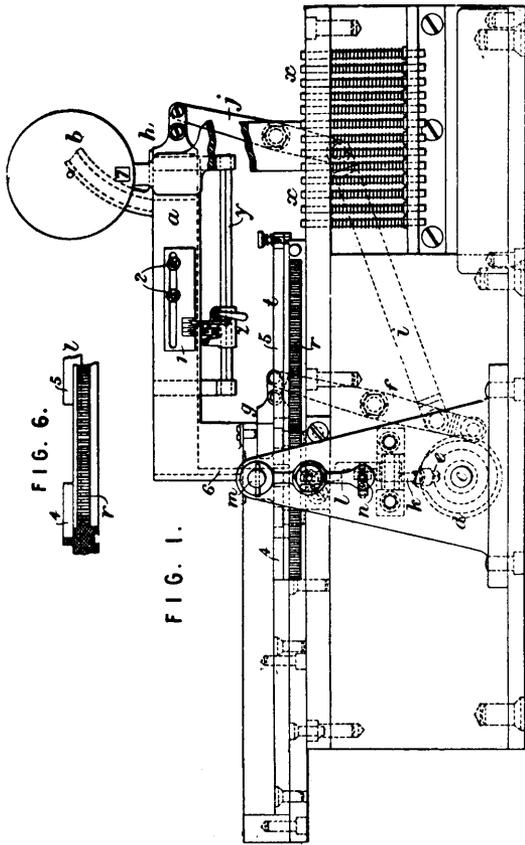
Claim.—A support for the neck and head consisting of a curved roll-shaped bolster or air cushion *a*, arranged to fit the neck, and a cushion *b* adapted to be detachably attached to the former by means of press buttons *c* or similar devices, constructed and arranged, substantially as hereinbefore described.

**No. 68,433. Apparatus for Justifying Set Types.**  
(Appareil pour justifier les caractères.)

Henry James Sydney Gilbert Stringer, Westbourne Park, County of London, and Frederick Wicks, Esher, County of Surrey, both in England, 10th August, 1900; 6 years. (Filed 6th December, 1899.)

Claim.—1st. In combination with a type setting machine and its indicators showing numbers of spaces and length of lines, a justifying apparatus comprising a set of finger keys and spring stop pins for a rack slide with upwardly projecting rib and for a second slide with rib, carried on the rack slide, a shaft carrying a cam for working a pair of feeders in type channels, and a cam causing a cross-head and spring rod to reciprocate, the said rod having a blade adapted to pass through a slot of a type channel and extrude space types, and a tappet to meet the ribs of the slides, the said crosshead having connected to it a spring pawl engaging with teeth of a ratchet wheel, on the shaft of which is a pinion engaging the teeth of the rack slide, constructed and operating, substantially as and for the purpose set forth. 2nd. The combination with a type setting

machine and its indicators showing numbers of spaces and length of lines, of a justifying apparatus adapted to act upon spaces of unit



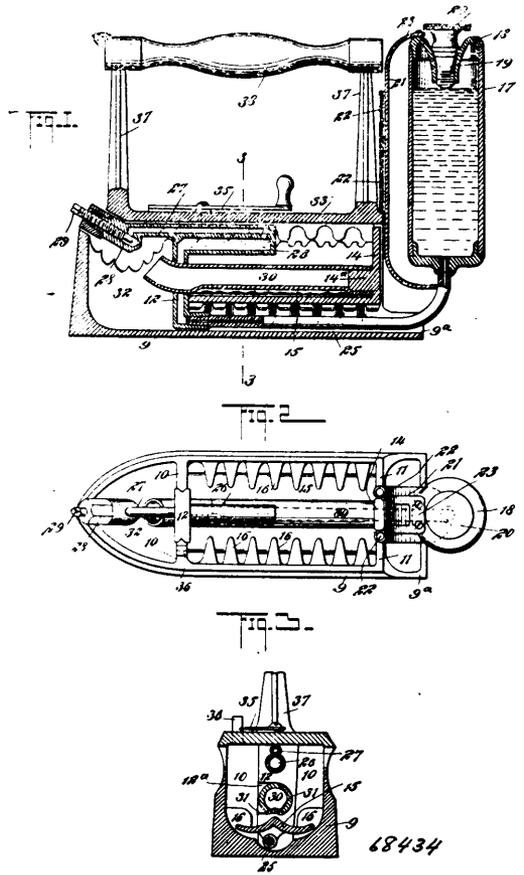
thickness and operating to reject excess of spaces without substituting others for those that are rejected as set forth.

**No. 68,434. Sad Irons. (Fer à repasser.)**

Iver Wickland, Superior, Wisconsin, U.S.A., 10th August, 1900; 6 years. (Filed 26th July, 1900.)

*Claim.*—1st. A sad iron, comprising a body, a reservoir supported thereon, a retort mounted in the body and having communication with the reservoir, a valve commanding the outlet from the retort, and a burner in which said valve discharges. 2nd. A sad iron, having a body, a box mounted vertically therein and forming an oil cup in front thereof, a reservoir having communication with the box, a retort communicating with the box, a tube communicating with the retort, a valve controlling the outlet from the retort, the said tube being extended forward over the oil cup, and a burner in which said valve discharges. 3rd. A sad iron, having a body, a box fitted vertically therein and forming an oil cup in the front thereof, a burner extended through the box and having openings therein rearward of the box, a retort communicating with the box, a tube passing from the retort forwardly over the oil cup, and a valve controlling the outlet of the second named tube and discharging into the burner. 4th. A sad iron, having a body, a reservoir sustained thereon, a shield mounted in the body near the bottom thereof, a tube passing from the reservoir beneath the shield, a box mounted in the body and communicating with the tube, the box being situated forward of the shield and forming an oil cup in the forward part of the body, a burner tube mounted in the box and extending over the shield, a retort communicating with the box, a tube leading from the retort forwardly over the oil cup, and a valve controlling the outlet of the tube and discharging into the burner tube. 5th. A sad iron having a body, a shield plate mounted thereon, an oil supply tube passing into the body beneath the shield, and burner devices mounted in the body above the shield. 6th. A sad iron comprising a body, a plate fitted to slide therein at the rear thereof and disposed vertically, a shield attached to the plate and extending forward over the bottom of the body, a box mounted vertically in the front portion of the body and forming an oil cup forward thereof, a burner tube mounted in the box and extending rearwardly over the shield, the burner tube extending forward of the box, an oil supply tube passing into the body beneath the shield and communicating with the box, a retort communicating with the box, and a valve controlling the outflow from the retort, such valve discharging into the

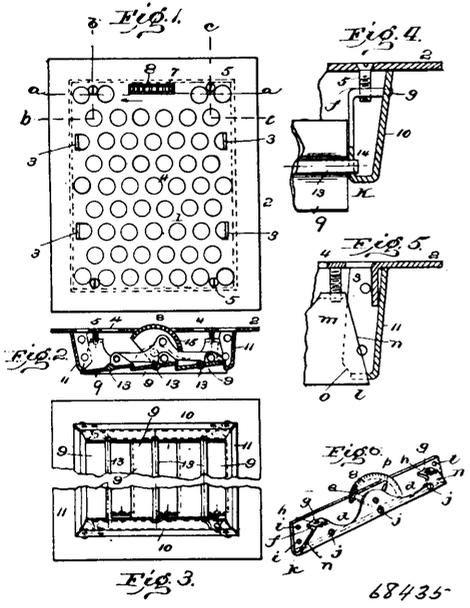
open front end of the burner tube. 7th. A sad iron having a body, a shield mounted therein, an oil supply tube passing into the



body beneath the shield, and burner devices mounted in the body over the shield. 8th. A sad iron, having a body with internal lugs or webs projecting from the side walls thereof a shield with notched side edges receiving the lugs or webs, spaces being left between the side edges of the shield and the side walls of the body, an oil supply pipe passing into the body beneath the shield, and burner device located in the body above the shield. 9th. In a sad iron, the combination with a body and vapour generating and burning devices, of a plate slidably fitted in the body and disposed vertically, and a shield attached to and supported by the plate, the shield extending horizontally beneath the burner devices. 10th. A sad iron, having a body, a box mounted therein, an oil supply tube communicating with the box, a valve controlling the outflow from the retort, and a burner tube supported by the box and having its receiving end juxtaposed to the valve. 11th. A sad iron, comprising a body portion with an oil cup at one end thereof, a wall or partition mounted in the body portion at the side of the oil cup, vapour generating devices, and a burner tube supported at the side of the partition opposite the oil cup. 12th. A sad iron, having a box slidably mounted therein, a retort communicating with and supported by the box, and a burner tube also supported by the box and receiving the vapour from the retort. 13th. A sad iron, having a body with a notch, a cover adapted to engage one end in the notch, and a latch pivoted on the cover, and a notched stud on the body and adapted to be engaged by the latch. 14th. An oil reservoir for sad irons, the reservoir having a cap or head with a funnel formed thereon and projecting into the reservoir. 15th. An oil reservoir for sad irons and the like, the reservoir having a cap or head serving to close the upper end thereof and formed with a funnel projecting into the reservoir, and a closure for such reservoir. 16th. An oil reservoir for sad irons and the like, the reservoir having a funnel formed at the upper end thereof and projected into the reservoir. 17th. A burner tube for sad irons and the like, the burner tube having a groove disposed longitudinally therein and being slit transversely at each side of the groove, for the purpose specified. 18th. A burner tube for sad irons and the like, the burner tube having a groove extending longitudinally therein, and being formed with two lines of orifices on each side of the groove. 19th. A sad iron, having a body with heating devices therein and also having a notched portion at its top, a cover mounted on the body, and a latch pivoted on the cover and movable to engage the said notched portion of the body to hold the cover in place. 20th.

A sad iron, having a body, a shield to be mounted therein in proximity with the bottom thereof, an oil supply tube passed over the bottom beneath the shield, a burner located above the shield, and a retort in communication with the oil supply tube and discharging to the burner. 21st. A sad iron, having a body, a shield fitted therein and extending horizontally in proximity with the bottom of the body, an oil supply tube extending under the shield, and vapour generating and burning devices communicating with the supply tube and situated over the shield. 22nd. A sad iron, having a body formed with vertical guides thereon, a plate slidably fitted in the guides, a shield carried horizontally by the plate in proximity to the bottom of the body, a supply tube passed beneath the shield, and vapour generating and burning devices communicating with the supply tube and situated above the shield. 23rd. A sad iron, having a body, a box fitted in the front portion thereof and forming an oil cup in front of the box, the box being in communication with the oil supply, a retort communicating with the box, and a burner situated rearward of the box. 24th. A sad iron, having a body, means situated therein and forming an oil cup at the front of the body, such means comprising a retort for the generation of vapour and being in communication with a source of oil supply, and a burner fed from the said retort and situated rearward of the said means.

**No. 68,435. Hot Air Register. (Registre à air chaud.)**

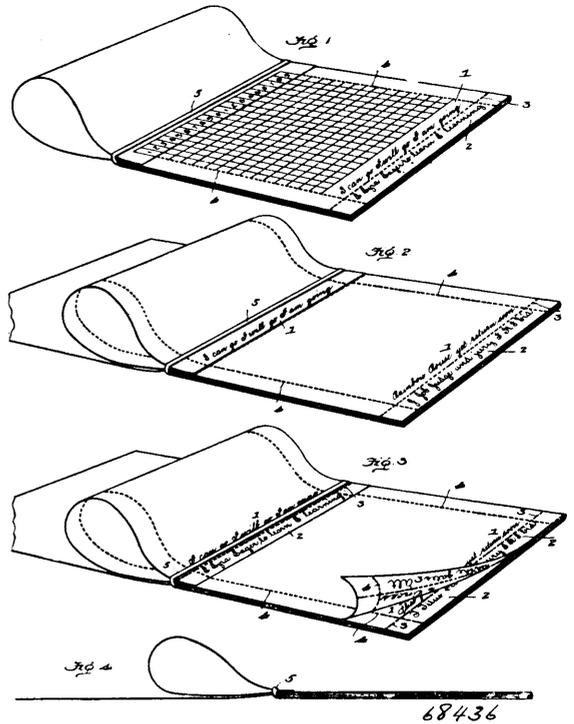


Charles E. Wolf and Adam R. Wolf, both of Altoona, Pennsylvania, U.S.A., 10th August, 1900; 6 years. (Filed 25th July, 1900.)

*Claim.*—1st. The hereinbefore described end plate 10, for hot air register frames consisting of a single piece or plate of metal bent trough-shaped and having one edge scalloped and the projecting ends of said scalloped side being bent at right angles and reduced to form rivets, *g*. 2nd. In a hot air register, a frame consisting of end pieces or plates bent to a trough shape and having one edge scalloped, *d*, and the projecting ends *c*, bent at right angles and reduced to form rivets *g*, side pieces or plates 11, having one longitudinal edge and the ends *m*, bent at right angles, and means for securing said end and side pieces together. 3rd. In a hot air register, a frame comprising end pieces 10, bent to a trough shape, the two walls of said end pieces being secured together, and the side pieces 11, having their ends *m*, bent at right angles and secured to said end pieces. 4th. In a hot air register, the combination with the frame comprising the end pieces 10, bent to a trough shape and having their walls secured together, and the side pieces 11, having their ends *m*, bent at right angles and secured to said end pieces, of the shutters 9, journalled in said end pieces, and means for operating said shutters. 5th. In a hot air register, the combination with a frame comprising the end pieces 10, bent to a trough shape and formed with right angled perforated, side pieces 11, having flanges at right angles, and right angled ends, a face plate 2, having perforations corresponding to said perforated ends, and bolts 5, for securing said plate to said ends. 6th. The combination, in a hot air register, with a face plate 2, having guiding clips 3, struck or stamped therein at intervals adjacent to its side edges and bent at right angles, of a frame comprising side and end pieces 11, 10, the latter being bent upwardly and at right angles to form lugs to receive fastening screw bolts 5, to secure the face plate and frame together. 7th. The combination in a hot air register, of the trough-shaped end pieces 10, the side

pieces 11, secured thereto, a face plate 2, having an elongated slot 7, formed therein, secured to said end pieces, a segment 8, pivoted in one of the end pieces and extending into said slot, a series of shutters 9, journalled in the end pieces, and a governing rod 16, connecting said shutters and the segment.

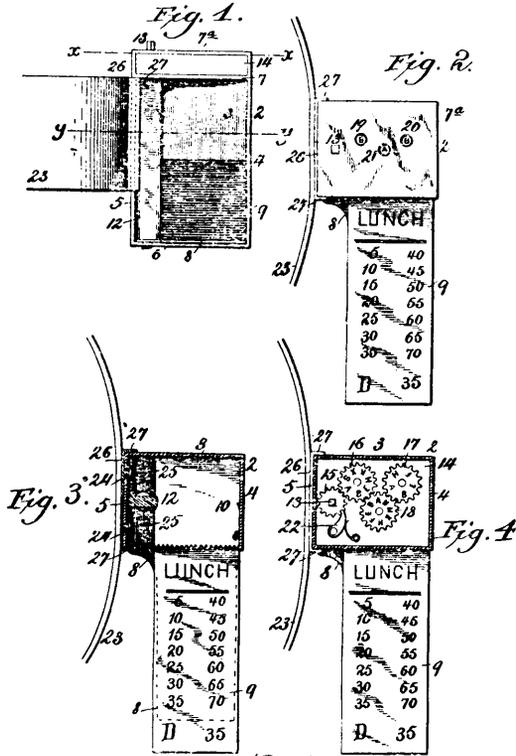
**No. 68,436. Copy Book. (Livret.)**



James William Williams and Robert Johnston Tilford, both of Louisville, Kentucky, U.S.A., 10th August, 1900; 18 years. (Filed 15th June, 1900.)

*Claim.*—1st. A copy book, the leaves whereof are hinged at their upper ends and at their lower ends are provided with copy running in reverse directions on their opposite sides, and readable when the hinge is at the top of the page, whereby the book can be written from either cover, one page of each leaf from one cover and the other page of each leaf from the other cover. 2nd. As an improved article of manufacture, a copy book, the leaves whereof are hinged at their upper ends, their lower ends provided with a plurality of different styles of copy forms, each set running in reverse directions on the opposite sides and readable when the hinge is at the top of the leaf, the end copy of each leaf only being detachable, whereby each leaf and each page thereof is provided with different styles of copy from cover to cover. 3rd. A copy book comprising the covers bound at their top edges, their lower edges provided with the copy running in opposite directions on their outer sides, the lower edges of the leaves between the covers provided with the copy running in opposite directions on both sides and readable when the hinge is at the top of the page, whereby the book may be written from either cover from end to end. 4th. A copy book, the leaves whereof at the edges parallel to the binding are provided with the copy in combination with a loop transversely secured at the binding edge for use in the way stated. 5th. A copy book ruled parallel with the binding, the leaves whereof are provided at their lower edge with the copy running in reverse direction on their opposite sides and readable when the hinge is at the top of the page, in combination with means whereby the copy leaf may be slidably held above the writing on the next succeeding page from either cover. 6th. A copy book, the leaves whereof at the edges parallel to the binding are provided with the copy, their right angled edges provided with a line of perforations, for the purpose stated. 7th. As an improved article of manufacture, the herein described copy book comprising the covers bound at their upper edges, their lower edges provided with copy, the leaves between the covers provided with copy running in pairs in opposite directions on their opposite sides and readable when the hinge is at the top of the page and separated by a line of perforations, the side edges of each leaf provided with a line of perforations intersecting the transverse line of perforations. 8th. A copy book having its hinge or binding along its top and each edge of the leaves at right angles to the binding, provided with lines of perforations.

**No. 68,437. Holder for Sales Checks.**  
(*Porte-échelle de chèques.*)



Aaron Liebman, assignee of Sanders Liebman, New York City, New York, U.S.A., 13th August, 1900; 6 years. (Filed 25th April, 1900.)

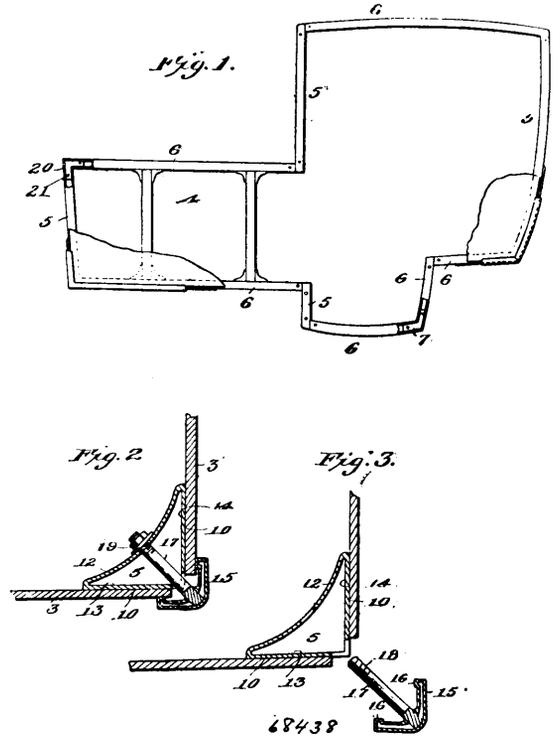
*Claim.*—1st. A holder for sales checks, the same consisting of a frame provided at the bottom with a shelf and at the top with a chamber having openings in the upper wall thereof, and having a side wall in combination with a rotatable clamp bar opposite said side wall, one end of which clamp bar passes through said chamber, and a train of indicating wheels operated in said chamber by said clamp bar, the said clamp bar and the outer wall of the casing forming a clamp for holding the coupons of sales checks, substantially as described. 2nd. A holder for sales checks, the same consisting of a frame provided at the bottom with a shelf and having top, side and back walls, in combination with a rotatable clamp bar journaled in the top and bottom of said frame, one end of said bar projecting beyond the journal and made square for the application of a key for turning the same, the wall opposite the bar serving in connection with the bar to clamp the coupons of sales checks, substantially as described.

**No. 68,438. Wheeled Vehicle.** (*Véhicule à roues.*)

John P. O'Brien, New York, and Alven Beveridge, New Rochelle, assignee of Harry McLaughlin, Stapleton, all in the State of New York, U.S.A., 13th August, 1900; 6 years. (Filed 11th May, 1900.)

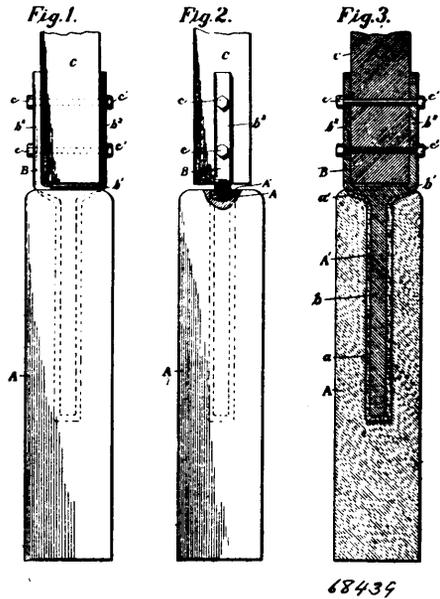
*Claim.*—1st. A frame for a vehicle body made up of tubular vertical bars, longitudinal bars and cross bars having plane surfaces for the attachment of panels, and corner pieces having tenons thereon adapted to fit within said tubular bars. 2nd. The combination with a bar constituting a portion of the frame of a vehicle body having plane surfaces, and panels lying against said plane surfaces, of a clamping cap consisting of a tubular bar bent to form inwardly projecting beads, the said beads being adapted to engage the outer surfaces of two adjacent panels, and means for securing said clamping cap to said bar and holding said panels in contact therewith. 3rd. The combination with an angle bar constituting a portion of the frame of a vehicle body, the said angle bar having plane side walls, and panels lying against said plane walls, of a clamping cap consisting of a tubular bar bent to form angularly arranged outer walls, and inwardly projecting beads at the ends of said angular walls, the said beads being adapted to engage the outer surfaces of two adjacent panels, and means for securing said clamping cap to the said angle bar and holding said panels in contact therewith. 4th. The combination with a tubular angle bar constituting a portion of the frame of a vehicle body, the said angle bar having plane side walls and a concave inner wall and having openings extending

through the concave wall and through the corner between said plane walls, and panels lying against said plane walls, of a clamping cap



consisting of a tubular bar bent to form angularly arranged outer walls and inwardly projecting beads at the ends of said angular walls, the said beads being adapted to engage the outer surfaces of two adjacent panels, and a bolt secured to said clamping cap extending through the openings in said angle bar for securing said cap to said angle bar and holding said panels in contact therewith.

**No. 68,439. Fence Post.** (*Poteau de clôtures.*)

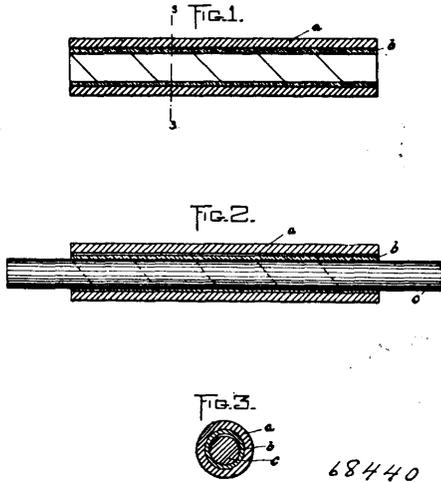


Lee K. Forsythe, Battle Creek, Michigan, U.S.A., 13th August, 1900; 6 years. (Filed 18th July, 1900.)

*Claim.*—1st. The herein described post, comprising a base formed of cement or artificial stone and moulded with a central vertical socket in its upper end, a bifurcated metallic yoke formed separately

from the base and having a port supporting bifurcation on its upper end and a tang of a size to fit loosely in said socket, a cement filling in said socket securing the tang of the yoke to the base, while the horizontal portions of the bifurcations of the yoke rest on the upper end of the base, a post having its lower end resting upon the horizontal portions of the bifurcations of the yoke and upheld thereby above the top of the base to prevent water collecting around it, and tie bolts transfixing the vertical portions of the yoke and the lower end of the post, for the purpose and substantially as described. 2nd. In a post, the combination of an artificial stone base of cement or other suitable material, formed with a central vertical socket and a recess in its upper end, a bifurcated yoke having its tang entered in said socket and the horizontal portions of its bifurcations partially seated in the recess in the upper end of the base, and a cement filling in said socket and recess securing the yoke stem and bifurcations thereto, with a wooden post having its lower end resting upon the horizontal portions of the bifurcations of the yoke and upheld thereby slightly above the upper end of the base, and tie bolts transfixing the vertical portions of the yokes and the lower ends of the posts, all substantially as and for the purpose described.

**No. 68,440. Armored Conduits. (Conduits.)**



Jacob Benjamin Boutillier, Boston, Massachusetts, U.S.A., 13th August, 1900; 6 years. (Filed 13th June, 1900.)

*Claim.*—1st. An armored conduit comprising a rigid metal tube or pipe, and a tubular lining composed of a helically wound strip of sheet asbestos expanded against the internal surface of the rigid pipe, to close the helical seam or joint between the convolutions of the strip. 2nd. An armored conduit comprising a rigid metal tube or pipe, and a tubular lining composed of a helically wound strip of sheet asbestos expanded against the internal surface of the pipe to close the helical seam or joint between the convolutions, said lining being cemented to the interior of the pipe to preserve said closed seam or joint.

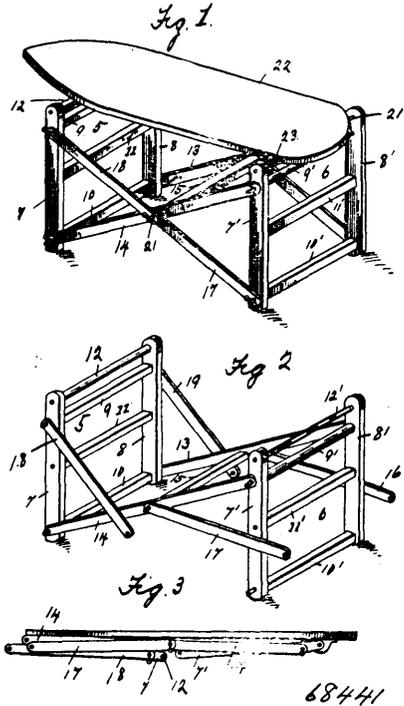
**No. 68,441. Folding Ironing Table.**

(Tables à repasser pliantes.)

John H. Osts, Rochester, New York, U.S.A., 13th August, 1900; 6 years. (Filed 31st July, 1900.)

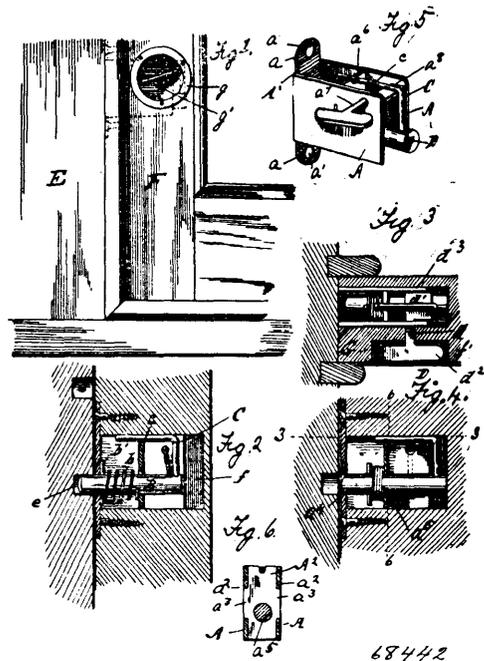
*Claim.*—An ironing table comprising a first and second upright, each of which uprights is formed of vertically disposed members having connecting cross pieces the lowermost and the one next to the uppermost of which extend beyond the outermost faces of the said members, strips pivotally connected to the uppermost extensions of the first upright and pivotally connected with the projections adjacent the lower end of the second upright, a cross piece connecting said strips at their centers and extending beyond their outer faces, supplemental strips having pivotal connection with the extending ends of said cross piece and having perforations adapted to receive the extensions adjacent the lower end of the first upright, corresponding supplemental strips having pivotal connection with the uppermost extensions of the second upright and having perforations

adapted to receive the extending ends of the cross piece connecting the first named strips, and a board having pivotal connection with



the uppermost cross piece of one of the uprights and adapted to lie upon the uppermost cross piece of the remaining upright.

**No. 68,442. Sliding Bolt Lock. (Serrure.)**

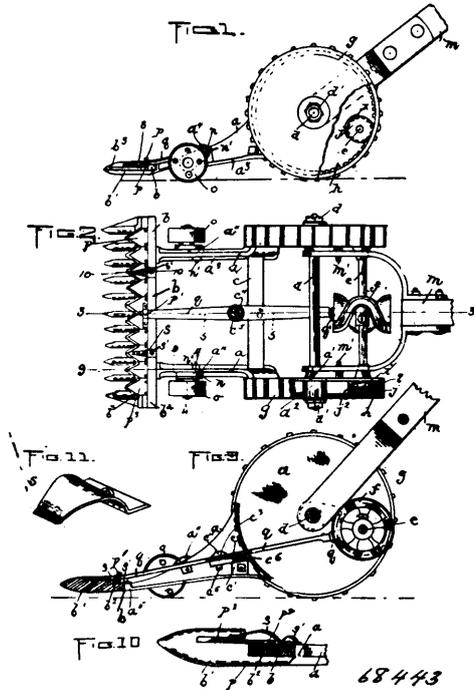


Charles B. Conant, Adrian, Michigan, U.S.A., 13th August, 1900; 6 years. (Filed 31st July, 1900.)

*Claim.*—1st. In a lock, the combination with the frame comprising the parallel side plates, the face plate and the guiding and spacing plates, of a spring actuated sliding bolt mounted in apertures in the face plate and said spacing plate and an arm secured to the bolt and having an angularly disposed portion engaging a guide in the spacing plate, said angular portion being located out of line with the axis of rotation of the key and serving as a stop to limit the movement of the key, substantially as described. 2nd. In a lock, the combination with the main frame comprising the face plate, two parallel side

plates formed integrally therewith and provided with apertures in line with each other and the spacing plate interposed between said side plates, and provided with lateral projections engaging the said apertures in the side plates, of a longitudinally movable bolt mounted in apertures in the face plate and space plate, and provided with a stop pin adapted to engage the inner side of the face plate to limit the outward movement of the bolt, a key engaging arm, secured to said bolt, extending at an angle therefrom and provided with a guiding portion parallel with the bolt and engaging a guide in the spacing plate, said guiding portion forming a stop for the key, and a spring surrounding the bolt and lying between the spacing plate and the stop pin on said bolt, substantially as described.

**No. 68,443. Lawn Mower. (Tondeuse de pelouse.)**



Rowley K. Ortt, Norristown, Pennsylvania, U.S.A., 13th August, 1900; 6 years. (Filed 31st July, 1900.)

*Claim.*—1st. In a lawn mower, the combination of side frames, the finger bar having the ribs arranged transversely across its under face, the front end of each side frame fitted and locked between two ribs and having a shoulder abutting against the rear edge of the bar, securing means, a knife bar, and actuating mechanism, substantially as described. 2nd. In a lawn mower, the combination of a frame work, driving wheels, the finger bar having ribs extended transversely across its bottom in continuation of the fingers, the front ends of the frame work fitting under said bar between certain of said ribs and secured to said bar and abutting against the rear edge thereof, said bar formed in one piece with its fingers and having the longitudinal top groove, the fingers having slots cut therein, the face of the finger bar in advance of said groove and forming the floor of said slots ground true and in one plane, the cutter bar sliding in said groove and having its knives resting on said true plane face, and actuating mechanism for reciprocating said knife bar, substantially as described. 3rd. In a lawn mower, the combination of a frame, driving means, actuating means for the cutting mechanism comprising the finger bar, and the cutter bar reciprocating therein and having vertical play, and spring keepers secured to the finger bar and arched over the cutter bar with their front ends yielding pressing down on the cutter bar over the cutting portions thereof and yieldingly holding the cutter bar down on the finger bar and permitting the vertical play of the cutter bar, said finger bar and its fingers formed integral and having a longitudinal way cut in its upper face and receiving the cutter bar, the fingers of said bar having slots cut therein all in the same plane, the floors of said slots and the face of the cutter bar in advance of said way being ground true and in the same plane and receiving the knives of the cutter bar, the sides of the fingers being ground and forming knife edges at the edges of said face forming the floors of said finger slots, substantially as described. 4th. In a lawn mower, the combination of a frame work, a finger bar rigidly secured thereto and having a longitudinal groove in its upper face in rear of the fingers, a reciprocating cutter bar sliding in said grooves with its knives reciprocating over the cutting edges of the fingers, said cutter bar having a limited vertical play, and the spring keepers yieldingly holding the cutter bar down on the finger and upper face of the finger bar, each keeper

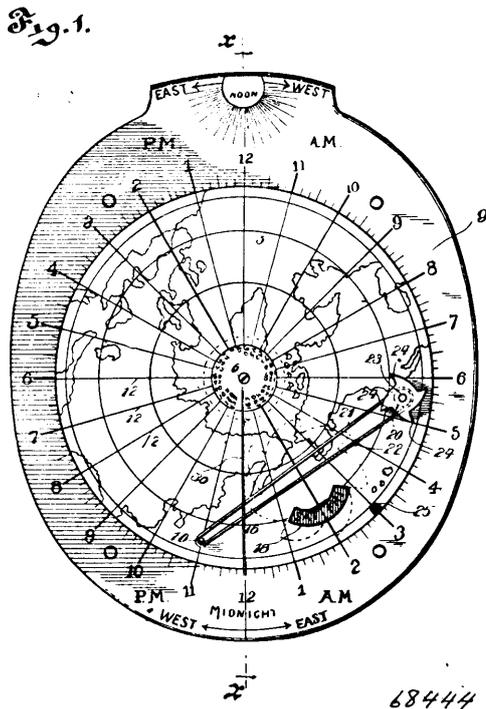
formed of thin spring metal and secured to the finger bar in rear of the cutter bar and arched up over the cutter bar and having its front end deflected down into engagement with a knife or knives of the cutter bar over the co-operating cutting portions of the finger bar, substantially as described. 5th. In a lawn mower, the combination of a frame work, ground wheels, actuating mechanism for the cutter mechanism, a finger bar secured to the wood work and having its longitudinal portion formed with a longitudinal groove in rear of the fingers, the reciprocating cutting bar having limited vertical play and comprising the bar sliding in said groove and the flat knife sections secured thereto and sliding over the shearing edges of the fingers, and separate spring keepers, each keeper secured to the finger bar in rear of said cutter bar, and projecting close over the rear portion of said cutter bar, for the purpose described, and deflected up over the cutter bar and engaging the knife sections over and holding the same yieldingly down to the co-operating shearing edges of the fingers, substantially as described. 6th. In a lawn mower the combination of side frames, ground wheels, and actuating mechanism, the finger bar formed integral from a single blank with the ribs extended across its under surface and having a flat longitudinally grooved top surface, the slots cut through the fingers and all located in the same plane, the front ends of the side frames between certain of said ribs and abutting against the edge of and secured to the bar, a reciprocating cutter bar fitted to the finger bar, and spring keepers fitted to the finger bar, and pressing down on certain knife sections thereof as described. 7th. In a lawn mower the combination of a frame, and driving mechanism, with a cutting mechanism comprising a finger bar, a cutter bar reciprocating thereon and having limited vertical play and independently forwardly tapering spring keepers secured to the finger bar and extending forwardly over the cutter bar and yieldingly bearing down on certain knife sections of the cutter bar over the co-operating cutting portions of the finger bar, as and for the purpose set forth. 8th. In a lawn mower, the combination of a frame, driving means mechanism for reciprocating the cutter bar, the cutting mechanism comprising a finger bar, and the cutter bar reciprocating therein and having vertical play, and spring keepers secured to the finger bar, and arched over the cutter bar with their ends yieldingly pressing down on the cutter bar over the cutting portions thereof and yieldingly pressing down on the finger bar and permitting the vertical play of the cutter bar, substantially as described. 9th. In combination, the finger bar having the flat top face and longitudinal top groove, the reciprocating finger bar having limited vertical movement and fitting said groove with its knife sections resting on the flat face of the bar in advance of the groove, and the isolated spring keepers, each having a flat end resting on the top face of the bar in advance of the groove, and the isolated spring keepers, each having a flat end resting on the top face of the finger bar at the rear end of the cutter bar, a securing screw passing through said flat end into the finger bar, said keeper arched upwardly and forwardly and downwardly from said flat ends with its front end resting and yieldingly bearing down on a knife section of said cutter bar, substantially as described. 10th. In a lawn mower, the combination of side frames, cutting mechanism, the ground wheels mounted on the side frames and having the rims provided with internal gearings, the shaft mounted in said frames and projecting therethrough within said wheel rims, the discs rigid on said shaft at the outer faces of the side frames and within the wheels, the ratchet teeth at the outer faces of said discs, the pinions loose on said shaft ends, at their outer ends abutting against said wheels at their inner ends abutting against said discs, each pinion having the exteriorly smoothed faced inner end formed with a concentric end recess entirely inclosing said ratchet teeth, and the inner end radial opening, the removable slide blocks in said opening, and the plate spring circumferentially arranged on said smooth faced portion with its free end engaging the outer end of said block, substantially as described.

**No. 68,444. Tellurian. (Tellurien.)**

John W. Smith, Goldsmith, Indiana, U.S.A., 13th August, 1900; 6 years. (Filed 26th July, 1900.)

*Claim.*—1st. In a tellurian, the combination with a stationary dial, of a map disc adapted to rotate with respect to the dial, a toothed disc mounted upon the map disc and graduated for the days of the week, said map disc being provided with an opening to disclose always two days of the week, a stop in the path of the teeth of the second disc for engagement thereby to rotate the disc step by step, a line denoting the international date line, a drum upon the map disc having a toothed disc, a belt operatively connected with the drum and extending across the date line, a body carried by the belt, and a stop in the path of the last-named toothed disc for engagement with the teeth thereof to operate the drum simultaneously with the second-named disc, to move the body over the date line and to move the day graduations across the date line and bring up a second day graduation. 2nd. In a tellurian, the combination with a rotatable map disc, of a stationary dial graduated for the hours of the day, a disc graduated for the days of the week and mounted to travel with the map disc, means whereby said disc may be partially rotated step by step relative to the map disc, a drum mounted upon the map disc, a belt carried by the drum, a body carried by the belt, an international date line upon the map disc and means for operating the graduated disc and the drum simultane-

ously. 3rd. In a tellurian, the combination with a map disc having an international date line and adapted for rotation, a second disc



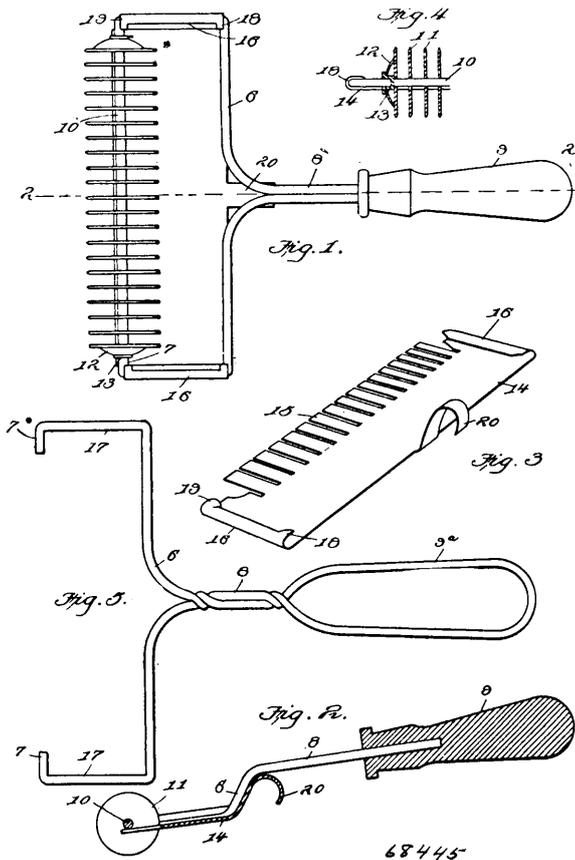
mounted upon the map disc and provided with day graduations arranged to disclose always two days of the week, one at each side of the date line, a drum upon the map disc, a belt operatively connected with the drum and extending across the date line, a body carried by the belt and means for simultaneously operating the drum and the second disc to move the body over the date line and to move a day graduation across the date line and bring up a second day graduation. 4th. In a tellurian, the combination of a rotatable map disc, said disc having an international date line thereon, additional lines upon the disc equally defining the latter, a dial concentric with the disc and graduated for hours of the day, a second disc mounted upon the map disc and having day graduations and adapted to expose always two graduations, a drum mounted upon the map disc, a belt upon the drum and crossing the date line, a body carried by the belt, and means for operating the second disc and the drum simultaneously to move the body upon the belt, and a graduation upon the disc simultaneously in opposite directions across the date line.

**No. 68,445. Noodle Cutter.** (*Coupe pâte.*)

Alice V. Lacombe, Longmont, and Evan Mathews, Denver, both in Colorado, U.S.A., 13th August, 1900; 6 years. (Filed 18th June, 1900.)

*Claim.*—1st. In a noodle cutter, the combination with a main frame provided at its rear side with a suitable handle, of a revoluble shaft secured to the forward side thereof carrying a series of cutting discs and a removable guard plate secured on said frame having a series of cleaner teeth alternating with the cutting discs, substantially as described. 2nd. In a noodle cutter, the combination with a substantially rectangular frame having inwardly projecting engaging extensions at its forward portion, of a revoluble shaft, carrying a series of discs, a bearing carrying arbor on the respective end discs adapted to be engaged by said engaging extensions and a removable guard plate arranged on said frame and having a series of forwardly projecting teeth alternating with the cutting discs, substantially as described. 3rd. In a noodle cutter, the combination with a main frame, of a revoluble shaft, carrying a series of cutting discs, the arbor on the respective end discs in which are located bearings adapted to be engaged by said frame, a removable guard plate adapted to lock said frame in engagement with the shaft and having forwardly projecting teeth alternating with the said discs, substantially as described. 4th. In a noodle cutter, the combination with a substantially rectangular main frame, of a single piece of wire bent to form engaging ends at its forward end, of a

revoluble shaft carrying a series of discs, arbors of the respective end discs in which are located bearings, adapted to be engaged by



the engaging ends of the frame, a removable guard plate locking said frame and shaft in operative engagement, substantially as described.

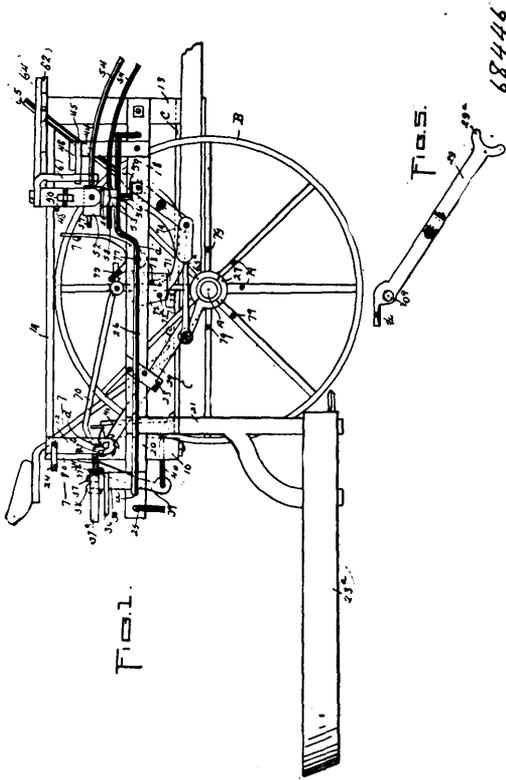
**No. 68,446. Rake Attachment for Harvesters.**

(*Attache de rateau pour moissonneuses.*)

John Pegg, Bloomington, Indiana, U.S.A., 13th August, 1900; 6 years. (Filed 31st July, 1900.)

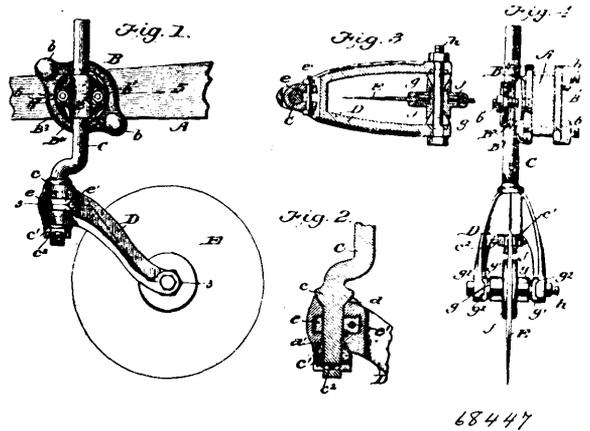
*Claim.*—1st. The combination, with the frame of a harvester and its platform, of a rake arm pivoted to said platform and operated by a supporting wheel of said harvester, the said rake arm being arranged to extend over the platform, a rake head pivotally attached to said rake arm, a locking bar capable of sliding movement over the rake head, and means, substantially as described, for operating the locking bar and securing the rake head in a horizontal position, substantially as described. 2nd. The combination, with the frame of a harvester and a rake arm pivoted to the said frame and operated by a supporting wheel of the said harvester, of a rake head pivotally attached to the said rake arm, pins projected from the rake head, a locking bar having sliding movement over the rake head and provided with apertures capable of registry with the pins of the rake head, a latch arranged to hold the rake teeth of the rake head in a horizontal position, shifting device for the locking bar arranged to engage therewith at the forward and rear portion of the frame, and a releasing device for the latch located at the forward portion of said frame, as and for the purpose specified. 3rd. The combination with a harvester frame, a rake arm pivoted thereto, a rake pivotally carried by the arm, and devices substantially as described for automatically moving the arm forward and rearward while the machine is in motion, of locking devices for the rake, a shifting mechanism for the locking devices, capable of being operated from a supporting wheel or by hand and a turning device for the rake, substantially as described. 4th. The combination, with the frame of a harvester, a rake arm pivotally attached to the said frame, and means, substantially as described, for imparting movement to the rake arm through the revolution of a supporting wheel of the harvester of a rake head constructed in sliding sections, the main section of the rake head being pivotally supported at the rake arm, a guide rail for the sliding section of the rake head and a shifting rail at the rear portion of the machine adapted for engagement likewise with the sliding section of the rake head, a recessed locking bar mounted to slide upon

the main portion of the rake head pins secured to the main portion of the rake head, adapted to pass through the recess in the locking



bar, or engage with the said bar, a shifting device located at the rear of the frame, arrangement for engagement with the locking bar, a latch carried by the rake arm, adapted to hold the rake teeth of the rake head, in a horizontal position, and a shifting arm located at the forward portion of the frame provided with fingers one of which is arranged to shift the locking bar and the other to release the said latch from engagement with the rake, as specified. 5th. The combination with a harvester frame, a rake arm carried thereby, a lever controlled clutch connection between the rake arm and the axle, a rake pivotally supported by the arm and provided with a sliding section and a guide for the sliding section of the rake, of a locking bar located over the said rake head a shifting finger arranged to engage with the locking bar near the termination of the rearward movement of the arm means for turning the rake head at the end of its rearward movement, a latch for the rake head adapted to engage therewith when turned, and a shifting and releasing device arranged to engage respectively with the locking bar and the latch when the said rake arm is at its termination of its forward movement, the said releasing device permitting the teeth of the rake to drop, and the shifting bar bringing the locking bar into position to prevent the rake head from turning while the rake teeth are being carried rearward, as specified. 6th. The combination, with the axle of a harvester, a clutch secured to the said axle, a second clutch loosely mounted on the axle, a shifting lever for the said clutch, and a locking device for the shifting lever, of a rake arm mounted on the frame of the harvester, a lever connected with the movable clutch and having a driving connection with the rake arm, and means, substantially as described, for releasing the locking device the shifting lever by the movement of a supporting wheel of the harvester, as and for the purpose specified. 7th. The combination, with the axle of a harvester, a clutch secured to the said axle, a second clutch loosely mounted on the axle, a shifting lever for the said clutch and a locking device for the shifting lever, of a rake arm mounted on the frame of a harvester, a lever connected with the movable clutch and having a driving connection with the rake arm, a ratchet wheel mounted beneath the locking device for the shifting lever, one of the teeth of the ratchet wheel being of sufficient length to engage with and disconnect the locking device from its keeper, a dog for the said ratchet wheel operated by the movement of a supporting wheel of the machine, and means, for carrying the said dog out of operative connection with the said supporting wheel, for the purpose specified.

No. 68,447. Colters. (*Contre de charrue.*)



Arthur Cowles Gaylord, Sandoval, Illinois, U.S.A., 13th August 1900; 6 years. (Filed 30th July, 1900.)

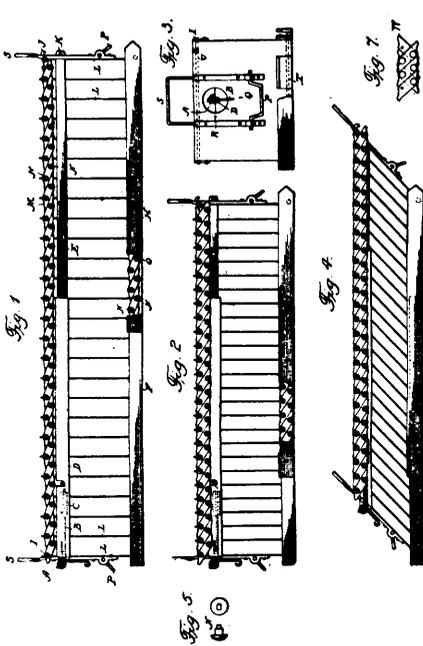
*Claim.*—1st. The standard clamp, comprising a base ring having teeth on one side and undercut on the other, clamping jaws for the standard, having corresponding surfaces to fit the undercut and teeth of the ring, and a clamping bolt arranged to clamp the jaws to the ring and to engage the teeth and undercut surfaces substantially as shown and described. 2nd. The standard clamp, comprising a base ring having teeth on one side and undercut on the other, the clamping jaws B<sup>2</sup>, B<sup>3</sup>, the jaw B<sup>3</sup>, having corresponding parts to fit the base ring and also a recessed stud b<sup>3</sup>, the clamping bolt b<sup>2</sup>, the jaw B<sup>2</sup>, fitting in the recess of the stud, and the bolt b<sup>1</sup>, clamping the two jaws together, substantially as and for the purpose described. 3rd. In a plow colter, the combination of a vertical standard and fork the two being connected by a swivelling joint and having conical bearings and means for adjusting them toward each other to take wear, substantially as described. 4th. A connection between the standard and a fork of a colter having conical bearings means for adjusting one of them toward the other, and a stop device for limiting the play of the fork about the standard, substantially as described. 5th. A connection between the standard and fork of a colter comprising two conical bearings on the standard, one fixed and the other adjustable, and a hub on the fork having conical hollow bearings, substantially as described. 6th. A fork joint for a colter standard having a conical enlargement and a screw threaded and perforated end below said enlargement, a nut having a conical upper surface and locking devices arranged on said threaded end of the standard, in combination with a fork having a hub with hollow conical bearings above and below, and a horizontal slot across its middle, and a locking collar arranged in said slot and provided with means for locking it to the standard, substantially as shown and described. 7th. A fork joint for a colter standard, consisting of a standard having a conical enlargement, and a screw threaded and perforated end below said enlargement, a nut arranged on said screw threaded end and having a conical upper surface, and a notched lower surface, a spring cotter passing through said notch, and the perforation in the standard, in combination with a fork having a hub with hollow conical bearings above and below and a horizontal slot across its middle, and a split clamp collar with locking bolt for clamping the standard, substantially as described. 8th. In a plough colter the combination of a disk colter, its supporting fork and a hub bearing carried by said fork and having conical wearing surfaces, substantially as described. 9th. The combination with a disc colter, of two clamp plates arranged on opposite sides thereof and having a screw threaded connection with each other and conical openings, the fork with branches having perforated lower ends and locking recesses, perforated conical bushings with locking lugs, and axial bolt passing through all these parts, substantially as and for the purpose described.

No. 68,448. Metallic Telescoping Account Book Holder. (*Livre de compte.*)

John H. Cass, assignee of Berry A. Baxter, both of Mansfield, Ohio, U.S.A., 13th August, 1900; 6 years. (Filed 3rd July, 1900.)

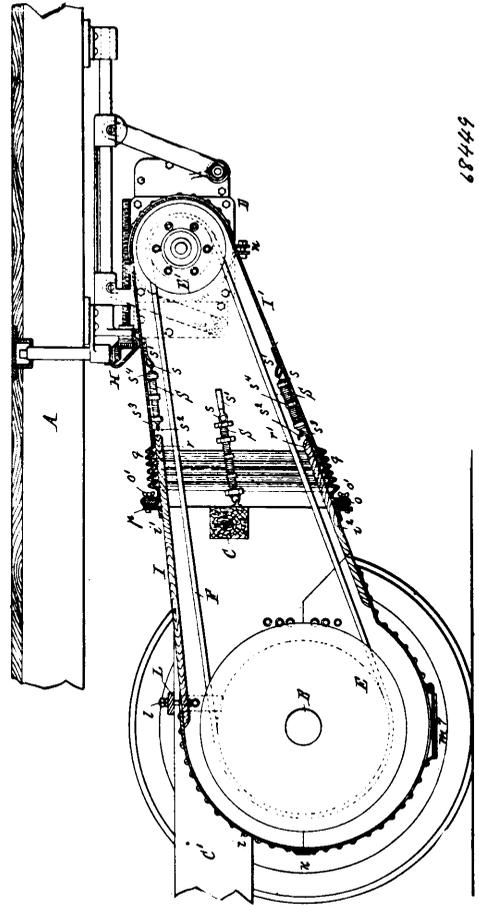
*Claim.*—1st. In a metallic adjustable holding device, the combination of a series of partition plates, bars with ends turned to form bearings and connected to both the top and bottom of said partition plates, and adjustable latticed chain, the ends of the links of said chain constructed to overlap each other and pivotally connected together and having holes placed at an angle therein, certain of said holes connecting the chain with the turned ends of the bars. 2nd. In a metallic adjustable holding device, the combination with a series of partition plates, of bars connected thereto, an adjustable latticed chain, bars connected to the bottom of the end partition

plates, and securely fastened in place to form a hinge. 3rd. In a metallic adjustable holding device, the combination of a series of



partition plates, bars with ends turned to form bearings and fitted to said plates, an adjustable latticed chain connected with said turned ends, bars fitted on the bottom of the rear and forward plates and bearings for the said bars, a bottom composed of two pieces telescoping each other with the end of the inner bottom turned in and resting on the end plate, and the bottom adapted for attachment to a pivot on a standard. 4th. In a metallic adjustable holding device, the combination of a series of partition plates, bars with the ends turned to form bearings, and fitted to said plates, an adjustable latticed chain connected with said turned ends, bars fitted to the end plates and bearings for the latter, the bottom composed of two pieces telescoping one another, upright hinges or rests riveted to the end partition plates and supporting end hinges. 5th. In a metallic adjustable holding device, the combination of a series of partition plates, bars with ends turned to form bearings and fitted to said plates, an adjustable latticed chain connected with said bars, bars fitted on the end plates and bearings for the latter, the bottom composed of two pieces to provide for its adjustment, upright hinges or rests, end hinges, and locking buttons pressed in the lower end partition plates. 6th. In a metallic adjustable holding device, the combination of a series of adjustable partition plates, bars with ends turned to form bearings fitted thereto, an adjustable latticed chain connecting said plates with round bars having turned ends supported by bearings attached to the bottom, a flat tube with rounded edges, a notched bar with a series of notches cut on its edge. 7th. In a metallic adjustable holding device, the combination of a series of adjustable partition plates, means for adjusting the said plates, an adjustable latticed chain, a flat tube having a recess cut in its edge, a bar having a series of notches cut on its edge, said bar telescoping with said tube, a locking lever journaled on the side of the flat tube with its end bent to fit in the notches cut in the bar when the locking lever is in a vertical position. 8th. In a metallic adjustable holding device, the combination of partition plates, bars fitted to said plates, an adjustable latticed chain connected with said bars, a telescoping bottom, a flat tube, a notched bar, a locking device, hooks riveted on the end partition plates, and a metallic standard used in connection with the metallic adjustable holding device, substantially as described. 9th. In a metallic adjustable holding device, the combination of partition plates, bars fitted to the ends of said plates, an adjustable latticed chain composed of a double row of links working in opposite directions and having holes placed in said links at an angle with each other, giving a reciprocating movement to the holding device which provides for the adjustment thereof, the ends of said links being rounded and overlapping each other. 10th. The combination of a series of partition plates having bearings formed at opposite edges thereof, an adjustable latticed chain, the ends of the links of said chain constructed to overlap each other, and pivotally connected together, and having holes therein to receive the partition bearings.

**No. 68,449. Casing for Electric Car Lighting.**  
(*Enveloppe pour lumière électrique de chars.*)

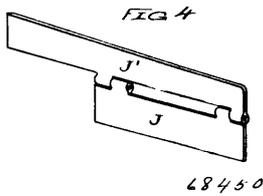
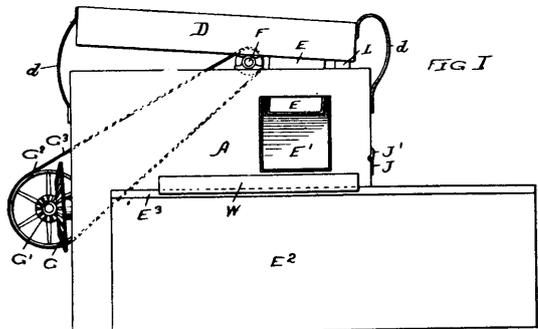


Charles M. Gould, New York City, assignee of Williard Fillmore Richards, Buffalo, both in the State of New York, U.S.A., 13th August, 1900; 6 years. (Filed 26th June, 1900.)

*Claim.*—1st. A tight casing for the dynamo driving mechanism of electric car lighting apparatus, inclosing the driving part of the car axle, the driven part on the dynamo and the connecting part and having between its end portions an extension, and flexible portion which is tightly connected with the adjacent portions of the casing and which permits the latter to lengthen and contract and to bend laterally in accommodating itself to the variations in the relative position of the dynamo and car axle, substantially as set forth. 2nd. A casing for the dynamo driving mechanism of electric car lighting apparatus, composed of front and rear sections mounted on the car truck and the dynamo, respectively, one of said sections being secured to the opposing section and provided with bellows folds or plaits, substantially as set forth. 3rd. A casing for the dynamo driving mechanism of electric car lighting apparatus, composed of front and rear sections mounted on the car truck and the dynamo, respectively, one of said sections being secured to the opposing section and provided with bellows folds, and springs arranged to contract said folds, substantially as set forth. 4th. A casing for the dynamo driving mechanism of electric car lighting apparatus, composed of front and rear sections mounted on the car truck and the dynamo, respectively, said sections being detachably secured together at their adjoining ends and one of said sections being provided with plaits or bellows folds, and contracting springs for said folds secured at one end to one of said sections and having their opposite ends detachably connected with the other section, substantially as set forth. 5th. A casing for the dynamo driving mechanism of electric car lighting apparatus, composed of a front section mounted on the car truck, and a flexible rear section mounted on the dynamo and provided at its front end with a clamping frame and adjacent to said frame with bellows folds, and clamping devices for securing said frames to the adjacent end of the front section, substantially as set forth. 6th. A casing for the dynamo driving mechanism of electric car lighting apparatus, composed of a rigid front section having its front portion supported on the car truck, and a rear section of flexible material having a closed rear portion which is supported on the dynamo, said flexible section being secured at its front end to said rigid section and provided with

bellows folds, substantially as set forth. 7th. A casing for the dynamo driving mechanism of electric car lighting apparatus, composed of front and rear sections mounted on the car truck and the dynamo, respectively, one of said sections being secured at its inner end to the other section and provided adjacent to its inner end with plaits or bellows folds, and the opposing section being provided with an extension or extensions which enter the plaited section and support its plaits or folds, substantially as set forth. 8th. A casing for the dynamo driving mechanism of electric car lighting apparatus, composed of a rear section mounted on the dynamo, and a front section mounted on the car truck and having an extensible connection with the rear section and provided with a removable lower portion or section for affording access to the interior of the casing, substantially as set forth. 9th. A casing for the dynamo driving mechanism of electric car lighting apparatus, provided with vertical slots for the passage of a car axle, pockets surrounding said openings, and vertical shields or washers mounted on said axle and sliding in said pockets, substantially as set forth.

**No. 68,450. Candy Cleaning Machine.**  
(Machine à nettoyer les bonbons.)



68450

Thomas Kane, Chicago, Illinois, and Leo A. Peil, Racine, Wisconsin, assignee of William S. Foster, Chicago, Illinois, all in the U.S.A., 13th August, 1900; 6 years. (Filed 18th June, 1900.)

*Claim.*—1st. The candy cleaning machine, consisting in the combination of a vibrating inclined candy delivery hopper or trough, with an inclined rotating perforated brush cylinder armed with brushes on its inner surface or periphery, substantially as specified. 2nd. The candy cleaning machine, consisting in the combination of a vibrating inclined candy delivery hopper or trough, with an inclined rotating perforated brush cylinder armed with brushes on its inner surface or periphery, and a case or box inclosing the brush cylinder, substantially as specified. 3rd. The candy cleaning machine, consisting in the combination of a vibrating inclined candy delivery hopper or trough, with an inclined rotating perforated brush cylinder armed with brushes on its inner surface or periphery, a case or box inclosing the brush cylinder, and a connecting spout leading from the delivery hopper or trough to the higher end of the inclined brush cylinder, substantially as specified. 4th. The candy cleaning machine, consisting in the combination of a vibrating inclined candy delivery hopper or trough, with an inclined rotating perforated brush cylinder armed with brushes on its inner surface or periphery, a case or box inclosing the brush cylinder, a connecting spout leading from the delivery hopper or trough to the higher end of the inclined brush cylinder, and a candy discharge spout, substantially as specified. 5th. The candy cleaning machine, consisting in the combination of a vibrating inclined candy delivery hopper or trough, with an inclined rotating perforated brush cylinder armed with brushes on its inner surface or periphery, a rotating shaft armed with a knocker or project on for vibrating the candy delivery hopper or trough, and a belt and gearing connecting said knocker shaft with the brush shaft, substantially as specified. 6th. In a candy cleaning machine, a rotating brush armed vessel or holder, the brushes being upon the inner surface or periphery thereof, and through which the candies are adapted to pass by gravity as the vessel rotates, the rotation of the brush vessel or holder cleaning the candies, substantially as specified. 7th. In a candy cleaning machine, a rotating series of brushes arranged close together to form a continuous rotat-

ing holder or vessel for the candies as they pass from one end thereof to the other, substantially as specified. 8th. In a candy cleaning machine, a rotating series of brushes arranged close together to form a continuous rotating holder or vessel for the candies as they pass from one end thereof to the other, in combination with a trough or hopper for delivering the candies to the series of brushes, substantially as specified. 9th. The combination with the hopper and the candy cleaning cylinder, of a conduit for the candies connecting the hopper and cylinder, said conduit having a bend at its central portion, and having its lower end extended vertically downward, substantially as specified. 10th. The combination with the hopper and the candy cleaning cylinder, of a conduit for the candies connecting the hopper and cylinder, said conduit having its lower end extended vertically downward into proximity to the bottom of the cylinder, substantially as specified. 11th. The candy cleaning machine, consisting in the combination of a vibrating inclined candy delivery hopper or trough acting to separate the candy from the bulk of the starch, with an inclined rotating perforated brush cylinder arm with brushes on its inner surface or periphery, substantially as specified. 12th. The candy cleaning machine, consisting in the combination of a vibrating inclined candy delivery hopper or trough having a screen for separating the candy from the loose starch and separate exits for the starch and candy, with an inclined rotating perforated brush cylinder arm with brushes on its inner surface or periphery, a conduit connecting the candy exit of the hopper with the interior of the cylinder, substantially as specified.

**No. 68,451. Trolley Wheel.** (Roue de trolley.)

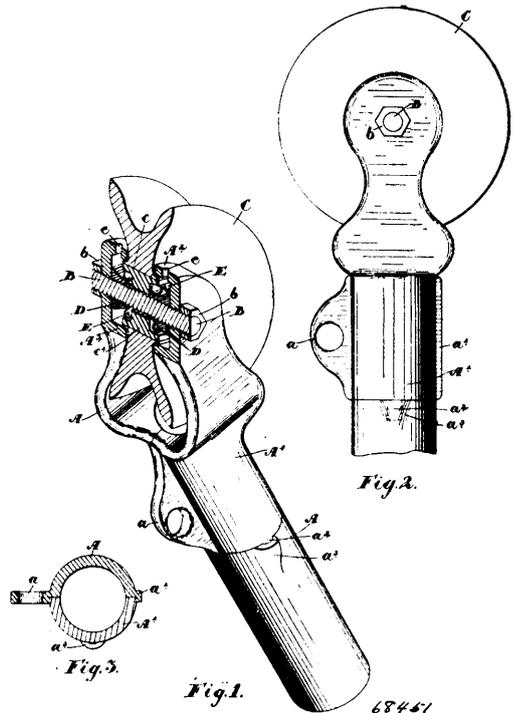


Fig. 1.

Fig. 2.

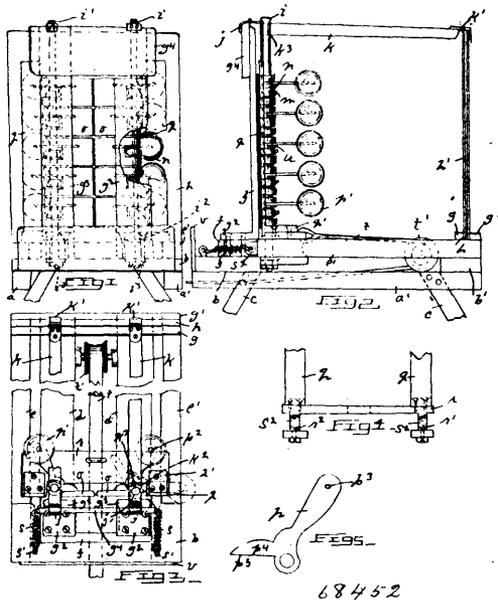
Fig. 3.

68451

John Kalte, of Port Elgin, Ontario, Canada, 13th August, 1900; 6 years. (Filed 9th March, 1899.)

*Claim.*—1st. In a trolley wheel and bearing therefor, the combination with the divided harp having inwardly projecting flanges at the top, of the threaded axle extending centrally within the flanges and connecting the parts together, the cones secured on the axle, the trolley wheel having an axial hole, the double cup-shaped bearing fitting therein having the cups extending outwardly over the cones and the balls all arranged as shown and for the purpose specified. 2nd. In a trolley wheel and bearing therefor, the combination with the divided harp having inwardly projecting flanges at the top, of the threaded axle extending centrally within the flanges and connecting the parts together, the cones secured on the axle, the trolley wheel having a tapered axial hole, the double cup-shaped bearing having the cups extending outwardly over the cones and provided with a tapered periphery, and the balls all arranged as shown and for the purpose specified. 3rd. The combination with the trolley wheel and axial support for same, of the harp comprising the solid portion having the bottom longitudinal lugs or ribs and bottom recesses, and the removable portion of the harp having a tenon fitting into the recess in the bottom, and the sides fitting within the longitudinal lugs or ribs, and the spindle connecting the removable portion of the harp to the solid portion at the top, as and for the purpose specified.

No. 68,452. Target. (Cible.)



John Uster, of Paterson, New Jersey, U.S.A., 13th August, 1900; 6 years. (Filed 19th April, 1900.)

*Claim.*—1st. In a target, the combination of a suitable frame, including spaced horizontal and vertical plates together forming an opening, shafts supported in said frame back of said vertical plates, paddles pivotally mounted on said shafts, normally closing said opening and movable out of opposition thereto, levers fulcrumed on said shafts and having projections extending from their fulcrumed ends and adapted to bear against the backs of said paddles, indicating devices carried by said levers, and a resetting mechanism for said levers and the paddles, consisting of a suitably guided frame, standards carried by said frame and adapted to engage said levers and means for actuating said frame, substantially as described.

2nd. In a target, the combination of a suitable frame, including spaced horizontal and vertical plates together, forming an opening shaft supported in said frame back of said vertical plates, paddles pivotally mounted on said shafts, normally closing said opening and movable out of opposition thereto, levers fulcrumed on said shafts and having projections extending from their fulcrumed ends and adapted to bear against the backs of said paddles, indicating devices carried by said levers, and a resetting mechanism for said levers and the paddles, consisting of a suitably guided spring returned frame standard carried by said frame and adapted to engage said levers, and a flexible operating device connected to said frame, substantially as described.

3rd. In a target, the combination with a suitable frame, including spaced horizontal and vertical plates together forming an opening, parallel rails supporting said plates and a base sustaining said rails, or vertical shafts removably mounted in said rails back of said plates, removable collars adjustably mounted on said shafts, paddles pivotally mounted on said shafts and having recesses receiving said collars, said paddles normally closing said opening and movable out of opposition thereto, levers fulcrumed on said shafts and having projections extending from their fulcrumed ends and adapted to bear against the backs of said paddles, said levers being fulcrumed within the recesses of the latter and each above a collar, indicating devices carried by said levers, a re-setting mechanism for said levers and the paddles, consisting of a suitably guided spring returned frame, standards carried by said frame and adapted to engage said levers, and a flexible operating device connected to said frame, a removable plate mounted on said rails back of said first-named plates and the opening formed thereby, hinges mounted upon the upper ends of said first-named plates and engaging said shafts, and padded bars pivotally connected to said last-named plate and also engaging said shafts at their upper ends, substantially as described.

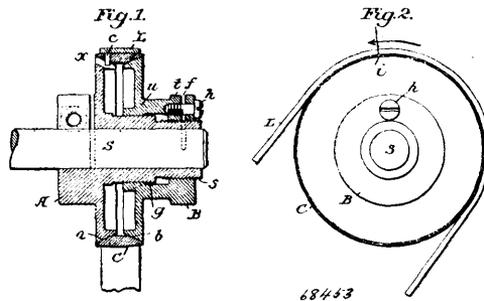
4th. In a target, the combination of a suitably supported shaft, collars mounted on said shaft, paddles fulcrumed on said shafts and provided with recesses receiving said collars, a lever fulcrumed on said shaft in the recess of each paddle and above the corresponding collar, each lever carrying an indicating device, and a friction washer disposed between each lever and the subjacent collar, substantially as described.

No. 68,453. Expansive Pulley. (Poulie.)

Simon W. Wardwell, jr., Providence, Rhode Island, U.S.A., 13th August, 1900; 6 years. (Filed 18th June, 1900.)

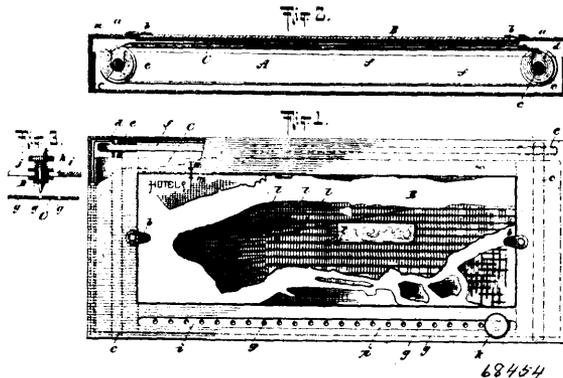
*Claim.*—1st. The within described expansive pulley, comprising two parts having bevelled edges, one adjustable in respect to the

other, a split band fitting the bevelled edges of the parts and connected to rotate therewith and to be expanded and contracted by



the adjustment of the parts, substantially as described. 2nd. The within described expansive pulley, comprising two parts having bevelled edges, one adjustable in respect to the other, a split band fitting the bevelled edges of the parts and connected to rotate therewith and having a substantially flat belt receiving face, substantially as described. 3rd. In an expansive pulley, the combination of two bevelled edged parts adjustable one in respect to the other, a split band fitting the bevelled edges of the parts and having an outer face to receive a flat belt and connected with the parts at one end, substantially as described. 4th. The combination in an expansion pulley, of two sections one with a threaded hub receiving the hub of the other, the sections with annular bevelled faces and a band with an inner face adapted to said bevelled faces, substantially as described. 5th. The combination with the section of an expansion pulley having a threaded hub and a second section adjustable on said hub, of an expansion band supported on said sections and adapted to be rotated therewith and to be expanded and contracted by varying the relative positions of said sections, substantially as set forth. 6th. The combination of the section A having a threaded hub and an annular bevelled face, the section B adapted to said threaded hub and with an annular face bevelled in the opposite direction, with means for securing the sections in relation to each other after adjustment, and a split band adapted to said bevelled faces, substantially as described.

No. 68,454. Display Map or Chart. (Carte.)



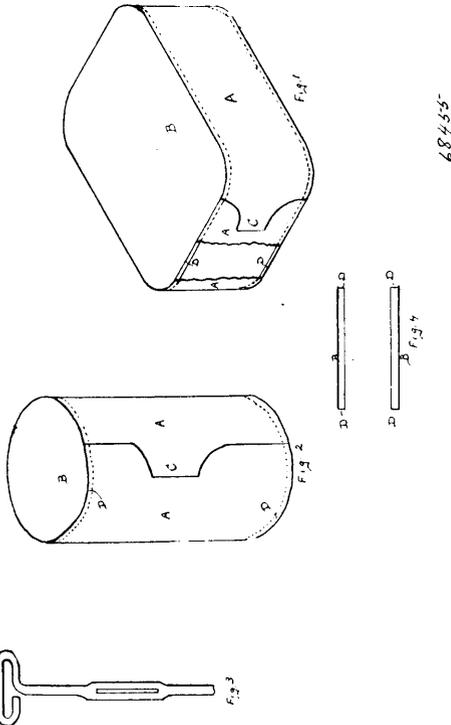
Edward Aberlie, of Buffalo, New York, U.S.A., 13th August, 1900; 6 years. (Filed 21st June, 1900.)

*Claim.*—1st. The combination of a transparent ground plan map and a separate removable piece having designations to be read in connection with the said map when viewed therethrough without changing the character of the map itself. 2nd. The combination of a transparent ground plan map, a separate piece having designations to be read in connection with said map when viewed therethrough without changing the character of the map itself, and means for determining when the designations bear the proper relation to the map to afford a proper reading of one in connection with the other. 3rd. The combination of a casing carrying a transparent map, a separate movable piece having separate groups of designations to be read in connection with said map when viewed therethrough so as to determine the location on the map of the points indicated by said designation and means for moving the movable piece with relation to the map so that each of the various groups of designations on the movable piece may be brought into register and read in connection with the map. 4th. The combination of a casing carrying a transparent map, a separate movable piece having separate groups of designations to be read in connection with said map when viewed therethrough, means for moving the movable piece with relation to the map so that each of the various groups of designations on the movable piece may be brought into register and read in connection with the map and the location of each of the points

indicated by the separate designations of each group may be determined and means for determining when the designations bear the proper relation to the map to afford a proper reading of one in connection with the other. 5th. The combination of a casing, a movable transparent map having separate sections each of which sections is different from the remaining sections, means for moving said map in the casing, a movable piece having separate groups of designations each of which groups is adapted to be read in connection with one of the sections of said map when viewed therethrough, means for moving the movable piece with relation to the map and indicating means for determining when a separate group of designations is in position to be read upon its respective section of the map. 6th. The combination of a casing, an exposed transparent map contained therein, a movable strip carrying designations which are adapted to be moved under said map and read in connection therewith when viewed therethrough, rolls upon which said strip is carried and hand operated means independent of said rolls for moving said strip in either direction. 7th. The combination of a casing, an exposed removable transparent chart contained therein, a movable strip carrying designations which are adapted to be moved under said chart and read in connection therewith when viewed therethrough, rolls upon which said strip is carried and a hand operated spring pressed engaging piece carried by said casing and adapted to engage the strip to move it in either direction. 8th. The combination of a casing, a movable transparent chart contained therein, removable rolls upon which said chart is carried, a movable strip carrying designations which are adapted to move under said chart and to be read in connection therewith when viewed therethrough, a hand operated spring pressed engaging piece carried by the casing and adapted to engage the chart to move it in either direction, removable rolls upon which said strip is carried and a hand operated spring pressed engaging piece carried by the casing and adapted to engage the strip to move it in either direction. 9th. The combination of a plurality of sheets having different designations, one of said sheets having a ground plan map and at least one of said sheets being transparent to enable the designations on one sheet to be read in connection with designations upon another sheet.

**No. 68,455. Key Opening Can.**

(Appareil à ouvrir les boîtes métalliques.)



Joseph Sutton Clark, St. George, New Brunswick, Canada, 13th August, 1900; 6 years. (Filed 26th June, 1900.)

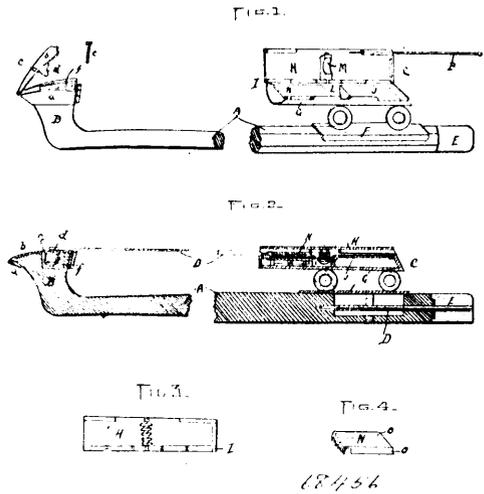
*Claim.*—1st. The side or body of the can soldered over the lip or flange of the top and bottom of the can. 2nd. The body of the can overlapping or forming a lug to which a key of suitable length may be attached to open the can.

**No. 68,456. Violin Bow.** (Archet.)

Gilbert H. Gregg, Davenport, Iowa, U.S.A., 13th August, 1900; 6 years. (Filed 11th July, 1900.)

*Claim.*—1st. In a violin bow, the combination with the staff, frog and hair, of a head having a recess or socket in its face, a metal ring

encircling said head and provided with a hinged lid with means for fastening it to the metal ring, said lid when so fastened



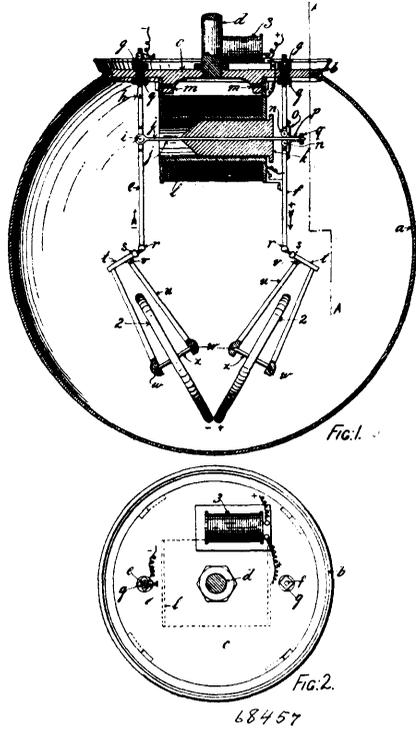
adapted to hold one end of the hair firmly in said socket for the purpose specified. 2nd. In a violin bow, a head having a recess or socket in its face, a clamping lid with a block on its under side, adapted to hold one end of the hairs of such bow in such socket, and an opening in said clamping lid through which the loose ends of the hairs may be passed, and means for fastening such clamping lid to the face of such head. 3rd. In a violin bow, a frog longitudinally adjustable on the staff of such bow, having a bed with a clamping plate or lid hinged to said bed adapted to clamp the hairs between said bed and lid and a toothed plate or comb for keeping the hairs evenly distributed while thus being held between such bed and lid for the purpose specified. 4th. In a violin bow, having a head to which one end of the hairs is secured, a frog having a bed with a recess or socket, a comb on toothed plate for evenly distributing the hair and adapted to rest on said bed with the hairs thus distributed, a hinged clamping plate or lid with a spring on its under side which is adapted to enter the socket in the bed, means for fastening said clamping plate or lid to the bed, thus holding the hairs firmly between said clamping lid and bed, substantially as shown and described. 5th. In a violin bow in combination with the staff and hair, a head having a recess or socket in its face, a ring or collar encircling said head a clamping lid hinged to said ring or collar and having a block projecting downward from its under side and a transverse opening near the middle of said lid, means for fastening said lid to the ring or collar, a frog provided with means for adjusting it longitudinally on the staff, a bed provided with a recess or socket, a comb or toothed plate to engage the hairs and rest on the bed plate, a hinged clamping plate provided with a block adapted to press the hair into the recess or socket in the bed, means for fastening said clamping lid to the bed, all for the purposes specified and substantially as described.

**No. 68,457. Electric Arc Lamp.** (Lampe électrique à arc.)

Oscar Bernhard Hellstrom, Sydney, New South Wales, 13th August, 1900; 6 years. (Filed 18th September, 1899.)

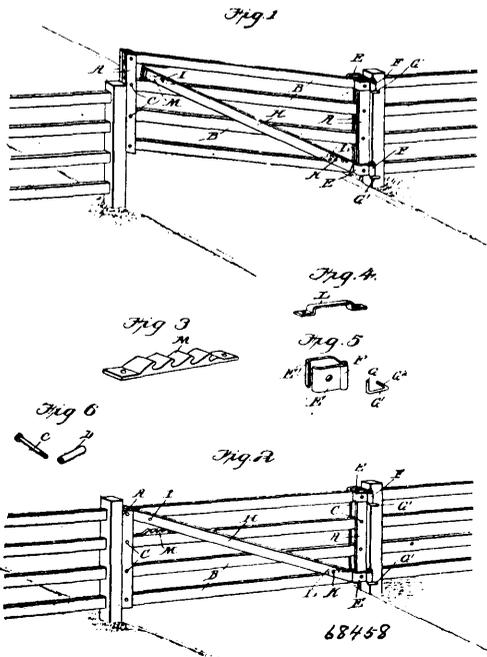
*Claim.*—1st. In an electric arc lamp, a pair of annular electrodes arranged edge to edge, and means for turning the same to present fresh surfaces to each other. 2nd. In an electric arc lamp, a pair of rotatably mounted, annular electrodes arranged edge to edge, and means for automatically rotating the same to present fresh surfaces to each other. 3rd. In an electric arc lamp, a pair of diagonally arranged, rotatably mounted, annular electrodes, arranged edge to edge and adapted to turn by gravity, as portions of the same are burnt away, to present fresh surfaces to each other. 4th. In an electric arc lamp, a pair of annular electrodes arranged edge to edge, and normally lying in contact with each other, means for turning the same to present fresh surfaces to each other, and means for automatically separating the same when the current is turned on. 5th. In an electric arc lamp, a pair of annular electrodes arranged edge to edge, brackets upon which said electrodes are mounted, one of which brackets is pivotally supported, a solenoid in circuit with said electrodes, a core therefor, a rod or bar secured to said core and connected with said pivotally supported bracket, and a spring acting upon said bar in opposition to said solenoid, as and for the purpose set forth. 6th. In an electric arc lamp, an annular electrode, a forked bracket therefor, one of the legs of which is pivotally mounted and the extremities of both of the legs having sockets therein, a supporting piece for said electrode comprising a hub and radially extending arms or spokes thereon provided with clamps upon their outer ends adapted to engage said electrode, and pintles on said hub whose ends fit within the sockets in the legs of said brackets, as and for the purpose set forth. 7th. In an electric arc lamp, a pair of annular electrodes arranged edge to edge, brackets

in which said electrodes are mounted to turn, supporting bars *c, f*, for said brackets, the bar *c*, being pivotally mounted, a solenoid in



circuit with said electrodes, a core therefor having a flanged end, a bar *j*, secured to said core and pivotally connected with the bar *c*, a nut or collar *q*, upon the end of the bar *j*, rollers on the bar *f*, between which the bar *j*, passes, a plate *o*, and a spring *p*, engaging the plate *o*, and the collar *q*, as and for the purpose set forth.

**No. 68,458. Gate. (Barrière.)**

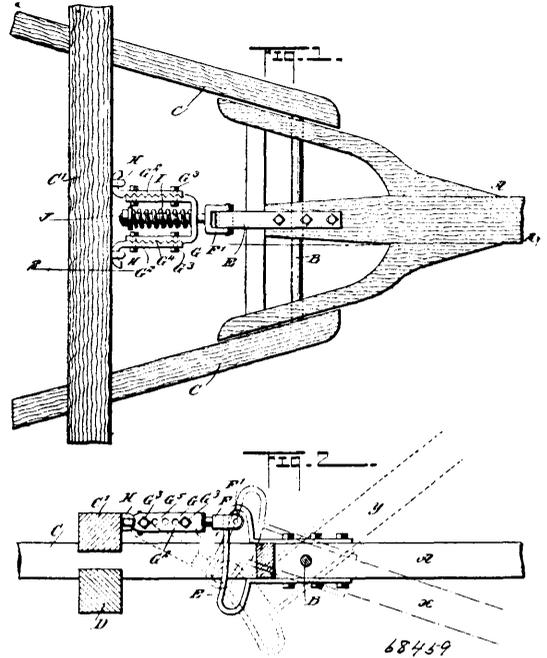


Andrew J. Wood, Campbell, and Thomas Shannon, Bath, both in the State of New York, U.S.A., 16th August, 1900; 6 years. (Filed 1st June, 1900.)

*Claim.*—A gate comprising double end patterns, parallel horizontal boards having their ends pivotally attached between the pairs

of end patterns, a loop secured upon the top of the lower horizontal board near its inner end, a toothed rack secured along the top of one of the upper horizontal boards, preferably the second from the top, a pair of brace boards located on opposite sides of the horizontal boards connected near their inner ends by a bolt passing through the loop, and near their front ends by a cross rod adapted to engage with the teeth of the toothed rack, substantially as described.

**No. 68,459. Wagon Tongue Support. (Support de timon.)**



John Calvin Lambert, Tonica, Illinois, U.S.A., 16th August, 1900; 6 years. (Filed 27th July, 1900.)

*Claim.*—1st. An automatic wagon tongue support, comprising a closed holder on the fulcrum end of a pivoted tongue, a spring-pressed slide having one end engaging said holder, and fitted to move therein to hold the tongue in position at any desired angle, and a pivoted guideway in which the said slide is free to move, substantially as shown and described. 2nd. An automatic wagon tongue support, comprising a holder on the fulcrum end of a pivoted tongue, a spring-pressed slide engaging said holder, to hold the tongue in position at any desired angle, and a pivoted guideway in which the said slide is free to move, said guideway being made in interlocking sections longitudinally adjustable upon one another, substantially as shown and described. 3rd. An automatic wagon tongue support, comprising a holder on the fulcrum end of a pivoted tongue and in the form of a curved band, a friction roller engaging said curved band, a slide on which the friction roller is journaled, said slide being provided with a head carrying the friction roller and straddling said band, a guideway pivoted to the wagon frame, and having a bearing for said slide, and a spring held on the slide and resting with one end on the guideway and with its other end abutting against a nut and washer adjustable on the end of the slide, substantially as shown and described. 4th. An automatic wagon tongue support, comprising a holder secured on the end of a pivoted tongue, a spring-pressed slide engaging said holder whereby to hold the tongue at different angles, and a guideway in which said slide is held, said guideway being formed in sections having serrated inner faces and apertures whereby to receive bolts, as shown and described.

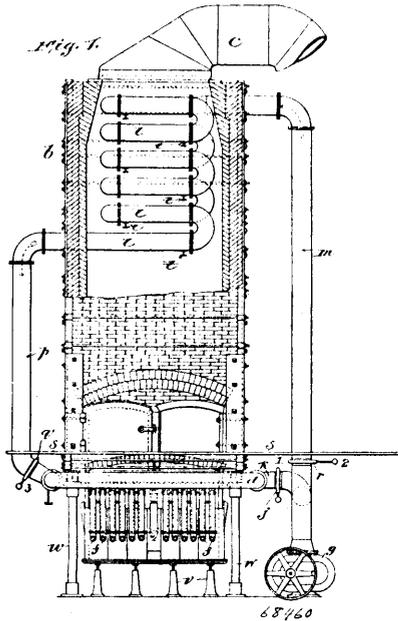
**No. 68,460. Ore Smelting Furnace.**

(Fourneau pour fondre les minerais.)

Edward Taylor Bradford, Denver, Colorado, U.S.A., 16th August, 1900; 6 years. (Filed 1st August, 1900.)

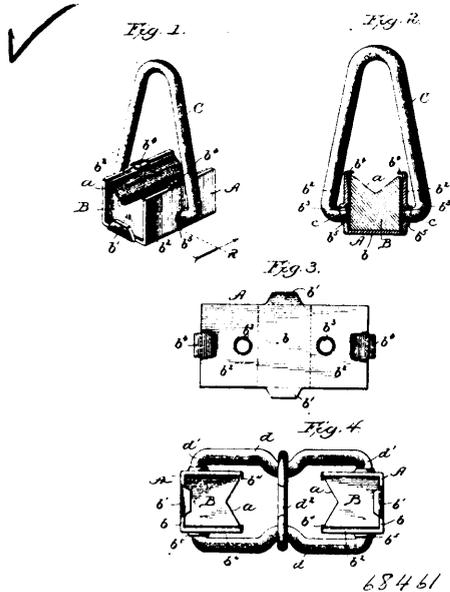
*Claim.*—1st. A hot blast furnace, provided with blast heating pipes located within the furnace and conducting the blast from the cooler to the hotter portions of said pipes, tuyeres connected to be supplied from the hotter end of the said heating pipes, and blower mechanism supplying the air to the cooler end of said heating pipes, substantially as set forth. 2nd. A hot blast furnace, provided with blast heating pipes located within the furnace and conducting the blast from the cooler to the hotter portions of said pipes, tuyeres connected to be supplied from the hotter end of said heating pipes, and blower mechanism supplying the air to the cooler end of said

heating pipes, and a non-conducting refractory lining in the portion of the furnace surrounding the heating pipes, substantially as set



forth. 3rd. A hot blast furnace, provided with blast heating pipes located within the furnace and conducting the blast from the cooler to the hotter portions of said pipes, tuyeres connected to be supplied from the hotter end of the said heating pipes, and also connected to supply a cold blast directly to the said tuyeres, and means for controlling the hot and cold blasts respectively, whereby the temperature of the blast as it issues from the tuyeres may be regulated at will, substantially as set forth. 4th. A hot blast furnace, provided with blast heating pipes located within the furnace and conducting the blast from the cooler to the hotter portions of said pipes, tuyeres connected to be supplied from the hotter end of the said heating pipes and means for forcing cold air at will through the heating pipes and also directly to the tuyeres, substantially as set forth.

**No. 68,461. Scale Loop. (Crochet de balance.)**

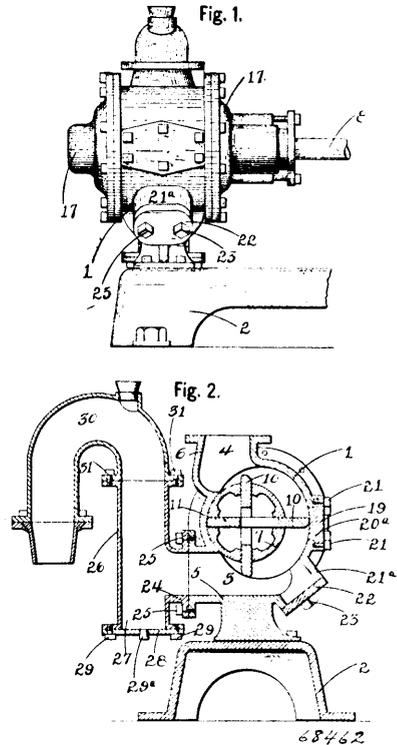


The Stimpson Computing Scale Company, assignee of Edward Finn, all of Elkhart, Indiana, U.S.A., 16th August, 1900; 6 years. (Filed 5th June, 1900.)

*Claim.*—1st. In a scale loop, the combination of a box or mounting of required tenacity, a bail for said mounting having pivotal connec-

tion therewith, and a bearing block of hard, non-corrosive material held by said mounting, substantially as and for the purpose set forth. 2nd. In a scale loop, the combination of a mounting provided with side perforations, side supporting members having inturned ends engaging said perforations, and a bearing block of agate held by said mounting, substantially as and for the purpose set forth. 3rd. In a scale loop, the combination of a mounting provided with side perforations, side supporting members having inturned upwardly inclined ends engaging said perforations, and a bearing block of agate held by said mounting, substantially as and for the purpose set forth. 4th. In a scale loop, the combination of a mounting provided with hollow side bosses, side supporting members having inturned ends and shoulders at the bases of said ends engaging said bosses, and a bearing block of hard, non-corrosive material held by said mounting, substantially as and for the purpose set forth. 5th. In a scale loop, the combination of a mounting formed from sheet metal and having bottom, ends and boss equipped perforated sides, side supporting members having inturned ends pivotal in said sides, and a bearing block of agate held by said mounting, substantially as and for the purpose set forth. 6th. In a scale loop, the combination with two bearings, of side links having inturned ends pivotally connected with said bearings, and a connection binding said links together, substantially as and for the purpose set forth.

**No. 68,462. Rotary Pump. (Pompe rotatoire.)**

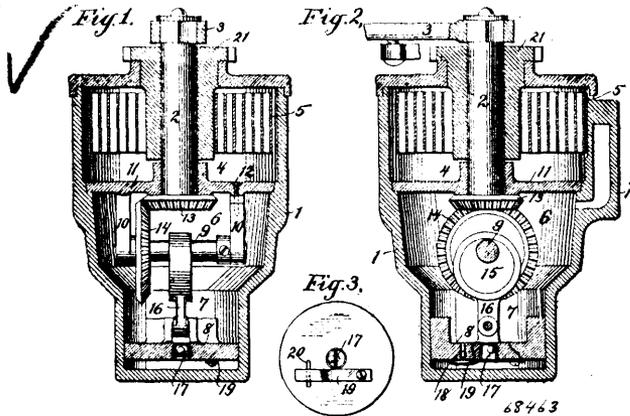


Bart Lobe, Buffalo, New York, U.S.A., 16th August, 1900; 6 years. (Filed 1st August, 1900.)

*Claim.*—1st. In a rotary pump, the combination with the casing, of valve blades within said casing, each formed in two parts and one part having two parallel arms extending from the blade side and provided with longitudinal ribs and the other two parallel arms extending from the blade side and provided with longitudinal depressions forming slideways in which the ribs upon the arms of the other part seat and travel, adjusting screws for adjusting the parts longitudinally with each other, and locking screws for fastening said parts in their adjusted position, as set forth. 2nd. In a rotary pump, the combination with the casing, of valve blades within said casing, each formed in two parts and one part having two arms extending at right angles therefrom and parallel with each other and provided with longitudinal ribs and the other having two parallel arms extending at right angles therefrom and provided with longitudinal depressions forming slideways in which said ribs seat and travel, blunt end adjusting screws passing through screw threaded openings, in one part and against the ends of the arms of the other part, and locking screws passing through openings in the other part and into screw threaded depressions in the ends of the arms of the first mentioned part for fastening said parts in their adjusted position, as set forth. 3rd. In a rotary pump, the combination with the casing, of a tubular extension projecting from the lower portion thereof and forming a trap for catching the heavier particles and a detachable cap attached to said extension through which the par-

ticles may be removed, as set forth. 4th. A rotary pump, comprising a casing having end openings, a side opening and suction and discharge openings, head plates closing the end openings, a cover closing the side openings, an operating shaft, valve blades connected to said operating shaft and filling pieces interposed between the head plates and the valve blades, thus allowing the valve blades to be formed narrow enough to be removed through the side opening upon the removal of the cover, as set forth.

**No. 69,163. Door Check and Closer.** (*Fermeture de porte.*)



Frederick Hawkins Ogden and Henry Ill, both of Newark, New Jersey, U.S.A., 16th August, 1900; 6 years. (Filed 30th July, 1900.)

**Claim.**—1st. In a door check, the combination with a vertical working cylinder, a vertically movable piston therein, and a vertical spindle mounted to be rotated, and connections between the door and spindle to rotate the latter when the door swings, of mechanism driven from said spindle to transmit the motion thereof to the piston, said mechanism comprising a cam, reducing gearing to transmit motion from the spindle to the cam, and a connection between the cam and the piston, the arrangement and proportion of said parts being such that the cam will be at a dead centre when the piston is at either limit of its travel, whereby the piston has a substantially continuous motion in one direction during the opening or closing movement of the door. 2nd. In a door check, the combination with a vertical working cylinder, a vertically movable piston therein, a vertical spindle mounted to be rotated, and connections between the door and spindle to rotate the latter when the door swings, of a shaft arranged at right angles to the axes of the cylinder and spindle, reducing gearing connecting the spindle and shaft, an eccentric on the shaft, and a device connected to the piston and movable by the eccentric to transmit movement from the latter to the piston, the arrangement and proportion of said parts being such that the eccentric will be at a dead centre when the piston is at either limit of its travel, whereby the piston has a substantially continuous motion in one direction during the opening or closing movement of the door. 3rd. In a door check, the combination with a cylinder, piston and operating mechanism, of an automatically adjusted relief valve, arranged to regulate the action of the check automatically. 4th. In a door check, the combination with a cylinder, piston and operating mechanism, of a check valve for permitting free passage of working fluid during the movement of the piston in one direction, and an automatically adjusted relief valve arranged to regulate the action of the check automatically. 5th. In a door check, the combination with a cylinder, piston and operating mechanism, of a check valve arranged to permit free passage of working fluid during the movement of the piston in one direction, and a curved leaf spring covering the relief passage and forming a relief valve, by which the action of the check is regulated automatically. 6th. In a door check, the combination with a cylinder, piston and operating mechanism, of a check valve adapted to permit free passage of working fluid during the movement of the piston in one direction, and an automatically adjusted relief valve carried by the piston and controlling the passage of the fluid through the relief passage in said piston, arranged to regulate the action of the check automatically. 7th. In a door check, the combination with a cylinder, piston and operating mechanism, said piston being provided with a relief passage, of a bent spring secured to the rear or working face of said piston and covering the relief passage thereof, and arranged to be pressed toward and thereby to restrict the orifice of said relief passage during the working stroke of the piston, whereby the action of the check is regulated automatically.

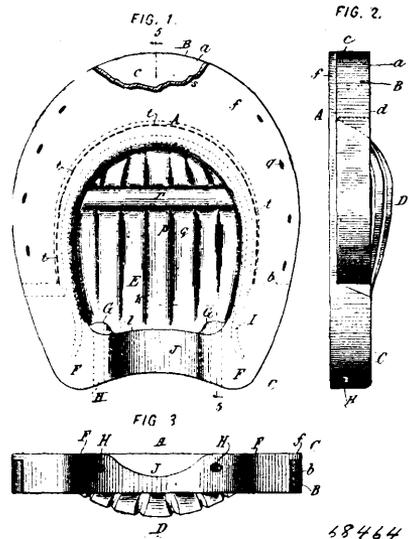
**No. 68,464. Hoof Pad for Horses.**

(*Coussinet pour pied de cheval.*)

William Joseph Kent, of New York City, New York, U.S.A., 16th August, 1900; 6 years. (Filed 2nd August, 1900.)

**Claim.**—1st. In hoof-pads, the combination with a bearing strip for receiving the sole of the hoof of a hollow central portion for

covering the sole of the foot inwardly of such bearing strip, and a reinforce on said bearing strip extending around said hollow



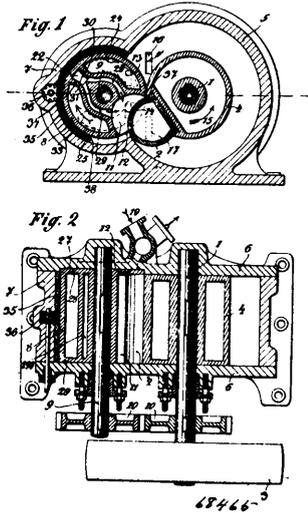
portion and having an open centre. 2nd. In hoof-pads, a body for covering the sole of a hoof having a bearing strip for contacting with the edges of the sole, a cavity under the centre of the sole, and a leather re-inforce on said bearing strip extending around said cavity and having an open centre. 3rd. In hoof-pads, a body for covering the sole of a hoof having a bearing strip for contacting with the edges of the sole, a downwardly projecting hollow centre forming an air chamber for protruding within and below the tread of a horse-shoe, a heel cushion crossing its rear, above the lower face of said protruding portion, and a frog socket in said heel cushion. 4th. In hoof-pads, a body having an outer portion for contacting with the edges of the sole of a hoof, having a cavity surrounded by such portion, said cavity having a wall for extending below the shoe, an air inlet leading to such cavity, and an automatic valve controlling flow through said inlet whereby in use said wall acts as a pump for forcing air through said valve. 5th. In hoof-pads, a flexible body adapted to be fastened to the sole of a hoof, and having a pneumatic chamber open at its upper side beneath the hoof, and a ring like leather attacher connected to and covering the outer edge of said body, and having an aperture opposite and of approximately the full area of said chamber whereby the air chamber is in direct communication with the face of the hoof. 6th. In hoof-pads, a body for contacting with the sole of a hoof, having an elastic downwardly bulging portion beneath the centre of the hoof, and a confined air chamber open at top under the hoof and within such portion, and a ring like leather attacher connected to and covering the outer edge of said body, and having an aperture opposite and of approximately the full area of said chamber whereby the hoof itself constitutes the sole top wall of said chamber. 7th. In hoof-pads, a body adapted to be attached to the sole of a hoof, having an elastic downwardly bulging portion beneath the centre of the hoof, and a stiffener carried by said body and surrounding said bulging portion for resisting lateral distortion of the hoof. 8th. In hoof-pads, a body having a thin bearing portion for attachment between the sole of a hoof and a horseshoe, a heel cushion at rear of such portion, a hollow downwardly centrally projecting portion having an unobstructed opening at top and surrounded by said bearing portion and said cushion, and having inner and outer longitudinal ribs and grooves for projecting through the centre of the shoe, and a ring like fibrous member attached to said body along its bearing portion and having a central opening opposite and of approximately the same size as its hollow central portion. 9th. In hoof-pads, a body having a bearing portion for passing between the sole of a hoof and the top bearing of a horse-shoe, a heel cushion at rear of said portion, a convex concave central wall for projecting downwardly through the centre of such shoe, and a transverse rib crossing said wall. 10th. The improved hoof-pad, having the bearing *f* for contacting with the outer edges of the sole of a hoof, the heel cushion *C* at rear of such portion, the central cavity *E* and walls, the central elastic protuberance *D* in its bottom face, the frog socket *J* crossing said heel cushion, and the stiffener *I* embedded within said body.

**No. 68,465. Rotary Engine.** (*Engin rotatoire.*)

Johann Detlef Adolf Böttcher and Jacob Heinrich Ludwig Böttcher, both of Hamburg, Germany, 16th August, 1900; 6 years. (Filed 1st August, 1900.)

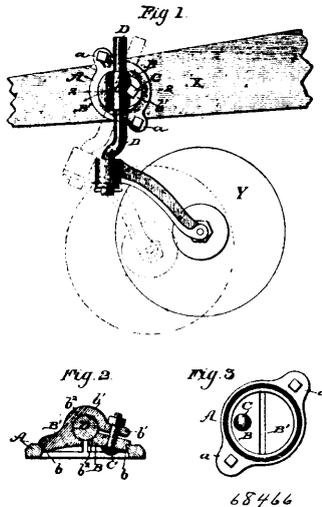
**Claim.**—1st. A rotary engine in which the admission of motive fluid is controlled by a distribution valve revolving at the same

angular velocity as the rotary piston, the said distribution valve being provided with a recess for the passage of the piston wing and



revolving in contact with a drum shaped body of equal peripheral length to which the piston wing is attached, the motive fluid passing through an opening in the distribution valve to a recess or passage in communication with the cylinder, substantially as described. 2nd. In a rotary engine of the kind described, a rotary motive fluid distribution valve in combination with an adjustable semi-cylindrical slide, one terminal edge of which is adapted to cut off the admission of motive fluid to the cylinder as soon as the following edge of the valve slot passes over it, substantially as described. 3rd. A rotary engine comprising a casing, a rotary drum, provided with a wing piston, mounted on a shaft, journaled in said casing a rotary cylindrical distribution valve as 8 also mounted in said casing a recess in said valve to receive the wing piston, gearing for rotating the valve and drum at the same angular velocity, and a motive fluid supply and reversing valve as 18 substantially as described. 4th. The complete rotary engine substantially as described or illustrated in the accompanying drawings.

No. 68,466. Colter Clamps. (Collet de coulic.)

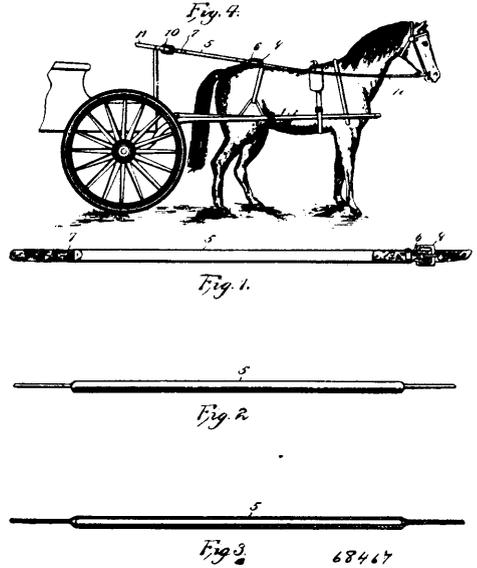


Arthur Cowles Gaylord, Sandoval, Illinois, U.S.A., 16th August, 1900; 6 years. (Filed 1st August, 1900.)

Claim.—1st. A colter clamp comprising a plate with an undercut circular opening, two jaws having edges fitting in said opening, one of said jaws having a lug extending around and forming a seat for the colter standard and terminating in a perforated end lying within the outer bend, and a bolt arranged substantially at right angles to one of the base plates and passing through the same and the said perforated lug to give a double adjustment with a single construction, substantially as shown and described. 2nd. A colter clamp comprising a plate with an undercut circular opening having smooth edges inclined as described, two jaws with smooth edges fitting in said opening, one of said jaws having a lug extending around and

forming a seat for the colter standard and terminating in a perforated end lying within the outer bend, and a bolt arranged substantially at right angles to one of the base plates and passing through the same and the said perforated lug substantially as and for the purpose described.

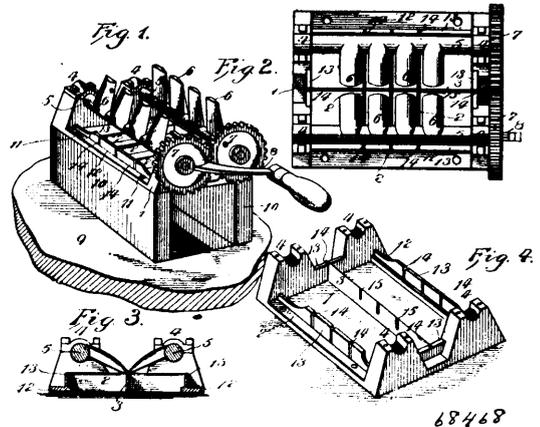
No. 68,467. Safety Reins. (Réneus.)



Orin M. Whitman, East Dickinson, New York, U.S.A., 16th August, 1900; 6 years. (Filed 3rd August, 1900.)

Claim.—1st. A rein comprising a rigid portion, a flexible strap fixed to one end of the rigid portion for engagement with a buckle, and a flexible strap fixed at the opposite end of the rigid portion for attachment of a hand portion, the rigid portion having thus fixed relation to the flexible portions. 2nd. A rein comprising a rigid portion having flexible portions at its ends and in fixed relation thereto, said flexible portions being adapted for attachment of buckles. 3rd. A rein comprising a rigid portion consisting of a rod having slotted ends, and flexible portions engaged with the slots in the ends of the rigid portion. 4th. A rein comprising a rigid portion consisting of a rod having slotted ends, a strap engaged with the slot at one end of the rod and adapted for connection of a hand portion, and a strap at the opposite end of the rod and provided with a buckle.

No. 68,468. Potato Cutter. (Machine pour couper les patates.)

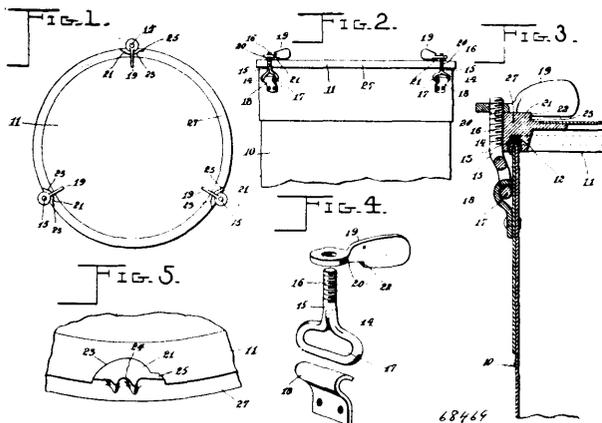


Atley Smith, Dayton, Wyoming, U.S.A., 16th August, 1900; 6 years. (Filed 7th August, 1900.)

Claim. In a device of the class described, the combination with an open substantially rectangular frame, having bearings located at the respective corners of the frame, extending above the plane thereof, and the bearings at the respective sides of the frame being aligned longitudinally thereof, of an intermediate longitudinal knife blade supported by the opposite ends of the frame, transverse knife blades intersecting the longitudinal blade, rock shafts mounted in the respective longitudinal pairs of bearings, and thereby spaced

above the knife blade, and provided with oppositely aligned inwardly extending fingers working at opposite sides of the intermediate longitudinal blade and between the adjacent transverse blades and means for simultaneously rocking the shafts, substantially in the manner shown and described.

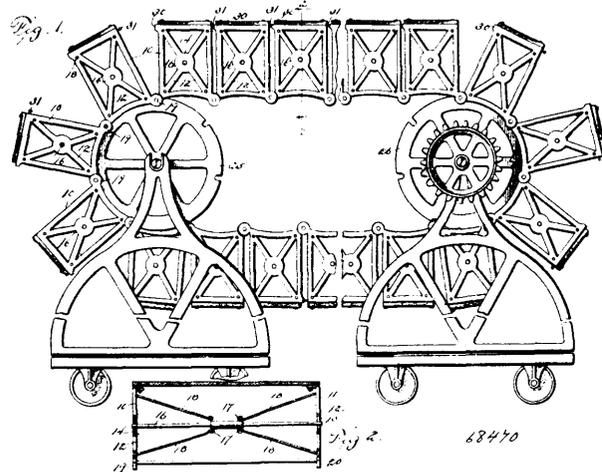
**No. 68,469. Dairy Appliance.** (*Appareil de laiterie.*)



Delphis Chassé, St. Guillaume D'Upton, Quebec, Canada, 16th August, 1900; 6 years. (Filed 3rd August, 1900.)

*Claim.*—1st. In a dairy appliance, the combination with a receptacle, of a cover having a packed channel, and means for tightly clamping the cover on said receptacle, substantially as described. 2nd. In a dairy appliance, the combination with a receptacle, of a cover having a packed channel and fitted to said receptacle, a series of adjustable supports on said receptacle, and clamping devices carried by said adjustable supports and arranged to engage with the cover, substantially as described. 3rd. In a dairy appliance, the combination with a receptacle, of a cover provided with a packed channel arranged to fit the receptacle, a series of supports on the receptacle, and a series of clamping devices, each adjustable on one support and arranged to exert a wedging action on the cover, substantially as described. 4th. In a dairy appliance, the combination with a receptacle, of a cover having a packed channel in its underside, and a series of cam bearing faces, a series of supports on the receptacle, and clamping levers mounted on the supports and arranged to ride upon the cam bearing faces, substantially as described. 5th. In dairy appliances, the combination with a receptacle, of a cover therefor, a series of stems pivoted on said receptacle at equi-distant points, a series of bearing faces on the cover, clamping levers on the stems for adjustment therewith and adapted to be adjusted thereon, and also adapted to engage with said bearing faces of the cover, substantially as described.

**No. 68,470. Chain.** (*Chaîne.*)

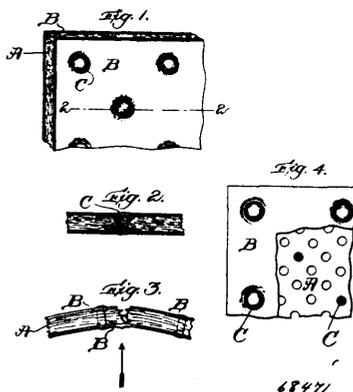


Ezra T. Bucknam, Tulare, California, U.S.A., 16th August, 1900; 6 years. (Filed 4th August, 1900.)

*Claim.*—1st. A conveyer chain, comprising links pivotally connected, and adjustable screws engaged with the adjacent links to limit the pivoted movements of the links. 2nd. A device of the class described, comprising a series of links which are pivotally

connected at one side and are unconnected at their opposite sides, each of the links having an angular socket and an angular headed adjustable screw at opposite ends of its unconnected side, the screw of one link being adapted for engagement of its head with the socket of a succeeding link to hold the unconnected sides of the links spaced and prevent adjustment of the screws when the head of the screw is engaged with the socket. 3rd. A conveyer, comprising drums and a chain mounted upon the drums and movable therewith, said chain including links which are pivotally connected at their ends which engage the drums and being unconnected at their opposite ends, and adjustable rigid means for holding the links with their unconnected ends separated and their adjacent sides to lie at angles to each other when in operative positions between the drums, whereby the links in operative positions, will describe an arch springing from the drums. 4th. A conveyer, comprising drums and a chain mounted upon the drums and movable therewith, said chain including links which are pivotally connected at points and are disconnected at other points exterior thereto, and adjustable screws engaged with the links at the last-named points and adapted for contact each with the adjacent link to hold said remote points separated to different degrees, whereby the links may be caused to describe an arch springing from the drums, and whereby the curvature of the arch may be varied. 5th. A link for conveyer chains, comprising side plates, each including a rectangular frame, a brace bar connecting the plates centrally thereof, tie rods connected with the brace rod and with the plates, and additional brace rods engaged with the plates and adapted for pivotal engagement of an adjacent link.

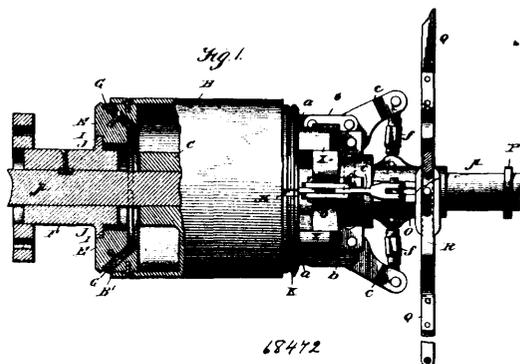
**No. 68,471. Composite Boards.** (*Planches.*)



Edward Payson White, Arlington Heights, Massachusetts, U.S.A., 16th August, 1900; 6 years. (Filed 2nd August, 1900.)

*Claim.*—The composite board above described, made up of the bulky middle portion A, and the outer sheets B, of material having tensile strength, all clamped and fixed in their relations, the one to the other, by rivets or the like.

**No. 68,472. Friction Clutches.** (*Embrayage à friction.*)

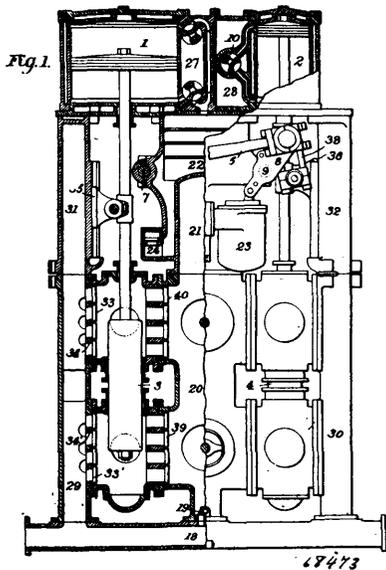


Ezra Liken, Barkeyville, Pennsylvania, U.S.A., 16th August, 1900; 6 years. (Filed 2nd August, 1900.)

*Claim.*—1st. The combination with a shaft and a loose pulley thereon, provided with a friction face, of a sliding annular clutch member having a friction face adapted to engage with the friction face of the pulley, and provided upon its rear face with rearward extending guide pieces, a sleeve fixed to the shaft and provided with projections, extending outward from the said sleeve and adjacent to the rear face of the sliding clutch member, in which are formed

guideways for the rearward extending guide pieces of the sliding clutch member, and means for sliding the clutch member, substantially as set forth. 2nd. The combination, with a shaft and loose pulley thereon, provided with a friction face, of a sliding annular clutch member K, having a friction face adapted to engage with the friction face of the pulley, and provided with guide pieces 5, 6, 7 and 8, extending rearward the rear face of the said clutch member, near the periphery thereof, and provided also with lugs, a sleeve L, secured to the shaft and provided with outward extending projection X, adjacent to the rear face of the sliding clutch member, in which projection are formed guideways fitted to receive the said guide pieces of the clutch member, and means for sliding the clutch member, substantially as set forth. 3rd. The combination, in a clutch of the character described, of a loose pulley mounted upon a shaft having a clutch face, a clutch member adapted to engage therewith and having a conical or tapering face, friction segments or sections G, detachably secured to such conical face of the clutch member, radially disposed blocks or pieces H, inserted into the clutch face between the ends of the segments G, with which ends they abut to prevent the segments moving or becoming loose upon the screws, the said pieces H, being flush with the segments G, to form a continuous friction wearing face, and means for sliding the clutch member, substantially as set forth.

**No. 68,473. Pumping Engine. (Pompe.)**



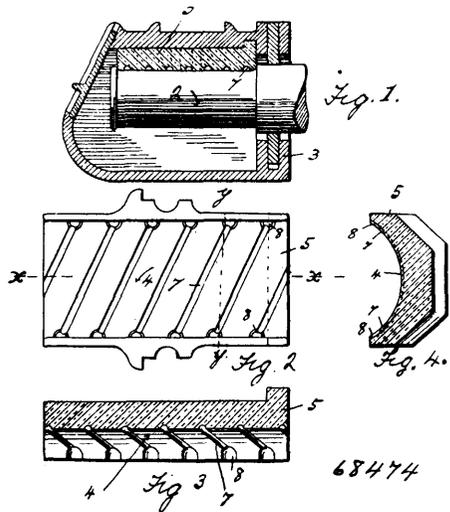
Charles Louis Heisler, Erie, Pennsylvania, U.S.A., 16th August, 1900; 6 years. (Filed 7th August, 1900.)

*Claim.*—1st. The combination with a pair of steam cylinders and their reciprocating piston rods, of a compensating mechanism comprising a pair of rocker arms, each having a fixed pivotal support, connections between said rocker arms and their respective piston rods, and a floating link connecting the free ends of said rocker arms, said compensating mechanism being constructed and arranged to limit the movement of either piston rod while the other piston rod is moving freely near its midstroke, for the purpose set forth. 2nd. The combination with a pair of steam cylinders and their reciprocating piston rods, of a compensating mechanism comprising a pair of rocker arms, each mounted upon a fixed pivotal support, links connecting said rocker arms with their respective piston rods, and a floating link connecting the free ends of said rocker arms, said compensating mechanism being constructed and arranged to limit the movement of said piston rod, while the other piston rod is moving freely near its midstroke, for the purpose set forth. 3rd. The combination with a pair of steam cylinders and their reciprocating piston rods, of a compensating mechanism comprising a pair of rocker arms, each mounted upon a fixed pivotal support, connections between said rocker arms and their respective piston rods, and a floating link connecting the free ends of said rocker arms, the said rocker arms and floating link being so proportioned, and the pivotal points of the rocker arms so located, that when either rocker arm and the floating link are in a common plane which is at right angles to their planes of movement the remaining rocker arm will be out of said plane, for the purpose set forth. 4th. The combination with a pair of steam cylinders and their reciprocating piston rods, of a compensating mechanism comprising two rocker arms, connections between said rocker arms and the piston rods, and a floating link connecting the two rocker arms, the said compensating mechanism being constructed and arranged in such manner that one of said piston rods is aided through a greater proportion of its stroke than

the other, for the purpose set forth. 5th. The combination with a pair of steam cylinders and their reciprocating piston rods, and a compensating mechanism comprising a pair of rocker arms, each mounted upon a fixed pivotal support, connections between said rocker arms and their respective piston rods, and a floating link connecting the free ends of said rocker arms, of suitable counterweights secured to the said rocker arms, said compensating mechanism being constructed and arranged to limit the movement of either piston rod while the other piston rod is moving freely near its midstroke, for the purpose set forth. 6th. The combination with a pair of steam cylinders and their reciprocating piston rods, and a compensating mechanism comprising a pair of rocker arms, each mounted upon a fixed pivotal support, connections between said rocker arms and their respective piston rods, and a floating link connecting the free ends of said rocker arms, of air pumps connected with and operated by the rocker arms, said compensating mechanism being constructed and arranged to limit the movement of either piston rod while the other piston rod is moving freely near its midstroke, for the purpose set forth. 7th. The combination with a pair of steam cylinders and their reciprocating piston rods, and a compensating mechanism comprising a pair of rocker arms, each mounted upon a fixed pivotal support, connections between said rocker arms and their respective piston rods, and a floating link connecting the free ends of said rocker arms, of cross heads, 35, 36, secured to the piston rods, said compensating mechanism being constructed and arranged to limit the movement of either piston rod, while the other piston rod is moving freely near its midstroke, for the purpose set forth. 8th. The combination with a pair of steam cylinders and their reciprocating piston rods, and a compensating mechanism comprising a pair of rocker arms, each mounted upon a fixed pivotal support, connections between said rocker arms and their respective piston rods, and a floating link connecting the free ends of said rocker arms, of a member connected to and movable with the valve of one of said cylinders, an oscillating beam mounted on said member, and rods connecting said beam and two moving parts of the engine, for the purpose set forth. 9th. The combination with a pair of steam cylinders and their reciprocating piston rods, and a compensating mechanism comprising a pair of rocker arms, each mounted upon a fixed pivotal support, connections between said rocker arms and their respective piston rods, and a floating link connecting the free ends of said rocker arms, of a condenser arranged between the piston rods and engine cylinders, the pivotal supports for the rocker arms being formed on or connected to the said condenser.

**No. 68,474. Car Axle Bearing.**

(*Coussinet d'essieux de chars.*)



Eugene Jacquemin, Minneapolis, Minnesota, U.S.A., 20th August, 1900; 6 years. (Filed 7th August, 1900.)

*Claim.*—A car axle brass, having the usual holding lugs or locking surfaces, and provided with a series of diagonal grooves in its wearing surface, said grooves terminating in the larger pockets at the ends, as described and for the purpose specified.

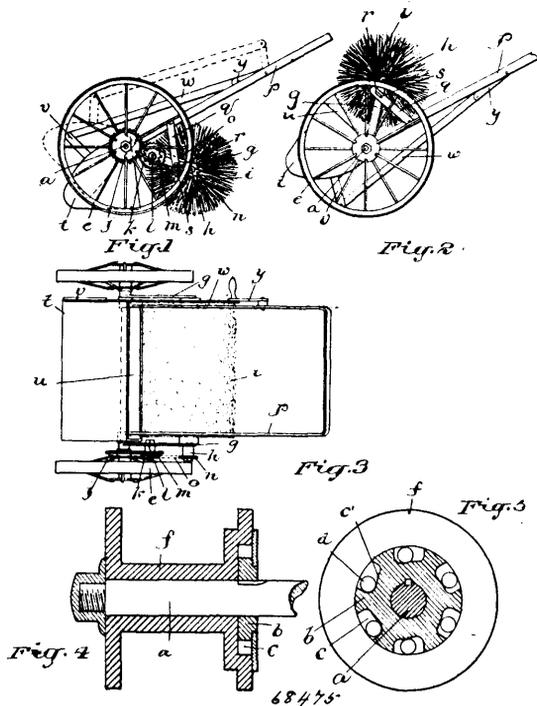
**No. 68,475. Street Sweeping Apparatus.**

(*Appareil pour balayer les rues.*)

Charles M. Kimball, Toronto, Ontario, Canada, 20th August, 1900; 6 years. (Filed 13th August, 1900.)

*Claim.*—1st. A street sweeper embracing in its construction an axle, ground wheels mounted on the axle, a dust receptacle suspended from the axle, arms connected to the axle, a brush journaled in the arms opposed to the opening in the dust receptacle, means for driving the brush from the axle, handles connected to the axle and

a dumping lever connected to the dust receptacle, substantially as specified. 2nd. A street sweeper embracing in its construction an



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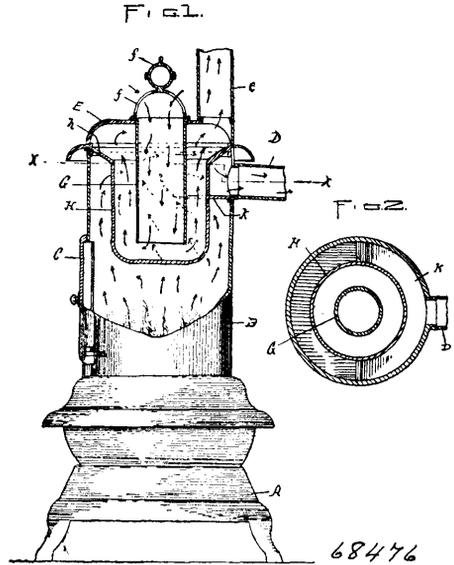
axle, ground wheels mounted on the axle, a friction clutch interposed between the axle and ground wheels to cause their united rotation during the forward revolution of the ground wheels, rearwardly directed arms connected to the axle, a brush journaled in the rearwardly directed arms, a dust receptacle suspended from the axle the opening of which is opposed to the brush, a spur wheel mounted on the axle, a spur wheel mounted on a stud intermeshing with the spur wheel on the axle, a sprocket wheel connected to the shaft of the brush, a sprocket chain passing around the sprocket wheels, handles connected to the axle and a dumping lever connected to the receptacle, substantially as specified. 3rd. A street sweeper embracing in its construction an axle, ground wheels mounted on the axle, a friction clutch interposed between the axle and ground wheels to cause their united rotation during the forward revolution of the ground wheels, rearwardly directed arms connected to the axle, a brush journaled in the rearwardly directed arms, a dust receptacle suspended from the axle the opening of which is opposed to the brush, a spur wheel mounted on the axle, a spur wheel mounted on a stud intermeshing with the spur wheel on the axle, a sprocket wheel mounted upon the shaft of the brush, a sprocket chain passing around the sprocket wheels, handles connected to the axle, an arm connected to the dust receptacle, a dumping lever one end of which is pivoted to the arm and the other end connected to a crank pivoted to one of the handles, substantially as specified.

No. 68,476. Stove. (Poêle.)

Isaac Brooke, of Pottstown, Pennsylvania, U.S.A., 20th August 1900; 6 years. (Filed 7th August, 1900.)

Claim.—1st. In a stove or furnace the combination with the casing E forming a fire chamber, of a closed radiating drum H supported dependently within said fire chamber and forming an annular draft passage between the said parts, a draft flue leading from the fire chamber at a point at or near the top of said annular draft passage, a cold flue G open at both ends and supported dependently within said drum through a central opening in the top cover of the furnace, and a hot air discharge opening at the top of said radiating drum, said parts being combined, arranged and operating substantially as described. 2nd. The combination with the inclosed fire chamber of a stove or furnace having a draft flue at or near its top, of an internal radiating drum having flaring or flanged upper walls and supported dependently in said fire chamber, of a deflecting plate between the said walls of fire chamber and the radiating drum and below the draft flue, adapted to deflect the flame and hot gases around the base of the radiating drum and its vertical walls, and a cold air flue chamber open at both ends and supported in a central opening in the top cover of the stove or furnace and dependently within the said radiating drum, substantially as described. 3rd. The combination with the fire chamber B having an upper draft flue D, of an internal dependently supported radiating drum H,

with flanged walls h adapted to support it within the fire chamber, and a cold air flue G open at both ends and supported within the

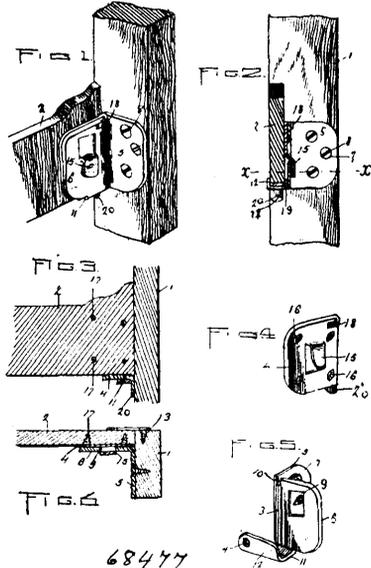


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said radiating drum, one end of said flue G communicating directly, through an opening in the top of the stove with the open air and the other end leading to near the bottom wall of said radiating drum, substantially as described.

No. 68,477. Bedstead Fastening.

(Attache pour bois de lit.)



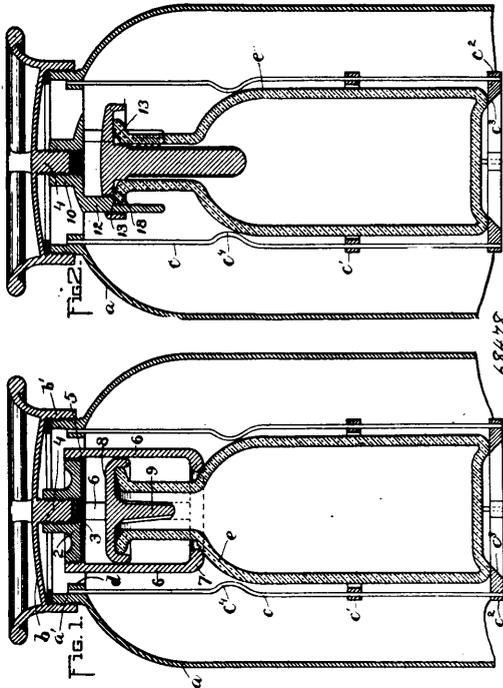
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Augustus D. Rape, of Quitman, Texas, U.S.A., 20th August, 1900; 6 years. (Filed 7th August, 1900.)

Claim.—1st. A fastening device for bedsteads comprising a plate for attachments to the bedstead leg, and provided with a laterally projecting seat for the support of the side rail, and a rearwardly projecting strap for attachment to the bedstead leg, and a plate for attachment to the side rail, and having a detachable lateral interlocking engagement with the former plate, substantially as described. 2nd. A fastening device for bedsteads, comprising an angular plate for attachment to the inner side of the bedstead leg, one of the sides of the plate having a laterally projecting arm extending from the lower edge thereof and forming a seat for the side rail, and a strap extending rearwardly from the outer end of the arm and designed for attachment to the outer side of the bedstead leg, and a plate for attachment to the inner side of the rail, having a detachable lateral interlocking engagement with the leg plate, substantially as described. 3rd. A fastening device for bedsteads, comprising a plate for attachment to the inner side of the bedstead leg, and provided with a laterally projecting seat located in advance of the inner edge of the plate, and a plate for attach-

ment to the side rail, having a pendant lug or shoulder for engagement with the rear edge of the laterally projecting seat, and also having a detachable lateral interlocking engagement with the leg plate, substantially as described. 4th. A fastening device for bedsteads, comprising a plate for attachment at substantially right angles to the inner side of the bedstead leg, and provided with a notch or socket located in the inner edge of the plate, and also a laterally projecting seat, and a plate for attachment to the side rail provided with hook for engagement with the notch in the leg plate, said rail plate having a detachable lateral interlocking engagement with leg plate, substantially as described. 5th. A fastening device for bedsteads, comprising an angular plate, one of the sides of which is designed for application to the inner side of the bedstead leg, the other side being provided with an opening and a notch located in the upper edge and at the inner end of the side a lateral arm projecting from the lower edge of the latter side of the plate and opposite the former side thereof and a rearwardly extending strap provided at the outer end of the arm and designed for attachment to the outer side of the bedstead leg, and a plate for attachment to the inner side of the side rail of the bedstead, and provided with a laterally offset, tongue for engagement through the opening in the leg plate, a laterally offset hook for engagement with the notch in said plate and a pendant lug or shoulder for engagement with the rear edge of the latter arm, substantially as described.

**No. 68,478. Fire Extinguisher. (Extincteur d'incendie.)**

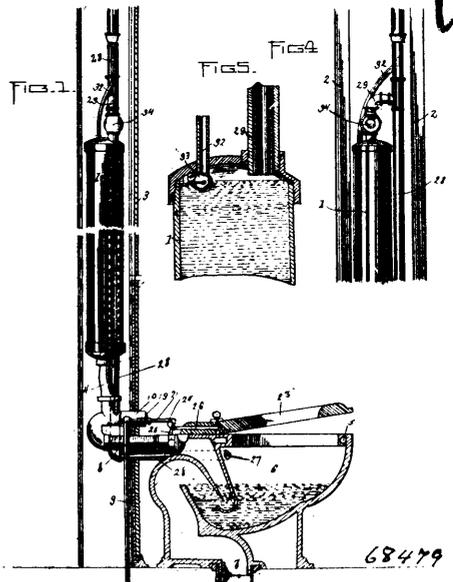


Arthur Campbell Badger, of Boston, Massachusetts, U.S.A., 20th August, 1900; 6 years. (Filed 7th August, 1900.)

*Claim.*—1st. A fire extinguisher, comprising a casing having a neck and a detachable cap or cover therefor, a bottle holder attached to the neck of the casing independently of the cover, a gravity stopper adapted to close the neck of a bottle in said holder, a stopper guide, and adjustable connections between the guide and cover, whereby the guide may be adjusted toward and from the bottle neck and made operative with bottles of different sizes. 2nd. A fire extinguisher, comprising a casing having a neck and a detachable cap or cover therefor, a bottle holder attached to the neck of the casing, a screw threaded coupling or connecting member on the cover, and a stopper guide having a complementary screw threaded coupling or connecting member formed to engage the member on the cover, said members permitting the adjustment of the stopper guide. 3rd. A fire extinguisher, comprising a casing having a neck and a detachable cap or cover therefor, a bottle holder attached to the neck of the casing, a screw threaded coupling or connecting member on the cover, and a stopper guide having a complementary screw threaded coupling or connecting member formed to engage the member on the cover, said members permitting the adjustment of the stopper guide, said guide having means such as a ring or a series of shoulders for exerting downward pressure on the bottle. 4th. A fire extinguisher, comprising a casing having a neck and a detachable cap or cover therefor, a bottle holder attached to the neck of the casing, a screw threaded

coupling or connecting member on the cover, and a stopper guide composed of an externally threaded head having a threaded coupling member to engage the coupling member on the cover, an internally threaded ring to engage the external thread on the head, stopper guiding arms on said ring, and a bottle confining ring on the lower ends of said arms. 5th. A fire extinguisher, comprising a casing having a neck and a detachable cap or cover therefor, a bottle holder attached to the neck of the casing, a gravity stopper adapted to close the neck of a bottle in said holder, and a stopper guide supported by said cover and having means for retaining the stopper when the cover is removed from the casing. 6th. A fire extinguisher, comprising a casing having a neck and a detachable cap or cover therefor, a bottle holder attached to the neck of the casing, a gravity stopper adapted to close the neck of a bottle and projecting outside of said neck, and a stopper guide attached to the cover and having stopper guiding arms, and a stopper retaining ring at the lower ends of the arms formed to engage the projecting portion of the stopper.

**No. 68,479. Closet Ventilating and Flushing Apparatus. (Ventilation des latrines.)**

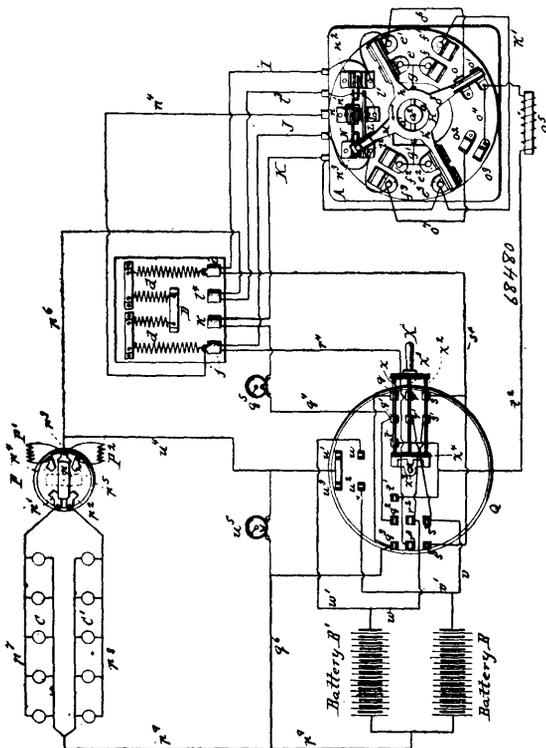


William Spencer Brickell, Buffalo, New York, U.S.A., 20th August, 1900; 6 years. (Filed 24th July, 1900.)

*Claim.*—1st. In a water closet, flushing and ventilating apparatus, the combination of a vent pipe in communication at its inlet end with the closet bowl, a tank having a relief tube terminating in said vent pipe to produce an influx of air at the inlet end of the vent pipe during the filling of the tank, and means for controlling the flow of water into and out of the tank, substantially as specified. 2nd. In a water closet flushing and ventilating apparatus, the combination of a closed flushing tank, a vent pipe communicating at its inlet end with the bowl of the closet, and connected with the interior of the tank to receive the air escaping from the latter during the filling thereof with water, the direction of said discharge being toward the outlet end of the vent pipe, and means for controlling the flow of water into and out of the tank, substantially as specified. 3rd. In a water closet flushing and ventilating apparatus, the combination of a vent pipe in communication at its inlet end with the closet bowl, a flushing tank, a time discharge relief tube, extending from the top of the tank into the vent pipe and extended therein toward the outlet end of said pipe, and means for controlling the flow of water into and out of the tank, substantially as specified. 4th. In a water closet flushing and ventilating apparatus, the combination with a closed flushing tank, of a vent pipe in communication with the closet bowl and with the tank at its top, valve mechanism for closing communication between the vent pipe and the tank simultaneously with opening communication directly through the vent pipe, and a relief tube connecting the tank with the vent pipe above said valve mechanism, and means for controlling the flow of water into and out of the tank, substantially as specified. 5th. In a water closet flushing and ventilating apparatus, the combination of a flushing tank, a vent pipe in communication with the closet bowl, and also in communication with the tank at its top by means of a suction passage and a relief passage, valve mechanism for controlling the communication between the lower portion of the vent pipe and the upper portion thereof and said suction passage, respectively, and means for controlling the flow of water into and out of the tank, substantially as specified. 6th. In a water closet flushing and ventilating apparatus, the combination

of a flushing tank, a vent pipe in communication with the closet bowl, a suction passage connecting the vent pipe with the tank at its top, pressure controlled valve mechanism for establishing communication between the suction passage and the lower portion of the vent pipe, and between the lower and upper portions of the vent pipe, alternately, a relief tube connecting the upper portion of the tank with the vent pipe above the plane of said valve mechanism, and of less cross-sectional area than the vent pipe, to cause an upward current of air in the vent pipe, and a suction at the lower end thereof, during the filling of the tank, and means for controlling the flow of water into and out of the tank, substantially as specified. 7th. In a water closet flushing and ventilating apparatus, the combination of a flushing tank, a vent pipe in communication with the closet bowl, a suction passage connecting the vent pipe with the tank at its top, pressure controlled valve mechanism for establishing communication between the suction passage and the lower portion of the vent pipe, and between the lower and upper portions of the vent pipe, alternately, a relief tube connecting the upper portion of the tank with the vent pipe above the plane of said valve mechanism, and of less cross-sectional area than the vent pipe, to cause an upward current of air in the vent pipe, and a suction at the lower end thereof, during the filling of the tank, the discharge end of said relief tube, inclosed within the vent pipe, being extended toward the outlet end of the latter, and means for controlling the flow of water into and out of the tank, substantially as specified. 8th. In a water closet flushing and ventilating apparatus, the combination of a flushing tank, and means for controlling the flow of water into and out of the tank, of a vent pipe adapted to be supplied with air at a point adjacent to the closet bowl, and connections between the vent pipe and the tank whereby air is discharged from the tank into the said pipe, and is drawn from said pipe into the tank, respectively, during the filling and emptying of the tank to induce an influx of air at that end of the pipe which is in the vicinity of the closet bowl during both the filling and emptying of the tank, substantially as specified. 9th. In a water closet flushing and ventilating apparatus, the combination of a flushing tank, and means for controlling the flow of water into and out of the tank, of a vent pipe having its inlet end located at a point adjacent to the closet bowl, and fluid controlled valve connections between the vent pipe and the tank whereby air is discharged from the tank into the said pipe, and is drawn from said pipe into the tank respectively, during the filling and emptying of the tank to induce an influx of air at the inlet end of said pipe during both the filling and emptying of the tank, substantially as specified.

**No. 68,480. Electric Lighting Apparatus.**  
(Eclairage électrique.)

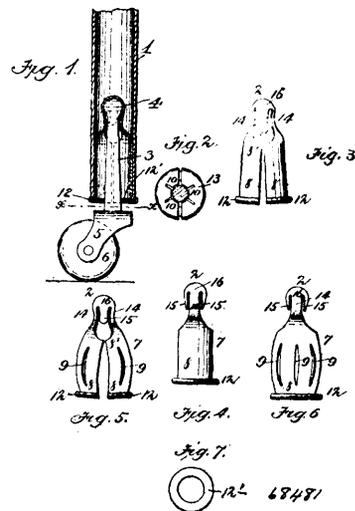


Rufus Nutting Chamberlain, Depew, New York, U.S.A., 20th August, 1890; 6 years. (Filed 29th June, 1900.)

Claim.—1st. The combination with the generating circuit, the lighting circuit and two storage batteries, of a multiple hand switch

having two sets of main contacts interposed between the generating circuit on one hand and the batteries and the lighting circuit on the other hand, a set of emergency contacts interposed between the batteries and the lighting circuit, and a switch lever adapted to connect either a set of main contacts or the emergency contacts, each set of main contacts having two contacts arranged in the generating circuit for opening or closing the same and having also a group of battery alternating contacts, whereby, upon shifting the switch lever from one set of main contacts to the other, the generating circuit is alternately connected with one battery and the other battery with the lighting circuit, while upon engaging the switch lever with the emergency contacts the generating circuit is opened and both batteries are connected in multiple with the lighting circuit, substantially as set forth. 2nd. The combination with the generating circuit, the field circuit, the battery circuit and the lighting circuit, of a multiple hand switch having main contacts interposed between the generating circuit and the battery and lighting circuits for opening or closing the generating circuit, emergency contacts interposed between the battery circuit and the lighting circuit, field contacts arranged in the field circuit for opening or closing the same, and a switch lever adapted to be engaged with or disengaged from the main contacts and the field contacts for closing or opening the field circuit when the generating circuit is closed or opened, or to be engaged with the emergency contacts for opening the generating circuit and field circuit and connecting the battery circuit with the lighting circuit, substantially as set forth. 3rd. The combination with the lighting circuit and the supplying circuit, of an interposed hand switch having lamp contacts and a supplying contact, a resistance contact connected with the supplying contact by a resistance, and a switch lever by which the supplying contact can be connected at will with said lamp contacts to supply the lighting circuit, or by which the resistance contact can be connected with one of the lamp contacts to supply part of the lighting circuit, thereby placing the resistance in series with the part of the lighting circuit which is connected with the resistance contact by the switch lever, substantially as set forth.

**No. 68,481. Castor Socket.** (Roulette de meubles.)



Bernhard H. Noeting, Nebraska City, Nebraska, U.S.A., 20th August, 1900; 6 years. (Filed 5th June, 1900.)

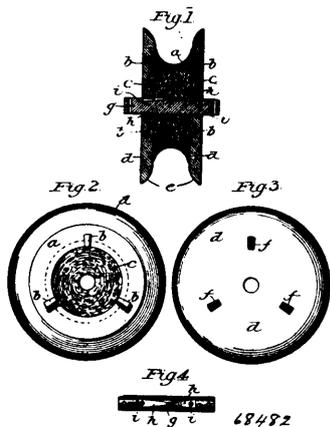
Claim.—1st. A cylindrical castor socket made of a single sheet of spring metal, consisting of a head 16, spring tongues 15, spring necks 14, semi-cylindrical barrel-shaped parts 8, slitted longitudinally, converting said parts into yielding springs, flange 12, washer 12<sup>1</sup>, track plate 13, said track plate forming a bearing for a pintle, substantially as shown and described and for the purposes set forth. 2nd. A cylindrical castor socket made of a single sheet of spring metal, consisting of a head 16, semi-cylindrical barrel-shaped parts 8, slitted longitudinally, converting said parts into yielding springs, flange 12, washer 12<sup>1</sup>, track plate 13, said track plate forming a bearing for pintle, substantially as shown and described and for the purposes set forth.

**No. 68,482. Trolley Wheel.** (Roue de trolley.)

Stephen Girard Reynolds, Easton, Pennsylvania, U.S.A., 20th August, 1900; 6 years. (Filed 16th May, 1900.)

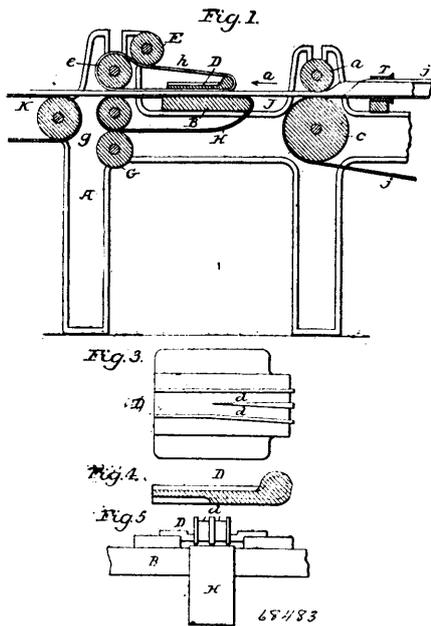
Claim.—1st. A trolley wheel, having in combination a peripherally grooved annular centre provided with integral lateral projections, side discs having interlocking indentations or depressions on their inner sides corresponding in number and position with the projections, whereby said disc and centre are locked against relative rotary movement, and a pin on which the side discs have their bear.

ings. 2nd. A trolley wheel, having in combination, the peripherally grooved annular centre *a*, provided on its outer edges with



integral radial lugs or teeth *b*, the side discs *d*, having radial interlocking indentations or depressions *f*, corresponding in number and location with the lugs or teeth, and the pin *g*, adapted to fit in bearings in the side discs. 3rd. A trolley wheel, having in combination, the peripherally grooved, annular centre ring *a*, having radial lugs or teeth projecting laterally from its opposite edges, the side discs *d*, having radial indentations or depressions *f*, corresponding in number and location with the teeth on the centre ring, the fibrous packing *c*, and the pin *g*, adapted to be secured in the fork of the trolley pole providing a bearing for the discs. 4th. A trolley wheel, having in combination, a centre ring, side discs, and a fibrous packing within the hollow of the ring, and a pin upon which the wheel revolves, said pin provided at its top with flattened portions *h*, inclining in opposite directions from the central point.

No. 68,483. Flexible Tubing. (*Tuyau flexible.*)

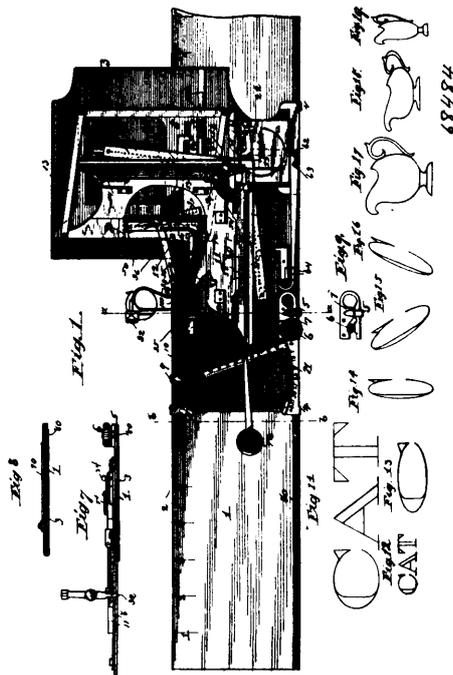


Henry James Doughty, Providence, Rhode Island, U.S.A., 20th August, 1900; 6 years. (Filed 13th January, 1900.)

Claim.—1st. In apparatus for joining the edges of rubber or similar materials, bands, and means for moving and guiding the same, so that they approach each other and thereby force the edge to be joined tightly together, substantially as described. 2nd. In a tube making apparatus, means for folding in the edges of a travelling strip, combined with travelling means for drawing and holding said edges together, substantially as described. 3rd. In a tube making apparatus, means for folding in the edges of a travelling strip, combined with two travelling bands, with means for causing them to bear on said folded in portions and for bringing them gradually together, substantially as set forth. 4th. The combination in a tube

making apparatus, of a part having converging grooves and endless bands travelling through said grooves, and means for conducting and supporting a folded strip adjacent to said bands, substantially as set forth. 5th. In a tube making machine, the combination of an open folding tube *T*, a conveyer belt passing through said tube, substantially as set forth. 6th. The combination with the folding tube, of travelling means for bringing and holding together the edges of the strip folded in said tube, substantially as set forth.

No. 68,484. Reproducing Device. (*Appareil pour copier.*)

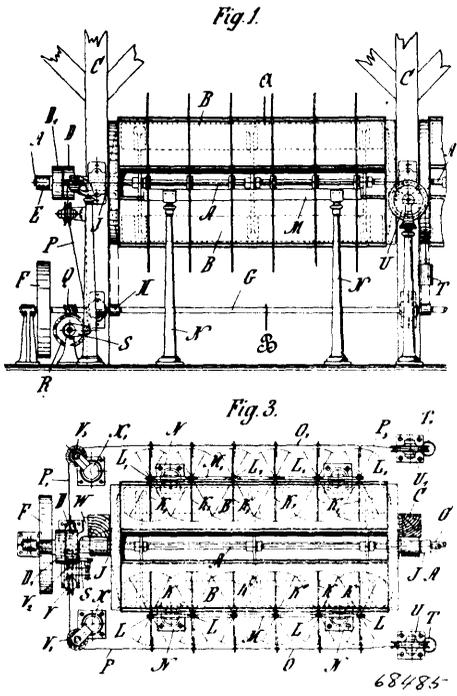


Arthur E. Jacobs, of Cleveland, Ohio, U.S.A., 20th August, 1900; 6 years. (Filed 30th September, 1899.)

Claim.—1st. In a reproducing device, the combination with a base plate and oppositely moving plates mounted thereon, the upper of said plates being provided with two sides forming a right angle between them and with slots parallel to said sides, of a pen actuated by said plates, and means for moving said plates to produce predetermined movements in the pen, consisting of a model adapted to be followed by a tracing point, a pair of arms pivoted together at one extremity, at which pivotal point the said tracing point is inserted and provided at their outer extremities with guide pins moving in slots in the base plate, and also provided with perforations at regular intervals, and pins adapted to be inserted in predetermined perforations in said arms and passing through the slots in said upper plate, whereby positive movements are given the said plate, substantially as described. 2nd. In a reproducing device, the combination with a base plate provided with slots at right angles to each other, of upper and intermediate plates thereon, the said plates being adapted to move in opposite directions and the said upper plate being provided with two slots forming a right angle between them and parallel to the said slots in the said base plate, arms pivoted together at one of their extremities and perforated at regular intervals and provided with pin guides in their other extremities adapted to move in the slots in the said base plate, a tracing point at the pivoted connection of the said arms, pins adapted to pass through the slots in the upper plate and inserted in predetermined perforations in said arms, a pen actuated by said movable plates, and means for changing the vertical movements of said pen to oblique movements, substantially as described. 3rd. In a reproducing device, a pen and a base plate in combination with oppositely moving plates mounted upon said base plate and constructed and arranged to afford vertical and horizontal movements to said pen, a model and tracing point, mechanism adapted to transmit the vertical and horizontal movements of said tracing point to said plates in any predetermined degree of either, and means for changing the vertical movements of said pen to oblique movements, substantially as described. 4th. In a reproducing device, the combination with a pen and tracer, and means for imparting to the pen the vertical and horizontal movements of the tracer, of a controller for changing the vertical movements of the tracer to either right or left oblique movements of the pen, substantially as described. 5th. In a reproducing device, the combination with a pen and oppositely moving plates adapted to impart vertical and horizontal movements to the pen, of means for chang-

ing the said vertical movements to alternately right or left oblique movements at pleasure, consisting of a vertically slotted plate to which said pen is attached, the said plate being mounted in horizontal guides in the vertically moving plate aforesaid, and a controlling device for said pen-carrying plate, consisting of a T-shaped piece pivoted to said vertically moving plate at the intersecting point of its arms, provided with a horizontal guide in the horizontally moving plate at the extremity of the longer arm, with perforations in the cross arm at regular intervals, and a pin passing through the vertical slot in the pen-carrying plate and inserted in one of said perforations in the cross-arm of the controller, substantially as described. 6th. In a reproducing device, in combination, a base plate, an intermediate plate adapted to slide horizontally upon the base plate, and an upper plate adapted to slide vertically upon the intermediate plate, a vertically slotted pen carrier mounted in horizontal guides upon the vertically moving plate, and a T-shaped controlling device constructed and arranged to change the vertical movements of the pen to oblique movements, said controlling device being pivoted upon the vertically moving plate at the intersection of its arms, and having the cross-arm perforated at regular intervals and the extremity of the other arm secured in a horizontal guide in the horizontally moving plate. 7th. In a device for the purpose described, slotted plates adapted to receive guiding pins therein, in combination with spring actuated keepers for said pins, consisting of a spring pressed side for each slot, substantially as described. 8th. In a reproducing machine, a base plate mounted upon a ruler blade in guides, a clamping device for the plate and a spacing device, said spacing device consisting of a graduated arc upon the base plate, an indicating finger pivoted upon the base plate, the said finger being perforated at regular intervals and marked with a scale, and a weight adapted to rest upon the rear blade and connected to the index finger by means of an arm and pin at the extremity thereof, substantially as described. 9th. In combination with a pen for use in a machine of the character described, means for removably securing said pen to one of the moving parts of the device, consisting of a spring to which the pen is secured, and keeper provided with conical depressions into which the pointed extremities of the springs are secured.

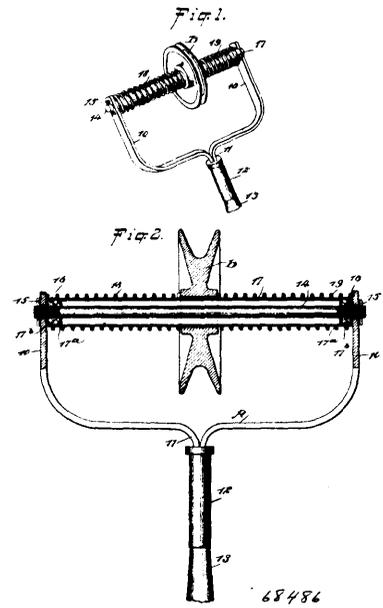
**No. 68,485. Ventilating Apparatus. (Ventilateur.)**



Henrich Klein, of Timaseus, Bavaria, Germany, 22nd August, 1900; 6 years. (Filed 22nd July, 1899.)

*Claim.*—1st. A ventilator rotating with great velocity in a slowly rotating drum which on its circumference has a number of equally distributed slit shaped apertures, for the escape of the air, that air which is expelled, being replaced by air from without which enters in the direction of the drum shaft, substantially as described. 2nd. A number of crescent shaped fan blades, resembling venetian blinds, movable on vertical pivot, and placed along the two longer sides of the drum, and means to put them in oscillatory motion by transmission gear driven by the ventilator shaft, substantially as and for the purpose hereinbefore set forth.

**No. 68,486. Trolley Harp. (Trolléc.)**



Edward Greenberry Johnson, of Brigantine, New Jersey, Franklin D. Palmer and Carl Coenen, both of New York City, New York, all in the U.S.A., 22nd August, 1900; 6 years. (Filed 3rd July, 1900.)

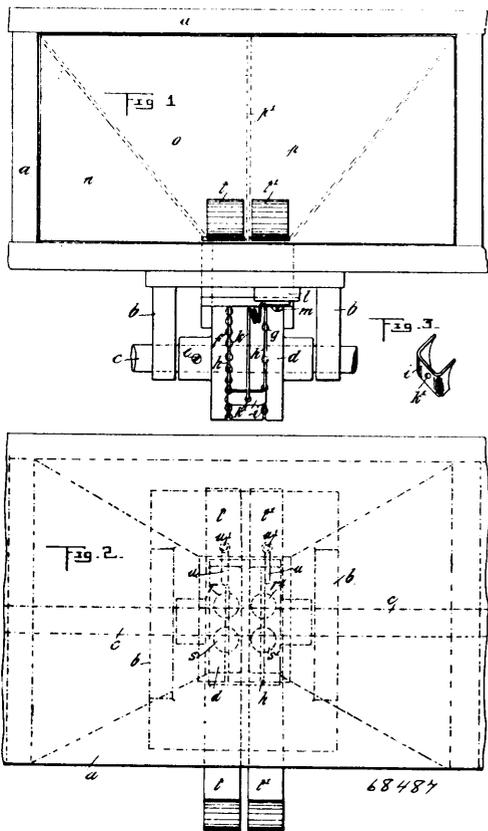
*Claim.*—1st. The combination of the trolley harp, the shaft journaled thereon, the trolley wheel mounted to turn loosely on said shaft and also capable of sliding thereon, and spring bearing against opposite sides of the trolley wheel and against fixed abutments. 2nd. The combination of the trolley harp, the coiled springs bearing with their outer ends against the harp members, the trolley wheel against which the inner ends of said springs abut, the fixed shaft extending centrally through the coiled springs and the trolley wheel, and secured to the harp members, and the tubular shaft interposed between the fixed shaft on one hand and the trolley wheel and springs on the other hand, the wheel being free to turn and slide on said tubular shaft. 3rd. The combination of the trolley harp, the coiled springs bearing with their outer ends against the harp members, the trolley wheel against which the inner ends of the said springs shut, the fixed shaft extending centrally through the coiled springs and the trolley wheel, and secured to the harp members, and the tubular shaft mounted upon ball bearings upon the fixed shaft and interposed between the latter on one hand and the trolley wheel and springs on the other hand, the wheel being free to turn and slide on said tubular shaft.

**No. 68,487. Seed Sowing Apparatus. (Machine à semer.)**

The New Zealand Loan and Mercantile Agency Company, Limited, Wellington, assignee of Charles Bristow Marton, all in the Colony of New Zealand, 22nd August, 1900; 6 years. (Filed 18th April, 1900.)

*Claim.*—1st. In apparatus for the purpose described, a roller fixed upon a spindle revolvable beneath a seed hopper holes or indentations in the circumferential periphery of said roller receiving seed to be sown and means for conducting seed from said hopper to the periphery of the roller, substantially as and for the purpose herein described and illustrated in the drawings. 2nd. In apparatus for the purpose described, a revolvable roller having holes or indentations in its circumferential periphery to receive seed to be sown, means for conducting seed from a hopper to the periphery of said roller whereby it passes into said holes and an ejector working in a groove in the roller for removing seed from said hole, substantially as and for the purposes herein described and illustrated in the drawings. 3rd. In apparatus for the purpose described, a roller revolvably mounted beneath a receptacle containing seed to be sown and a riding hopper beneath said receptacle riding upon a roller, means for admitting seed to said riding hopper from said receptacle and means for carrying seed upon the circumferential periphery of said roller whereby it is discharged from said riding hopper, substantially as and for the purposes herein described and illustrated in the drawings. 4th. In apparatus for the purpose described, a roller revolvably mounted beneath a receptacle containing seed to be sown and a riding hopper beneath said receptacle riding upon a roller, means for admitting seed to said riding hopper from said receptacle and holes or indentations in the circumferential periphery of said roller receiving seed within the said riding hopper and conducting it therefrom, substan-

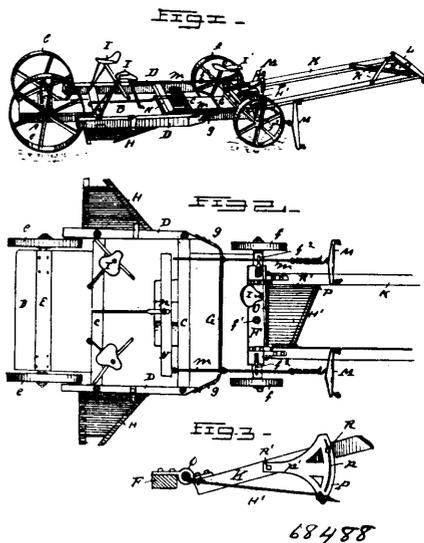
tially as and for the purposes herein described and illustrated in the accompanying drawing. 5th. In apparatus for the purpose described,



a roller revolvably mounted beneath a receptacle containing seed to be sown and a riding hopper beneath said receptacle riding upon the roller, means for admitting seed to said riding hopper from said receptacle and a continuous groove upon the circumferential periphery of said roller receiving seed within the said riding hopper and conducting it therefrom, substantially as and for the purpose herein described and illustrated in the accompanying drawings. 6th. In apparatus for the purpose described, a roller revolvably mounted beneath a receptacle containing seed to be sown and a riding hopper beneath said receptacle riding upon a roller, means for admitting seed to said riding hopper from said receptacle a continuous groove upon the circumferential periphery of said roller receiving seed within the said riding hopper and conducting it therefrom and a channel or channels in the form of a screw thread upon said roller feeding seed to said groove, substantially as and for the purposes herein specified. 7th. In apparatus for the purpose described, a receptacle for seed a roller revolvably mounted beneath it and a riding upon the roller, said roller being provided with means for receiving and conducting seed from said hopper, substantially as specified and illustrated. 8th. In apparatus for the purpose described, a receptacle containing seed, a roller revolvably mounted beneath it, said roller being provided with means for receiving and conducting seed from a hopper beneath the seed receptacle and riding upon the roller, said hopper having an opening through which the seed passes and a slide for adjusting the size of said opening secured in position by a set screw, substantially as herein specified and illustrated. 9th. In apparatus for the purpose described, a receptacle containing seed, a roller revolvably mounted beneath it, said roller being provided with means for receiving and conducting seed from a hopper beneath the seed receptacle and riding upon the roller, substantially as and for the purposes herein specified and illustrated in the drawing. 10th. In apparatus for the purpose described, a receptacle for seed divided into compartments a hopper beneath said receptacle riding upon a roller and also divided into compartments and means upon the circumferential periphery of said roller for receiving seed and conducting it from each compartment to said riding hopper the bottom of each compartment of the seed receptacle having an opening for the passage of seed to the riding hopper and sliding shutters between the seed receptacle and said riding hopper having each an opening and arranged to admit seed to and shut off seed from any compartment of the riding hopper independent of any compartments simultaneously, substantially as and for the purposes herein described and illustrated in the accompanying drawings. 11th. In apparatus for the purpose described, a receptacle containing seed, means for conducting seed from said receptacle to a roller mounted revolvably

beneath it, holes or indentations in the form of a ring or rings upon the circumferential periphery of the roller receiving seed within and conducting it from the riding hopper, a groove or grooves circumscribing the roller and passing through said holes and an ejector fitting within said groove or grooves adapted to eject seed from said holes, substantially as and for the purposes herein described and illustrated in the drawings. 12th. In apparatus for the purpose described, a receptacle containing seed, means for conducting seed from said receptacle to a roller mounted revolvably beneath it, said roller having holes or indentations in the form of a ring upon its circumferential periphery receiving said seed, a groove surrounding the roller passing through said holes and an ejector fitting within said groove for ejecting seed from the holes, said ejector being in the form of a blade wedge shaped one end and held in the groove by a wire spring, substantially as and for the purposes herein specified and illustrated. 13th. In apparatus for the purpose described, a receptacle containing seed, means for conducting seed from said receptacle to a roller mounted revolvably beneath it, said roller having holes or indentations in the form of a plurality of rings upon its circumferential periphery receiving seed within and conducting it from the riding hopper, and a partition bracket riding upon said roller and fitting within said riding hopper for preventing seed from entering one or more of the rings of holes in said roller, substantially as specified and illustrated. 14th. In apparatus for the purpose described, a receptacle for seed divided into two compartments, a riding hopper beneath said receptacle divided by a dividing plate, the bottoms of said compartments each having a hole communicating with one of the divisions of the riding hopper, and a roller beneath said riding hopper provided with means whereby seed is simultaneously withdrawn from one division of the riding hopper and discharged intermittently and from the other division of the riding hopper and discharged in a continuous flow, said means consisting of a number of holes in the circumferential periphery of the roller for giving the intermittent discharge and of a circumferential groove for providing a continuous flow, substantially as and for the purposes herein described and illustrated in the drawings.

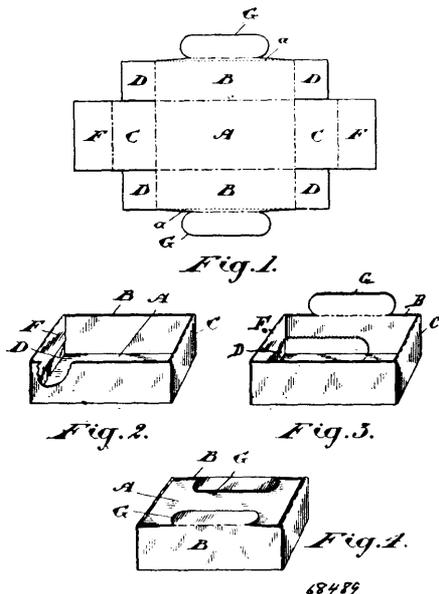
**No. 68,488. Three Row Cornstalk Cutter.**  
(Machine pour couper les gerbes.)



Andrew A. Nilson and Jens Johnson Ven, both of Elk Point, South Dakota, U.S.A., 22nd August, 1900: 6 years. (Filed 9th May, 1900.)

**Claim.**—1st. In a corn cutter, the combination with the frame of an axle F pivoted to said frame at its middle, a rod O secured along the front of said axle, a double tongue K hinged to said rod near each end thereof, a knife H<sup>1</sup> having its front cutting edge diagonal to said rod, quadrants P having slots p and radius arms p<sup>1</sup> attached to the double tongue by bolts R, R<sup>1</sup> and fastened to the knife H<sup>1</sup> at each end thereof, and a sheet of metal S extending rearwardly from the knife and hinged to the rod O, substantially as described. 2nd. A three row corn cutter, comprising the combination with sills A, of the flooring B, the cross bars C, the side rails D, the transverse bar G, having backwardly turned oblique ends attached to the forward ends of the said rails, the whole forming a substantially flat platform, the seats l mounted on said platform near the ends of the side rails, the knives H rigidly attached to the side rails alongside of said seats, the front axle F pivoted to the platform, the seat l<sup>1</sup> mounted on said axle, a double tongue hinged to said axle, and a knife H<sup>1</sup> adjustably mounted between the two parts of the tongue, substantially as described.

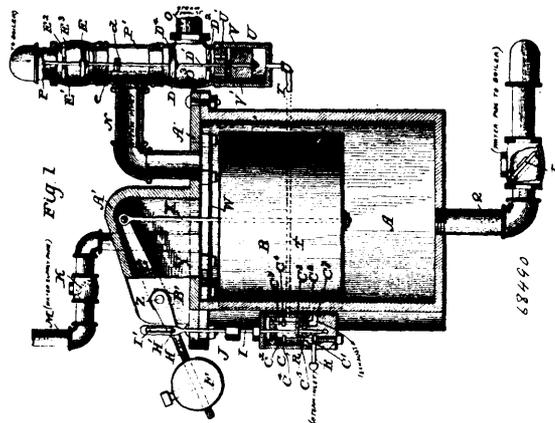
**No. 68,489. Paper Box.** (*Boites en papier.*)



Alfred Jephcott, Toronto, Ontario, Canada, 22nd August, 1900; 6 years. (Filed 11th June, 1900.)

*Claim.*—1st. A blank for paper boxes formed of a single piece and comprising the centre A, sides B B, ends C C, end flaps D, formed integral with the sides, and fastener flaps F F, formed integral with the ends, substantially as and for the purpose specified. 2nd. A blank for paper boxes formed of a single piece and comprising the centre A, sides B B, ends C C, end flaps D, formed integral with the sides, fastener flaps F F, formed integral with the ends, and the sealing flaps G, formed integral with the sides, substantially as and for the purpose specified. 3rd. In a paper box, the box proper in combination with a cover having integral sealing flaps formed at the lower edges of its sides so that they may be gummed to the bottom of the box, substantially as and for the purpose specified.

**No. 68,490. Automatic Boiler Feed.**  
(*Alimenteur pour bouilloires.*)

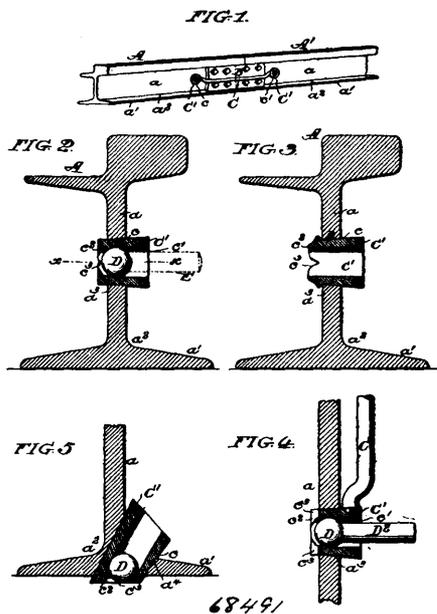


Henry Jackson Davis, Playfair Goodwin Ault, Wilbur Wheeler Bailey, and James Hardy Widenman, all of Birmingham, Alabama, U.S.A., 22nd August, 1900; 6 years. (Filed 8th August, 1900.)

*Claim.*—1st. In an apparatus of the character described, a water tank connected with a boiler, and a water supply and a water displacing weight in said tank, a lever arm connected with such displacing weight, a governor weight applied to said arm and adapted for adjustment along the same for controlling automatically the water level in the boiler, a steam pipe leading from the boiler and opening into the tank, a valve governing the admission of steam through said pipe, and means for opening and closing said valve by the rise and fall of said weight, as set forth. 2nd. In an apparatus of the character described, a tank interposed between the boiler and

water supply, a steam pipe connection between said tank and the steam space of the boiler, a steam cylinder connected with said pipe, and having a head provided with passages U<sup>1</sup>, a piston working in said cylinder and carrying valves E and D, which govern the admission and exhaust of steam in said pipe, a steam pipe arranged to supply steam behind said piston, a steam chest connected to said latter pipe, admission and reducing valves in said chest, and a water displacing weight in the tank arranged to alternately open and close the last-named valves, steam having free access to the upper side of the piston from the chest containing the said admission and reducing valves, as shown and described. 3rd. In an apparatus of the character described, the combination with the tank connected with a boiler and a source of water supply, a displacing weight adapted to rise and fall in said boiler, a rocking lever connected with said weight, and an adjustable governor or counterbalance weight applied to said arm, of a valve chest, a steam inlet valve C<sup>1</sup>, and steam exhaust valve C<sup>2</sup>, arranged in said chest and provided with shouldered stems, a slidable rod having a lengthwise slot engaging a pin on said lever arm, and provided with a shoulder or collar within the valve chest, which collar is adapted to engage the shoulders on the valve stems, steam pipes connecting said chest with the boiler, and a steam chest having admission and exhaust valves, and a piston for operating them, as shown and described. 4th. In an apparatus of the character described, a tank having a connection at its bottom with the boiler and provided with pipes at its top, one of said pipes leading from a water supply and the other leading from the steam space of the boiler, a float or weight adapted to controlling the passage of steam through the latter pipe, and a perforated baffle plate fixed in the upper portion of said tank above the float or weight and extending over the same between it and the exits of said pipes, as and for the purpose set forth. 5th. The combination of a tank interposed between the boiler and water supply, a steam pipe leading from the boiler into the top of the tank and provided with an exhaust pipe, an admission valve controlling the said exhaust, a cylinder connected with said pipes and provided with a piston whose movements alternately open and close said valves, a steam chest having a connection with said cylinder, a steam actuated valve in said chest, which is closed by action of steam as soon as lifted off its base, a water displacing weight in said tank arranged to apply or reduce the pressure in such connection, whereby to move the piston in the cylinder, a lever arm connected with the displacing weight, a counterbalancing weight arranged to move on said arm, and thus used as a governor or regulator, a valve rod provided with a slot, and engaging a pin on the lever arm when the lever arm is near the end of its stroke, the whole apparatus being so placed that the tank does not completely empty, thereby always containing a quantity of hot water for heating the water discharging into it and always feeding hot water to the boiler, a check valve interposed between the tank and the boiler admitting water to the boiler, but preventing the flow in the opposite direction, and a check valve interposed between tank and water supply, admitting water to the tank, but closing when pressure is on the tank, all substantially as set forth.

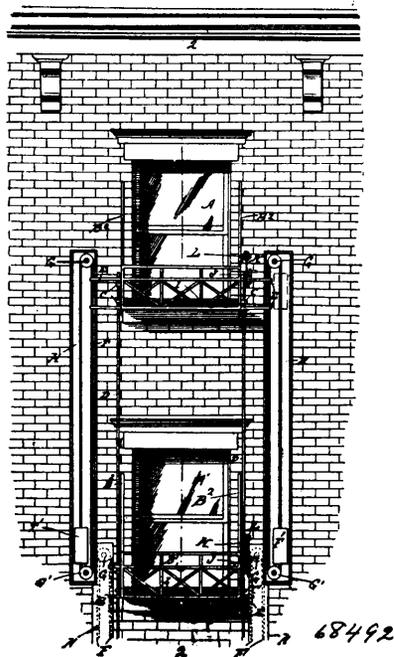
**No. 68,491. Method of Securing Electrical Rail Bonds in Rails.** (*Assemblage de rails de chemin électrique.*)



William Riehei Cock, Plainfield, New Jersey, U.S.A., 22nd August 1900; 6 years. (Filed 16th July, 1900.)

*Claim.*—The method of securing a hollow, preferably slightly conical, electric bond terminal in place in a rail, which consists, in first forcing the terminal into a perforation in the rail and then expanding it and clenching it against the edge of the perforation in the rail by progressively expanding the hollow bond by means contacting and acting at one time only on a narrow annular section of the bond terminal but successively on all portions of the bond to be expanded.

**No. 68,492. Fire Escape.** (*Sauveteur d'incendie.*)



Corrine Dufour, Savannah, Georgia, U.S.A., 22nd August, 1900; 6 years. (Filed 7th August, 1900.)

*Claim.*—1st. A fire escape, comprising a plurality of balconies, independent guideways on the building and on which the balconies slide one independently of another, the said guides being inclined downward and outward and a counterbalancing device for each balcony. 2nd. A fire escape, comprising a plurality of balconies arranged one above the other on the face of the building, guideways for each of said balconies extending downwardly and outwardly so that the uppermost balcony on sliding downward on its guideways alights on the next balcony below in step form, substantially as shown and described. 3rd. A fire escape, comprising a plurality of balconies arranged one above the other on the face of the building, guideways for each of said balconies, the guideways for each balcony extending downwardly and outwardly so that the uppermost balcony on sliding downward on its guideway alights on the next balcony in step form, and counterbalancing devices for each of the balconies, as set forth.

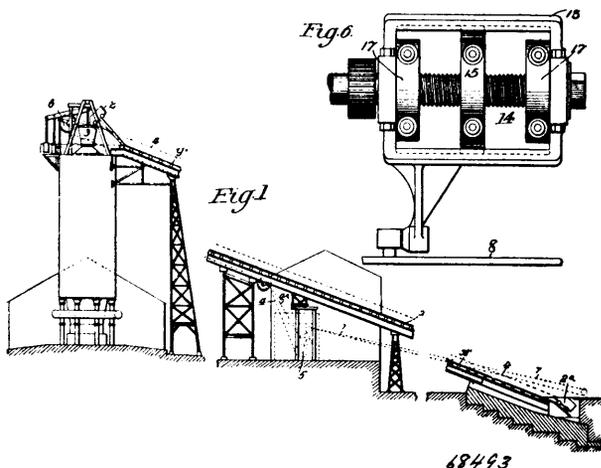
**No. 68,493. Hoisting Apparatus for Blast Furnaces.**

(*Ascenseur pour fournaïses.*)

Walter Kennedy, Pittsburg, Pennsylvania, U.S.A., 22nd August 1900; 6 years. (Filed 7th August, 1900.)

*Claim.*—1st. In a hoisting mechanism, the combination of a car, mechanism for moving said car and automatic means for changing the rate of movement of a car from slow to fast and from fast to slow as it reaches certain predetermined intermediate points in its traverse, substantially as set forth. 2nd. In a hoisting mechanism, the combination of a car, mechanism for moving said car, means for stopping said car at the ends of its traverse, and automatic means independent of the stopping means for changing the rate of movement of the car as it reaches certain predetermined points in its traverse, substantially as set forth. 3rd. In a hoisting mechanism, the combination of a car, mechanism for moving said car, automatic means for changing the rate of movement of the car from slow to fast and from fast to slow as it reaches certain predetermined intermediate points in its traverse, and means for automatically stopping the car at the ends of its traverse, substantially as set forth. 4th. In a hoisting mechanism, the combination of a car, a motor for moving said car, a connection from the motor to the generator, said connection being automatically controlled to effect a change of speed of the motor as the car reaches certain predetermined points in its traverse, and a normally operative connection from the generator to the motor, substantially as set forth. 5th. In a hoisting mechanism, the combination of a car, a hoisting engine for moving the car, a

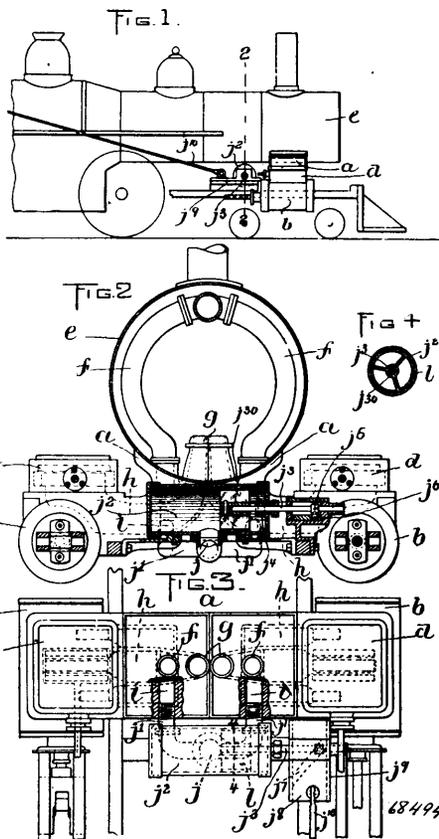
main supply pipe provided with a valve, a normally open by-pass around the valve in the main supply pipe, and automatic means for



opening and closing the valve in the main supply pipe as the car reaches certain predetermined points in its traverse, substantially as set forth.

**No. 68,494. Exhaust Mechanism for Locomotives.**

(*Mécanisme d'épuisement pour machine à vapeur.*)



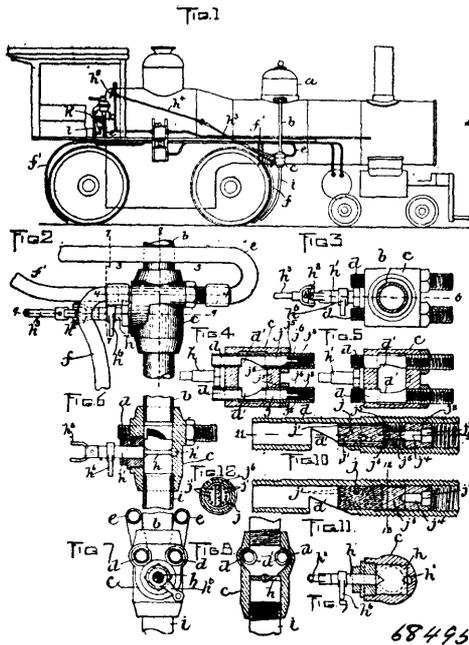
Henry Huings Huff, of Dorchester, Arthur Dudley Curran, of Boston, and Smith Payne Burton, Jr., of Reading, all in the State of Massachusetts, U.S.A., 22nd August, 1900; 6 years. (Filed 7th August, 1900.)

*Claim.*—1st. The combination with the cylinders, exhaust passages and exhaust nozzle, of a reservoir, and connections between said reservoir and the exhaust passages, the connections being such that the reservoir is caused to alternately receive and deliver exhaust steam through said connections, and means for controlling the passage of steam into and out of said reservoir. 2nd. The combination with the cylinders, exhaust passages and exhaust

nozzles, of a reservoir, pipes  $j^1 j^1$  communicating with the two exhaust passages, a single pipe  $j$  connecting the pipes  $j^1 j^1$  with the reservoir, and a valve adapted to open and close the pipe  $j$ .

**No. 68,495. Track Sanding Apparatus for Locomotives.**

(Appareil à sauter les voies.)



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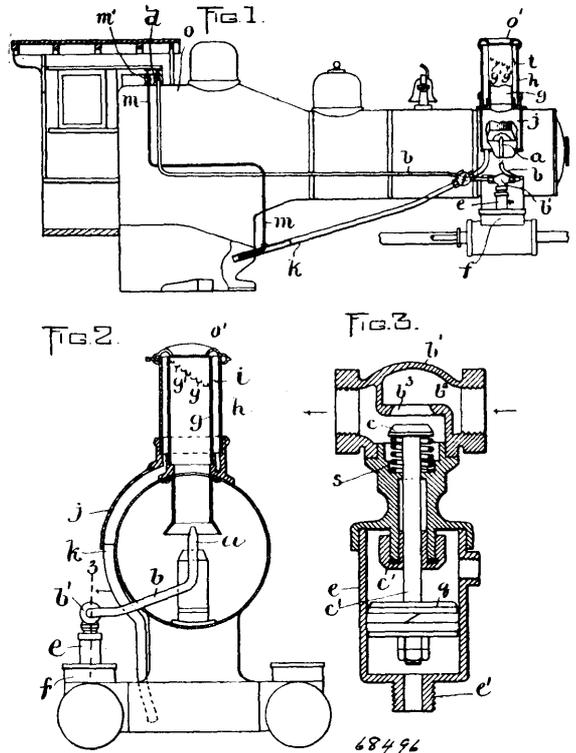
Henry Huings Huff, of Dorchester, Arthur Dudley Curran, of Boston, and Smith Payne Burton, Jr., of Reading, all in the State of Massachusetts, U.S.A., 22nd August, 1900; 6 years. (Filed 7th August, 1900.)

*Claim.*—1st. A track sanding apparatus, comprising a sand box, a casing connected with said box and adapted to contain sand, a blast pipe having a sand-receiving orifice and located within the casing and adapted to be embedded in the sand in said casing, a supply pipe connected with one end of the blast pipe, and a sand delivery pipe connected with the other end of the blast pipe. 2nd. A track sanding apparatus, comprising a sand box, a casing connected with a sand box and adapted to contain sand, two blast pipes located in the casing and each having a sand-receiving orifice within the casing, independently controlled air-supply pipes connected with the receiving ends of the blast pipes, and independent sand delivery pipes connected to the delivery ends of the blast pipes, one of said delivery pipes being arranged to deliver sand in front of the driving wheels and the other behind the driving wheels. 3rd. A track sanding apparatus, comprising a sand holding casing, a blast pipe having a sand-receiving orifice within the casing, an air-supply pipe connected with the receiving end of the blast pipe, a sand delivery pipe connected with the delivering end of the blast pipe, and an air-conducting plug or valve adjustable in the blast pipe and adapted to vary the operative size of the sand-receiving opening therein. 4th. A track-sanding apparatus, comprising a sand-holding casing, a blast pipe having a sand-receiving orifice within the casing, an air-supply pipe connected with the receiving end of the blast pipe, a sand-delivery pipe connected with the delivering end of the blast pipe, and an air-conducting plug or valve adjustable in the blast pipe and adapted to vary the operative size of the sand-receiving opening therein, said valve having air-distributing orifices. 5th. A track-sanding apparatus, comprising a casing connected with a sand box and adapted to contain sand, a blast pipe having a sand-receiving orifice within the casing, and a supply pipe connected with one end of the blast pipe, a sand-delivery pipe connected with the other end of the blast pipe, a sand-delivery pipe extending from the casing below the blast pipe, and a valve in the casing between the blast pipe and the last mentioned delivery pipe. 6th. A track-sanding apparatus, comprising a casing connected with a sand box and adapted to contain sand, a blast pipe having a sand-receiving orifice within the casing, and a supply pipe connected with one end of the blast pipe, a sand-delivery pipe connected with the other end of the blast pipe, a sand-delivery pipe extending from the casing below the blast pipe a valve in the casing between the blast pipe and the last mentioned delivery pipe, and means for operating said valve, said means including a handle in the cab and connections between said handle and the valve. 7th. A track-sanding apparatus, comprising two casings at opposite sides of a locomotive, connections between said casings and the sand box, blast pipes having sand-receiving

orifices within the casings, means for supplying compressed air to the blast pipes, sand-delivery pipes connected with the blast pipes, said delivery pipes extending from the lower portions of the casings, valves in the casings between the blast pipes and the last mentioned delivery pipes, an operating handle in the cab, and connections between said handle and one of the valves, and connections between the two valves extending across the engine, whereby the valves are simultaneously operated. 8th. A track-sanding apparatus, comprising a sand box, two casings at opposite sides of a locomotive, connections between said casings and the sand box, blast pipes located in said casings and having sand-receiving orifices intermediate the ends thereof and within the casings, air-supply pipes connecting a source of compressed air supply with the receiving end of the blast pipes, means controlled by an attendant in the cab for supplying and shutting off the compressed air, and sand-delivery pipes extending from the blast pipes. 9th. In a track-sanding apparatus, a sand-delivery pipe having a yielding closed valve at its delivering end adapted to be opened by sand in the pipe. 10th. In a track-sanding apparatus, a casing having a sand-supply pipe, two blast pipes, and a partition between the blast pipes. 11th. In a track-sanding apparatus, a blast pipe having a sand inlet, a plug at one end of the inlet having a series of air conducting orifices, and means for distributing air supplied to said orifices. 12th. In a track-sanding apparatus, a blast pipe having a sand inlet, a plug at one side of the inlet having a series of air-conducting orifices, and a spring-pressed air distributor yieldingly held against a seat in the conduit which supplies air to said orifices.

**No. 68,496. Automatic Blower.**

(Soufflet automatique.)



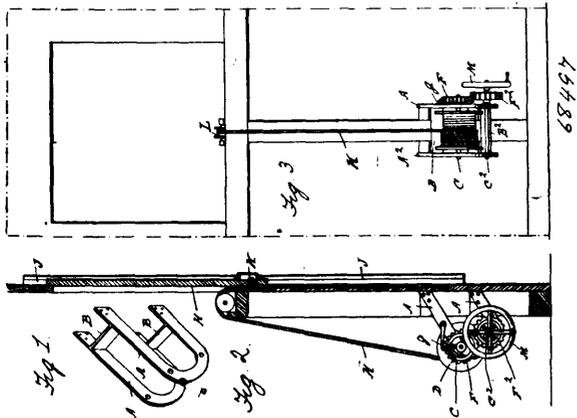
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Henry Huings Huff, Dorchester, Arthur Dudley Curran, Boston, and Smith Payne Burton, jr., Reading, all in the State of Massachusetts, U.S.A., 22nd August, 1900; 6 years. (Filed 7th August, 1900.)

*Claim.*—1st. A locomotive having a blower nozzle, a conduit connecting it with the boiler, and means controlled alternately by pressure in a steam chest of the locomotive, and by pressure in the boiler, for alternately closing and opening said conduit. 2nd. In a locomotive, the combination of a blower nozzle, a steam conduit connecting said nozzle with the boiler, a valve adapted to control the said conduit, and means acted on by steam pressure in a steam chest of the locomotive, to hold the valve in its closed position, the valve and its closing means being adapted to yield to the steam pressure in the boiler and permit the passage of steam to the blower when steam is shut off from the steam chest. 3rd. In a locomotive, the combination of a blower nozzle, a steam conduit connecting said nozzle with the boiler, a valve arranged to close said conduit against the boiler pressure therein, a cylinder communicating with a steam chest of the locomotive, and a piston in said chamber connected with the said valve the steam pressure in the steam chest acting on the piston to hold the valve closed until steam is shut off from the

steam chest, when the piston and valve yield to the boiler pressure and permit steam to pass to the blower.

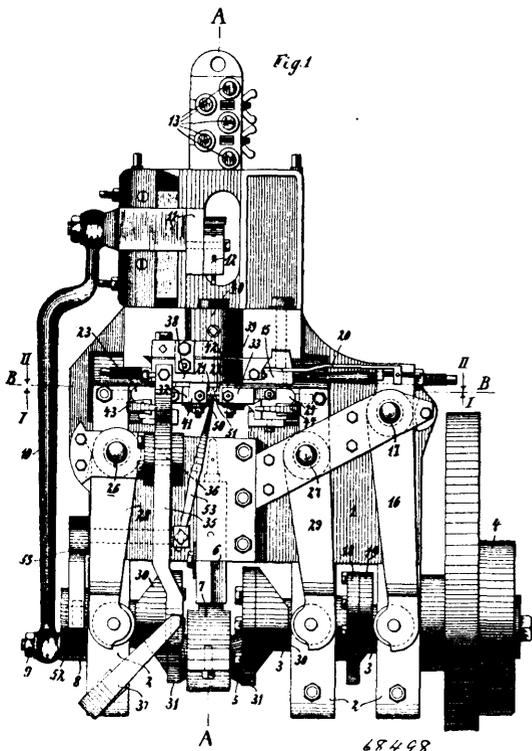
**No. 68,497. Vertically Adjustable Barn Door.**  
(*Porte de grange.*)



Fred Hering, Chicago, Illinois, U.S.A., 22nd August, 1900; 6 years. (Filed 7th August, 1900.)

*Claim.*—1st. A vertically sliding door fitted in parallel ways at the sides of an elevated doorway, a pulley mounted at the bottom and centre of the doorway, a frame fixed to the inside of the lower portion of the wall of a building directly below said pulley, a cylinder mounted in said fixed frame, means for rotating and locking said cylinder, a rope fixed to the bottom of the door and extended over said pulley and its lower end fixed to said cylinder, all arranged and combined to operate in the manner set forth for the purpose stated. 2nd. Means for operating a vertically adjustable barn door, comprising a frame fixed to the wall of the building below the centre of the doorway composed of mating sides A and A<sup>2</sup> and cross bars B and B<sup>2</sup>, a shaft C having a fixed cylinder D, a shaft C<sup>2</sup>, gear wheels F and F<sup>2</sup>, a detent *g*, a rope K fixed to the door and to the cylinder, a pulley L at the bottom of the doorway and a crank wheel on the end of the shaft C<sup>2</sup>, all arranged and combined as shown and described for the purposes stated.

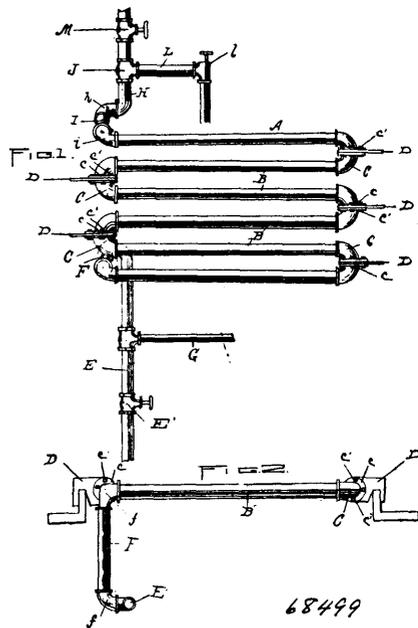
**No. 68,498. Machine for the Manufacture of Wire Nails.**  
(*Machine pour faire les clous de broche.*)



Jakob Wikschtreim, Kiew, Russia, 22nd August, 1900; 6 years. (Filed 25th March, 1899.)

*Claim.*—1st. In a machine for the manufacture of wire nails, the combination with a crank shaft, cams and discs, carried by said shaft, a sliding hammer operated from said shaft and a cutting, holding and gripping device for intermittently advancing the wire, also actuated from said shaft, of a disc bearing a cam, and a double armed lever, engaging with its free end the tangentially directed arm of a circular disc being capable of rotating on a central pivot, said disc imparting a lateral movement to the knives, substantially as shown and for the purpose described. 2nd. In a machine of the kind hereinbefore described, the combination with a crank shaft, bearing three discs, of a double armed lever, resting with its upper end on the side of the disc and bearing with its lower end against a movable jaw and of two double armed levers, provided at their upper ends with rollers sliding on the side of the discs and bearing with their other ends against guide blocks, dovetailed to the base plate, and a third lever sliding with the upper end on the circumference of the disc, the edge of which is provided with a projection and the lower end of which bears against the tangential arm of a disc, pivoting on a pin and having on the surface projections engaging with the guide blocks containing the knives and dovetailed to the former guide blocks, substantially as and for the purpose described. 3rd. The combination in a wire nail machine, of a pair of knives, guide blocks dovetailed to the bed plates of the machine, and two elastic plates of thin sheet metal located near said knives, substantially as described. 4th. In a wire nail machine, the combination with elastic holding plates of a clearer consisting of a double armed lever whose curved end projects directly in proximity to said plates, and means for operating said lever, substantially as described. 5th. In a machine of the class described, a pair of cutting knives having each two reversely bevelled edges with a bevelled shoulder at the meeting point of said reversely bevelled edges, the edges of one knife being bevelled reversely to the edges of the other, substantially as described.

**No. 68,499. Hollow Grate Bar for Furnaces.**  
(*Fournaises.*)



William W. Reed, Centre Ridge, Kansas, U.S.A., 22nd August, 1900; 6 year (Filed 7th August, 1900.)

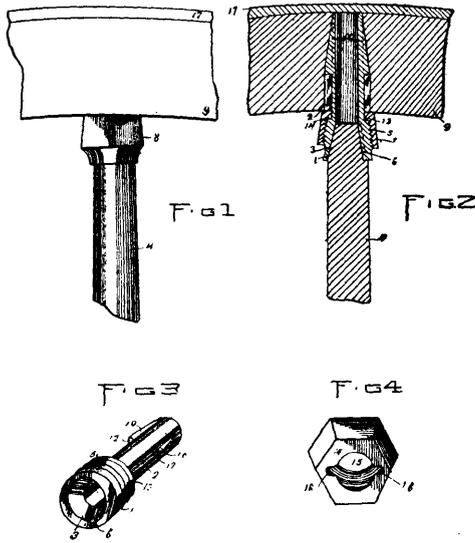
*Claim.*—1st. A grate for steam boiler furnaces, comprising a number of hollow grate bars, flanged couplings connecting said grate bars at their ends to form a serpentine passageway or grate and supporting plates interposed between the couplings and secured thereto, together with the supply and discharge pipes connected to the ends of the grate, as herein shown and described. 2nd. A grate for steam boiler furnaces, comprising a series of hollow grate bars, flanged couplings connecting said grate bars at their ends to form a serpentine passageway or grate supporting plates interposed between the couplings and secured thereto, vertical pipes coupled to the ends of the grate, and supply and discharge pipes coupled to the lower ends of the vertical pipes respectively, substantially as shown and described.

**No. 68,500. Tire Tightener.**  
(*Appareil pour serrer les bandages de roues.*)

Charley L. Ferriotti, Bartlett, Texas, U.S.A., 22nd August, 1900; 6 years. (Filed 7th August, 1900.)

*Claim.*—1st. A device of the class described, comprising a thimble provided with a tenon having tapered wings or flanges adapted to

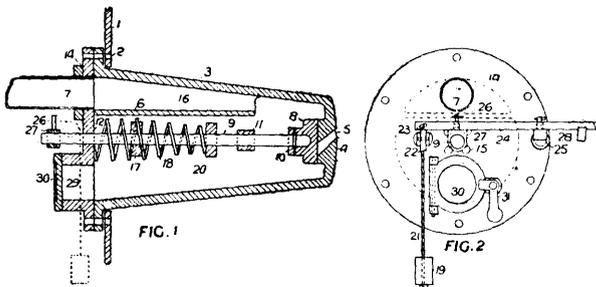
engage a felly, and a nut engaging the thimble and provided at its top or outer portion with a circular opening and having opposite



68500

notches or recesses, substantially as and for the purpose described. 2nd. A device of the class described, comprising a thimble having an oval socket and provided with exterior screw threads, a hollow tenon rigid with the thimble and provided with opposite wings or flanges tapering toward their outer ends and forming inner shoulders, and a nut engaging the screw threads of the thimble and provided with a circular opening and having opposite notches or recesses, substantially as described.

**No. 68,501. Tuyeres for Forges and Furnaces.** (Tuyères.)



68501

John Overall, Sydney, New South Wales, Australia, 22nd August, 1900; 6 years. (Filed 7th August, 1900.)

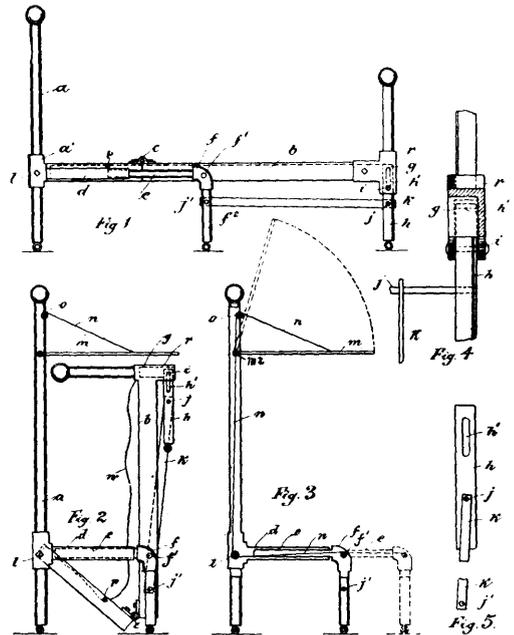
Claim.—1st. A tuyere, comprising a horizontal body in the nose of which a nozzle is formed, a closure for the nozzle, a supply duct conveying a continuous current of air, a clearing scuttle, air vents at the back end of the tuyere, and a closure for said air vents, substantially as described. 2nd. In a tuyere, the combination with an air chamber receiving a continuous current of air, a blast nozzle in the fore end of said chamber, air vents, a closure for said nozzle and air vents, and a clearing scuttle, substantially as described. 3rd. In a tuyere of the kind herein described, the combination of mechanism for keeping the air nozzle closed and the air vents normally open, and a hand lever for simultaneously opening said nozzle and closing said vents and vice versa, substantially as described. 4th. The construction and combination of air chamber, air nozzle, air vents, diaphragm plate, rod and closure thereon for said nozzle and vents, means for operating said rod, and clearing scuttle, substantially as illustrated in the accompanying drawings.

**No. 68,502. Iron Folding Bedstead.** (Lit pliant.)

James Montgomery, Chicago, Illinois, U.S.A., 22nd August, 1900; 6 years. (Filed 9th August, 1900.)

Claim.—1st. The combination with head and foot ends and intermediately hinged side rails, pivoted to said ends, of reciprocable supports pivoted to said side rails, intermediate to said ends, and means to hold said intermediate supports erect, substantially as

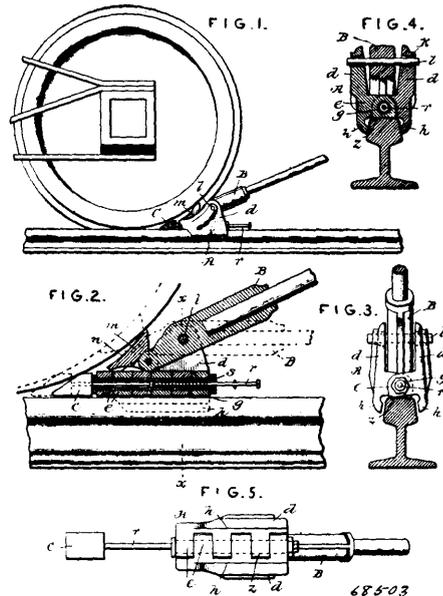
specified. 2nd. The combination with the head and foot ends and intermediately hinged side rails, connecting said ends, and recipro-



68502

cable supports pivoted to said rails, intermediate said ends, of a hinge operated canopy and cord connecting said canopy and said reciprocable supports, substantially as specified. 3rd. The combination with the head and foot ends and intermediately hinged side rails connecting said ends and an intermediate reciprocable support for said rails, of a woven web held at the ends of said rails, and a bar connecting said rails near the hinge of said rails, substantially as specified.

**No. 68,503. Device for Moving Cars.** (Appareil pour mouvoir les chars.)



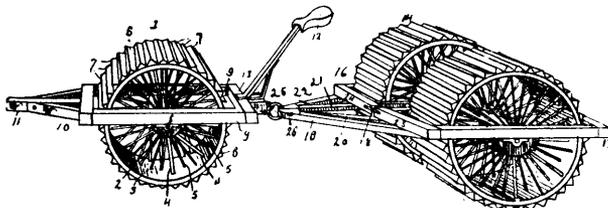
68503

George Foster Pearson, Lowell, Massachusetts, U.S.A., 22nd August, 1900; 6 years. (Filed 9th August, 1900.)

Claim.—1st. In a car moving device, the combination of the two rail gripping lever jaws pivoted together, and having their fulcrums upon the tread of the rail, and independent of their pivot, and the lever pivoted to said jaws, whereby upon operation of said lever when in engagement with the car, said jaws are rocked upon the rail tread as a centre to close, substantially as specified. 2nd. In a

car moving device, the combination of the two rail gripping jaws, having the inwardly extending knuckles pivoted together, and fulcruming upon the rail tread upon the side of their pivot opposite their respective jaws, and the lever pivoted to said jaws, substantially as specified. 3rd. In a car moving device, the combination of the two rail gripping lever jaws pivoted together and having their fulcrums upon the tread of the rail, the lever pivoted to said jaws, whereby upon operation of said lever when in engagement with the car, said jaws are rocked upon the rail tread as a centre to close, and means for opening said jaws, substantially as specified. 4th. In a car moving device, the combination of the two rail gripping jaws, having the inwardly extending knuckles pivoted together, and fulcruming upon the rail tread, upon the side of their pivot opposite their respective jaws, the lever pivoted to said jaws, the pivot thereof having inwardly flaring bearings in said jaws, said jaws being weighted to automatically open from the rail to normal position upon raising the pivot of said lever, substantially as specified. 5th. In a car moving device, the combination of the two rail gripping jaws pivoted together, and having their fulcrums upon the rail tread, and their rail gripping portions normally separated from the rail, the lever pivoted to said jaws, the pivot of said lever having journal and lever bearings in said jaws, whereby upon depression of said lever when in engagement with the car, said lever pivot will act to rock the jaws upon the rail to close thereto, substantially as specified. 6th. In a car moving device, the rail gripping jaws, the tubular pivot thereof, and the automatic trig or chock, having its rod extended through said pivot, substantially as specified. 7th. In a car moving device, the two rail gripping jaws having their fulcrums upon the tread of the rail, the tubular pivot for said jaws, the automatic trig or chock having its rod extended through said pivot, and the lever pivoted to said jaws, substantially as specified. 8th. The combination with a lever or lever socket, the hinged fulcrum jaws, and the spring trig, of the curve faced pivoted pinch block, substantially as specified.

**No. 68,504. Land Roller. (Rouleau à terre.)**



John Gilbert, Fisher, Minnesota, U.S.A., 22nd August, 1900; 6 years. (Filed 7th August, 1900.)

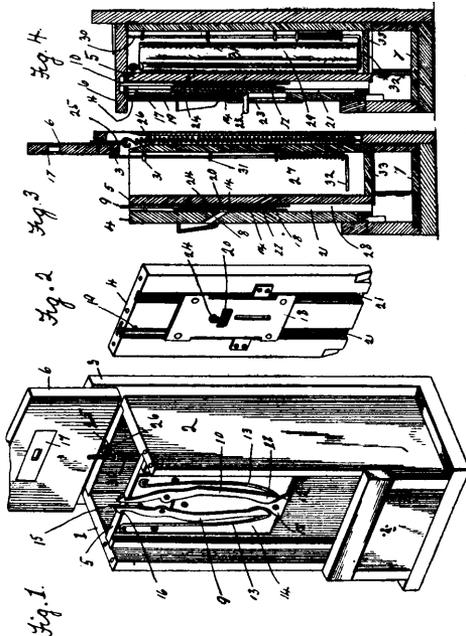
*Claim.*—1st. In a land roller, the combination with the supporting frame provided with a suitable draft attachment and a driver's seat, of a crushing or pulverizing roller comprising a hub and felly connected by alternating staggered spokes, and a crushing or pulverizing tire mounted upon the exterior of said felly and having its crushing surface grooved transversely throughout the entire width of the same to form integral pulverizing teeth, substantially as specified. 2nd. In a land roller, the combination with a crushing roller 1 mounted in a suitable draft frame and provided with a crushing tire grooved transversely throughout its entire width in its outer periphery to form integral pulverizing teeth, of two similarly grooved crushing rollers 14 and 15 mounted in supporting frames separately connected to each other and detachably and separably connected with the supporting frame of said crushing roller 1, substantially as specified.

**No. 68,505. Pillow Holder. (Porte oreiller.)**

John P. Morris, Cheyenne, Wyoming, U.S.A., 22nd August, 1900; 6 years. (Filed 18th July, 1900.)

*Claim.*—1st. A pillow holder, provided with a hinged lid, and upright levers adapted to engage said lid for holding it in its closed position, said levers being separated below their pivots to form opposing walls of the chute for receiving a coin for actuating said levers, substantially as described. 2nd. The combination of a pillow holder, having a hinged lid or cover, of yielding latch levers for engaging said cover, said levers being extended beyond their pivots to receive between them a coin for actuating them to release the cover, and a slide for moving the coin from between said levers and thereby actuating them to release the lid, substantially as described. 3rd. In a pillow holder, provided with a hinged lid, a pillow compartment and a separate compartment for the coin-actuated mechanism, the combination therewith of upright levers for engaging said lid, said levers being pivoted intermediate their ends and separated below their pivots to form opposing walls of a coin chute and at their lower ends provided with an inward projection adapted to hold the coin, and means for forcing the coin past said projection, substantially as described. 4th. The combination with a pillow holder having a hinged lid or cover, of spring-actuated, parallel levers pivoted, intermediate their ends and adapted to

engage said lid for locking it in its closed position, said levers forming opposing walls of the coin chute and provided with inturned



projections for holding the coin, and a slide provided with a coin slot and carrying a projection extending within said chute above the coin slot, substantially as described. 5th. The combination with a pillow holder, of a hinged lid or cover, parallel upright latch levers for locking said cover in its closed position, a spring for forcing said cover open when unlocked, coin-actuated extensions of the latch levers forming opposing walls of the chute and means for preventing the closing of the cover when the pillow is removed from the holder, substantially as described. 6th. The combination with a pillow holder, having a hinged lid or cover, of latch levers for locking said cover in its closed position, extensions of said levers beyond their pivotal points adapted to form opposing walls of a coin chute, and a slide provided with a projection moving within said chute for engaging the coin and causing it to operate said levers, substantially as described. 7th. A pillow holder, comprising a holder compartment, a hinged lid or cover thereof, and a separate compartment for the coin-actuating mechanism, the combination therewith of upright levers forming opposing walls of the coin chute and adapted at their lower ends to engage and hold a coin, a holder casing provided with a coin slot, a slide adjustable longitudinally of the chute, having a coin slot in alignment with the casing slot and opening into the coin chute and provided above said slot with a projection extending within the coin chute, substantially as and for the purpose described.

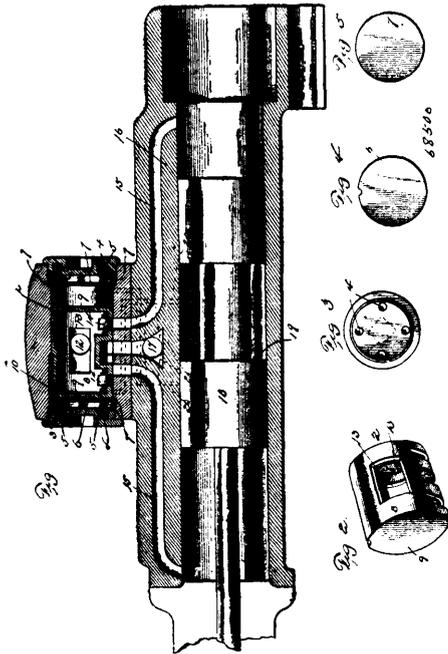
**No. 68,506. Balance Valve for Rock-Drills.**

(Soupape pour perçoirs à rocher.)

Harry S. Burrell, Belleville, Ontario, Canada, 22nd August, 1900; 6 years. (Filed 4th August, 1900.)

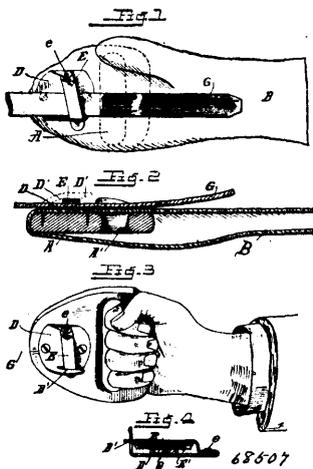
*Claim.*—1st. In an air or steam admitting apparatus for rock drills and the like, the combination with a chest or casing, of a hollow valve having means for receiving the air or steam thereinto from the opposite sides, the air or steam blowing over between the ends of the valve and the end limiting devices of the valve chamber, a cylinder having by-pass communication with the opposite ends of the chest or casing and the exhaust port, usual communicating means also being provided between the chest or casing and the cylinder and exhaust, and a piston having an intermediate recess. 2nd. In an air or steam admitting apparatus for rock drills and the like, the combination with a chest or casing and a cylinder having a piston therein, of a hollow valve having means for receiving the air or steam thereinto from the opposite sides, the air or steam blowing over between the ends of the valve and the end limiting devices of the valve chamber, the chest and cylinder having air or steam feed and exhaust means. 3rd. In an air or steam admitting apparatus for rock drills and the like, the combination with a chest or casing and a cylinder having a piston therein, the usual feeding and exhaust means being provided for said devices, of a loosely mounted hollow valve in the said chest or casing having means in diametrically opposite side portions thereof for receiving the air or steam thereinto, and means independent of stems for maintaining the said valve in one movable position within the chest or casing. 4th. In an air or steam admitting apparatus for rock drills and the like, the combination with a chest or casing and a cylinder having

a piston therein, the usual feeding and exhaust means being provided between said devices, of a loosely mounted hollow valve in



the said chest or casing having means in diametrically opposite side portions thereof for receiving air or steam thereinto, and a slidable key engaging the upper portion of the valve and the casing. 5th. In an air or steam admitting apparatus for rock drills and the like, the combination with a chest or casing and a cylinder having a piston therein, the usual feeding and exhaust means being provided between said devices, of removable heads or covers in the opposite ends of said chest or casing, washers or discs loosely mounted inward from the heads or covers, one of the washers having a recess in the upper portion thereof, springs interposed between the washers or discs and the heads or covers, a hollow valve loosely mounted in the chamber formed between the washers or discs and having means in diametrically opposite side portions thereof for receiving the air or steam thereinto, and a slidable key loosely mounted in the upper portion of the valve and chest or casing, the said key also engaging the recessed washer or disc and limited in its movement by the adjacent head or cover.

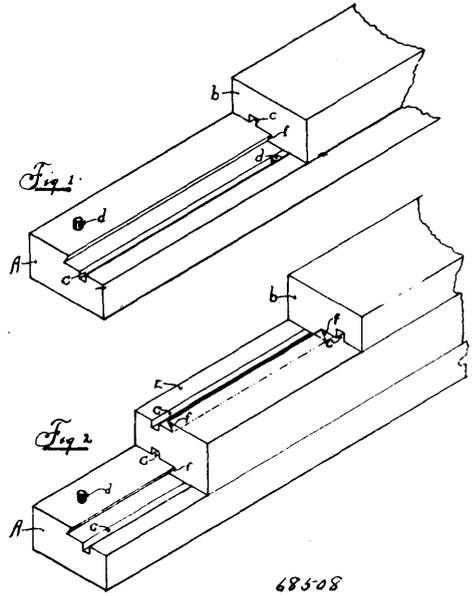
**No. 68,507. Driving Mittens. (Mittaine.)**



Phillip William Counselman, McClure, Ohio, U.S.A., 22nd August, 1900; 6 years. (Filed 13th June, 1900.)

*Claim.*—A device for holding reins, consisting of the apertured block A, the mitten carrying same, the plate D and the screws securing the latter and the mitten to said block, the lever E having a serrated edge and pivoted to an edge of said plate D, the opposite edges of the latter being slotted and turned at right angles to the body portion plate and forming a catch with cam edge to receive and hold the free end of said lever against a rein, as set forth.

**No. 68,508. Extension Table Slide. (Table d'extension.)**

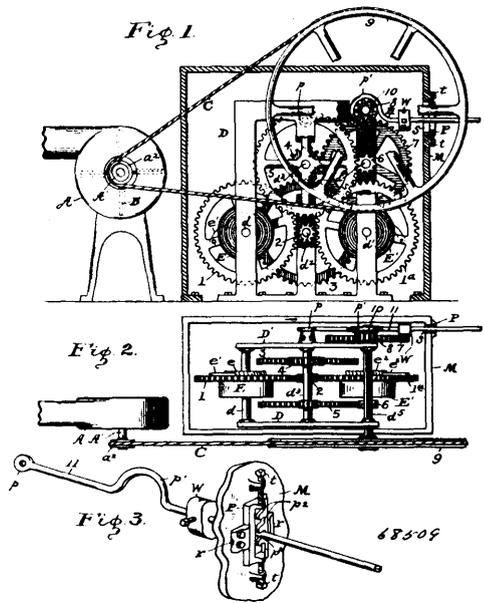


William Albert Littlefair, Lucknow, Ontario, Canada, 22nd August, 1900; 6 years. (Filed 27th July, 1900.)

*Claim.*—1st. The combination of blocks A and B, each having a dovetail F, and a groove C, and pins D, all arranged substantially as and for the purpose hereinbefore set forth. 2nd. In combination blocks A and B, each having a dovetail F, and a groove C, block E, having on each side thereof a dovetail F, and a groove C, and pins D in each of the blocks, all formed and arranged substantially as and for the purpose hereinbefore set forth.

**No. 68,509. Blacksmith's Blower. (Moteur pour soufflet de forge.)**

*Moteur pour soufflet de forge.)*

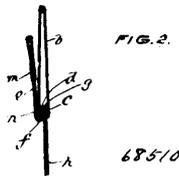
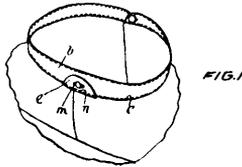


John W. Robinson, Pittsboro, Indiana, U.S.A., 22nd August, 1900; 6 years. (Filed 10th August, 1900.)

*Claim.*—1st. In a motor for blacksmith's forge blowers, a pair of shafts each having a loosely mounted wheel, springs connecting the wheels to the shafts, said wheels having pawl and ratchet mechanism, a shaft having a fly-wheel from which power is taken, said fly-wheel shaft being connected by a train of cogged wheels with the shafts carrying the springs, a friction wheel on the same shaft as the fly-wheel, a brake bar pivotally secured at one end and having a curved portion to contact with the friction wheel, a casing surrounding the motor mechanism having a slot in its wall through which the bar is projected, and said slot having notched sides to receive and hold the bar,

as and for the purposes specified. 2nd. The combination with a rotary blower for blacksmith's forges, having a pulley on the shaft carrying the blower fans, of a motor, comprising a pair of shafts each having a loosely mounted wheel, springs connecting the wheels to the shafts, said wheels having pawl and ratchet mechanism, a shaft having a fly-wheel, a belt connecting this fly-wheel with the pulley on the blower, said fly-wheel shaft being connected by a train of cogged wheels with the shafts carrying the springs, a friction wheel on the same shaft as the fly-wheel, a brake bar pivotally secured at one of its ends and having a curved portion to contact under certain conditions with the friction wheel, a casing surrounding the motor mechanism, having a slot in its wall through which the bar is projected, a sliding plate working in guides on the outside of the casing and having a slot through which the brake bar is projected, said slot having notches to receive the bar and hold it, and set screws to hold the adjustment which may be given to said plate thereby, as and for the purposes specified.

**No. 68,510. Shirt. (Chemise.)**



Frederick William Stewart, Montreal, Quebec, Canada, 22nd August, 1900; 6 years. (Filed 7th August, 1900.)

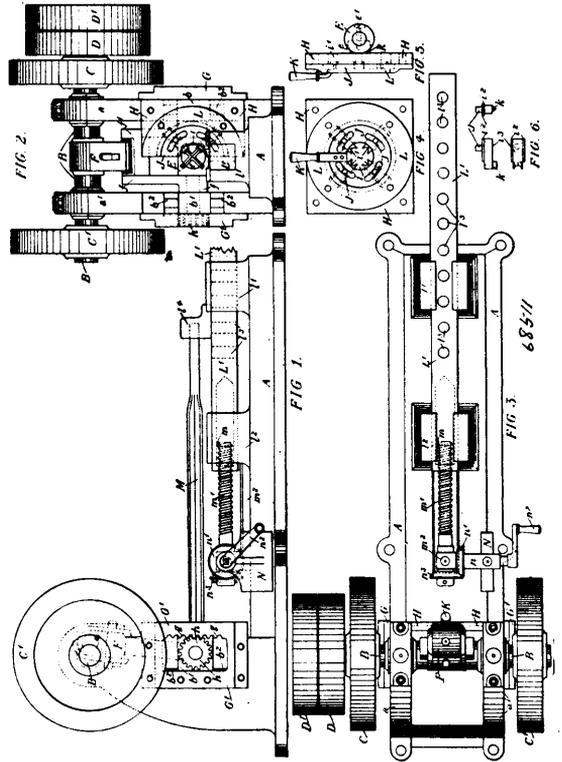
*Claim.*—1st. A shirt, having a stud carrying tab located outside of the collar band, substantially as described and for the purpose set forth. 2nd. The combination with a band *b* and yoke *h* of a shirt, of a tab *e* secured to the said shirt at the line of juncture of said band and yoke, by lines of stitching *c* and *n*, said tab being provided with a stud hole *m*, substantially as described and for the purpose set forth.

**No. 68,511. Machine for Sharpening Rock Drills, etc. (Machine pour aiguiser les perceois de rocher.)**

Walter Edward Kimber, 28 Nugget Street, Johannesburg, South African Republic, 22nd August, 1900; 6 years. (Filed 6th March, 1899.)

*Claim.*—1st. A machine for sharpening rock drills and rock drilling machine bits, constructed with a rolling die, or a roll carrying a die or impression of the cutting face of the drill or bit working in conjunction with a stationary plate in which the drill or bit is held whilst being sharpened, substantially as described. 2nd. A machine for sharpening rock drills and rock drilling machine bits, constructed with a rolling die, or a roll carrying a die or impression of the cutting face of the drill or bit working in conjunction with a stationary plate fitted with adjustable holders in which the drill is held while being operated upon, substantially as described. 3rd. A machine for sharpening rock drills and rock drilling machine bits, constructed with a roll carrying a die or impression of the cutting face of the drill, on the extremities of which roll pinions are secured which gear into fixed racks to rotate the roll as it is reciprocated, and a stationary plate arranged in front of the roll in which the drill is centred and held whilst being sharpened, substantially as described. 4th. A machine for sharpening rock drills and rock drilling machine bits, comprising a roll carrying a die or impression of the cutting face of the drill, pinions fixed to the extremities of said roll, stationary racks into which the pinions gear to effect a positive rotation of the roll as it is reciprocated, a stationary plate fitted with adjustable holding and centring devices arranged in front of the roll in which the drill is secured during the sharpening process, substantially as described. 5th. In a machine for sharpening rock drills and rock drilling machine bits, in combination, the roll *E*, the pinions *h* fixed to the ends of the roll, the plates *G* *G*<sup>1</sup> formed with an open centre and provided with teeth *g* on their front inner vertical edges with which the pinions mesh or gear to rotate the roll as it is reciprocated, the stationary plate *H* provided with adjustable holding and centring devices, and a means for reciprocating the roll *E* over the surface of plate *H*, substantially as described. 6th. In a machine for sharpening rock drills and rock

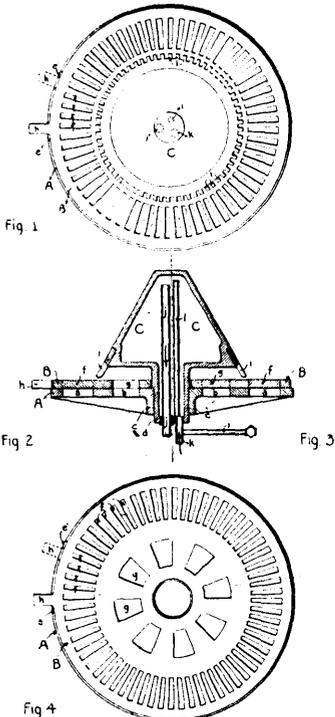
drilling machine bits, in combination, the roll *E*, carrying a die or impression of the cutting face of the drill, the pinions *h* fixed to the



extremities thereof, the plates *G* *G*<sup>1</sup> open at the centre and constructed with a rack or teeth *g* on their inner front vertical edge into which the pinions *h* gear, the stationary plate *H* formed with a central opening for the drill and with a number of radial slots corresponding to the wings of the drill, the centring and holding devices *i*<sup>1</sup> fitted within said slots and capable of being moved to or from the centre of the aperture in the plate *H*, means for reciprocating the roll over the surface of plate *E*, and an arrangement for supporting the drill endwise and feeding it forward whilst being sharpened, substantially as described. 7th. In a machine for sharpening rock drills and rock drilling machine bits, the combination with the sharpening mechanism, of a device for centring and holding the drills whilst being sharpened, comprising a stationary plate constructed with a number of radial slots corresponding in number to the wings of the drill, holders fitted in said slots capable of sliding therein to and from the centre, and a disc arranged over the plate formed with eccentric slots engaging projections on the holders which acts when rotated to simultaneously contract or expand the holders, substantially as described. 8th. In a machine for sharpening rock drills and rock drilling machine bits, the combination with the sharpening mechanism, of the arrangement for centring and holding the drills, comprising, in combination, the stationary plate *H* formed with a central aperture or opening *i* for the drill and with a number of radial slots recessed or countersunk along the radial edges, corresponding in number to the wings of the drill and opening into the central aperture *i*, the holders and centering devices *i*<sup>1</sup> fitted within the radial slots and formed with shoulders *i*<sup>2</sup> on two opposite sides to fit the recessed or countersunk radial edges of the slots, and constructed hollow or concave at their extremities to correspond to the convexity of the tips or outer edges of the wings of the finished drill, the projections *k* formed on the extremities of the holders *i*<sup>1</sup>, and projecting beyond the surface of the plate *H* at the back to prevent the metal of the drill being rolled beyond the desired point, the pins or projections *j* formed on the holders *i*<sup>1</sup> on the inside, the disc *J* provided with a number of curved eccentrically disposed slots corresponding to the holders *i*<sup>1</sup> into which the projections or pins *j* project, the lever *K* attached to the disc *J* for rotating it in either direction and the cap or cover *L* attached to the plate *H* for holding the several parts in position, substantially as described. 9th. In a machine for sharpening rock drills and rock drilling machine bits, in combination, the frame, comprising the base plate *A* and vertical sides *a*, *a*<sup>1</sup>, the vertical recesses formed in the sides *a*, *a*<sup>1</sup>, the blocks or slides *b*, *b*<sup>1</sup> fitted therein, the roll *E*, carrying a die or impression of the cutting face of the drill, with its extremities projecting through the blocks *b*, *b*<sup>1</sup> to the outside of the sides *a*, *a*<sup>1</sup>, the plates *G*, *G*<sup>1</sup> secured to the vertical members *a*, *a*<sup>1</sup> on the outside, formed with an open centre and with teeth *g* on the

inner front vertical edge, the pinions *h* fixed to the ends of the roll within the plates *G*, *G*<sup>1</sup> and gearing the racks *g*, the stationary plate *H* secured to the sides *a*, *a*<sup>1</sup> in front of the roll *E*, the holding and centering devices *i*<sup>1</sup> arranged to slide in radial slots formed in the plate *H*, the projections *k* and pins *j* formed on the holders *i*<sup>1</sup>, the disc *J* formed with eccentric slots into which the pins *j* project, the lever *K*, cap or cover *L*, and means for reciprocating the roll *E* over the surface or the plate *H*, and an arrangement for supporting the drill endwise and feeding the same forward during the operation of sharpening, substantially as described and shown. 10th. In combination the frame comprising the base plate *A* and vertical sides *a*, *a*<sup>1</sup>, the driving shaft *B* mounted in bearings in the upper ends of the sides *a*, *a*<sup>1</sup>, the fly wheels *C*, *C*<sup>1</sup>, the fast and loose pulleys *D*, *D*<sup>1</sup>, the vertical recesses formed in the sides *a*, *a*<sup>1</sup>, the blocks *b*, *b*<sup>1</sup> arranged to slide therein, the liners *b*<sup>2</sup>, the roll *E*, fitted with a detachable die *c* corresponding to the cutting face of the drill to be sharpened, and with its extremities projecting through the blocks *b*, *b*<sup>1</sup> to the outside of the sides *a*, *a*<sup>1</sup>, the connecting rod *F* formed with two arms *f*, *f*<sup>1</sup> loosely embracing the turned down ends of the roll *E* to the inside of the blocks *b*, *b*<sup>1</sup>, the plates *G*, *G*<sup>1</sup> fixed to the outside of the vertical members *a*, *a*<sup>1</sup> and constructed with an open centre, the rack or teeth *g* formed on the inner front vertical edge thereof, the stationary plate *H* arranged in front of the roll *E* and secured to the sides *a*, *a*<sup>1</sup>, formed with a central aperture or opening for the drill and with a number of radial slots recessed or countersunk along the radial edges, corresponding in number to the wings of the drill and opening into the central aperture *i*, the holders and centering devices *i*<sup>1</sup> fitted within the radial slots and formed with shoulders *i*<sup>2</sup> on two opposite sides to fit the recessed or countersunk radial edges of the slots, and constructed hollow or concave at their extremities to correspond to the convexity of the tips or outer edges of the wings of the finished drill, the projections *k* formed on the extremities of the holders *i*<sup>1</sup> and projecting beyond the surface of the plate *H* at the back to prevent the metal of the drill being rolled beyond the desired point, the pins or projections *j* formed on the holders *i*<sup>1</sup> on the inside, the disc *J* provided with a number of curved eccentrically disposed slots corresponding to the holders *i*<sup>1</sup> into which the projections or pins *j* project, the lever *K* attached to the disc *J* for rotating it in either direction and the cap or cover *L* attached to the plate *H* for holding the several parts in position, the guides *l*<sup>1</sup>, *l*<sup>2</sup> formed on the base plate *A*, the bar *L*<sup>1</sup> formed with the holes *l*<sup>3</sup>, the stop *l*<sup>4</sup> for the shank of the drill, the nut *m* fitted in the forward end of the bar *L*<sup>1</sup>, the screw *m*<sup>1</sup> traversing the nut *m*, the bracket *m*<sup>2</sup>, supporting the other extremity of the screw *m*<sup>1</sup>, the bevel wheel *n*<sup>3</sup> secured to the end of screw *m*<sup>1</sup> beyond bracket *m*<sup>2</sup>, the bracket *N* fixed to the base plate *A* formed with boss *n*, the spindle rotating in the boss *n*, the handle *n*<sup>2</sup> connected to one end thereof and the bevel wheel *n*<sup>1</sup> connected to the other extremity, the bevel wheel *n*<sup>1</sup>, gearing bevel wheel *n*<sup>3</sup>, for supporting the drill endwise and feeding the drill forward while being sharpened, substantially as described and shown.

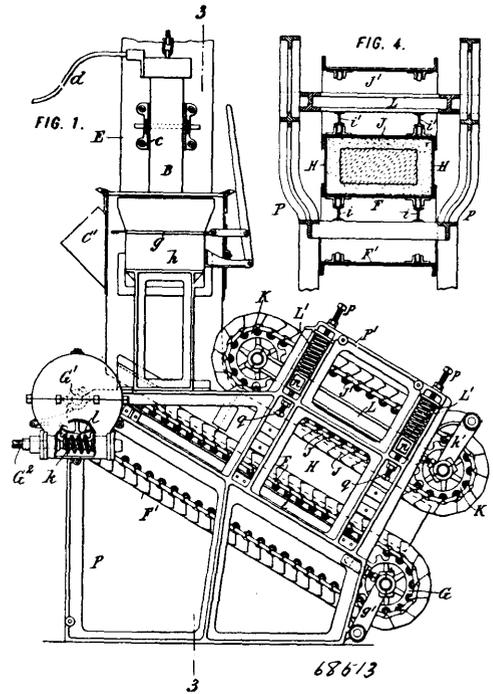
**No. 68,512. Grate. (Grillage.)**



John Wesley Gray, Peterborough, Ontario, Canada, 22nd August, 1900; 6 years. (Filed 7th June, 1900.)

*Claim.*—1st. A stove or furnace grate having a cone or wedge *C*, substantially as and for the purpose set forth. 2nd. The combination of the grates *A* and *B* with the water cone or wedge *C*, all substantially as shown and set forth and for the purpose specified.

**No. 68,513. Continuous Electric Furnace.**  
(*Fournaise électrique.*)

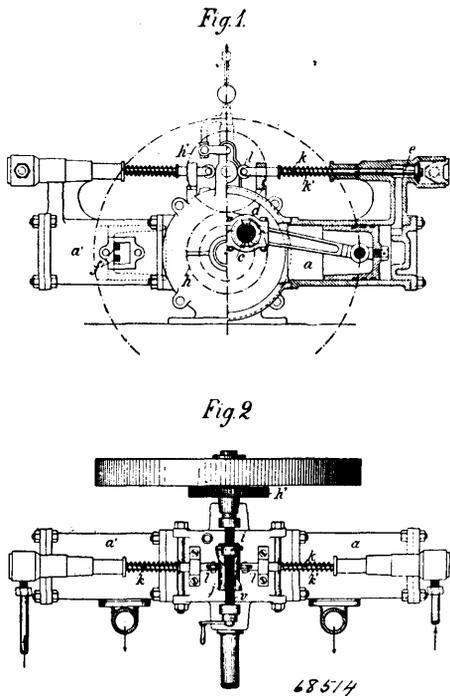


The Willson Carbide Works of St. Catharines, limited, St. Catharines, Ontario, Canada, assignee of Frank Creelman, New York City, New York, U.S.A., 24th August, 1900; 6 years. (Filed 23rd January, 1899.)

*Claim.*—1st. An electric furnace wherein a pig of product is formed below and out of contact with the electrodes and is conducted downward from the arc in a sloping direction in substantially the manner set forth. 2nd. An electric furnace wherein a pig of product is formed below and out of contact with the electrodes, said furnace comprising the electrodes between which the arc passes, and a sloping support for the granular mass of material beneath said arc, adapted to permit the feeding of said mass and the enclosed pig of product downward in a sloping direction away from said arc, in substantially the manner set forth. 3rd. An electric furnace comprising the electrodes between which the arc passes, and a sloping support for the granular mass of material beneath said arc, said support movable in downward direction to feed said mass and the enclosed pig of product downward in a sloping direction away from said arc, in substantially the manner set forth. 4th. An electric furnace comprising the electrodes between which the arc passes, and a sloping support for the granular mass of material beneath said arc, consisting of an endless belt movable to feed said mass and the enclosed pig of product downward in a sloping direction away from said arc, in substantially the manner set forth. 5th. An electric furnace wherein a pig of product is formed below and out of contact with the electrodes, said furnace comprising the electrodes between which the arc passes, and a sloping support for the granular mass of material beneath said arc, adapted to permit the feeding of said mass and the enclosed pig of product downward in a sloping direction away from said arc, combined with upright sides between which said mass is confined on said sloping support. 6th. An electric furnace comprising the electrodes between which the arc passes, and a sloping support for the granular mass of material beneath said arc, adapted to permit the feeding of said mass and the enclosed pig of product downward in a sloping direction away from said arc, combined with an inclined cover arranged to lie upon said sloping mass and restrain its downward movement. 7th. An electric furnace comprising the electrodes between which the arc passes, and a sloping support for the granular mass of material beneath said arc, adapted to permit the feeding of said mass and the enclosed pig of product downward in a sloping direction away from said arc, combined with an inclined cover consisting of an endless belt arranged to lie upon said sloping mass and restrain its downward movement. 8th. The combination in an electric furnace with chamber *C*, of an inclined endless belt *F* beneath it, and side plates *H* *H* co-operating with said belt to form a downwardly inclined trough for delivering the pig of product away from said chamber. 9th. In an electric

urnace, the combination with chamber C of inclined endless belt F beneath it, side walls H H, and upper endless belt J arranged to overlie the sloping mass of material, whereby the latter is confined between the two inclined belts. 10th. In an electric furnace, the combination with chamber C of inclined belt F beneath it, and upper inclined belt J, with means for pressing said belts together to grip the mass of product between them. 11th. In an electric furnace, the combination with chamber C of inclined belts F and J having lateral flanges, and side plates H H entering within said flanges to enclose the column of material.

**No. 68,514. Fluid Pressure Engine. (Engin.)**



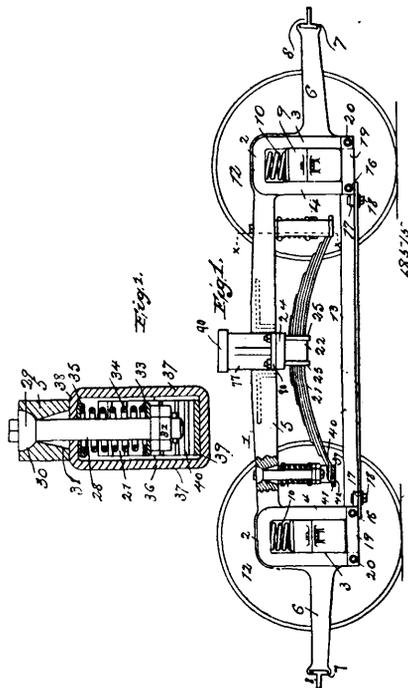
La Société des Générateurs à Vaporisation Instantanée Système L. Serpollet, assignee of Leon Serpollet, all of Paris, in the Republic of France, 24th August, 1900; 6 years. (Filed 19th April, 1899.)

*Claim.*—1st. In an engine of the kind described, distributing gear comprising the valves *e*, the rods *k*, springs *k*<sup>1</sup>, rollers 1, 1, and a cam such as *j* having two symmetrical inclines, which gear allows of forward running and backward running or stoppage of the engine, and also allows of the variation, by hand or by a governor, of any desired degree of admission of the steam or other fluid, substantially as described. 2nd. In an engine of the kind described, the apertures *f* formed in the wall of each cylinder, or alternatively the apertures *f*<sup>1</sup>, formed through the wall of the hollow tube T, allowing, in succession, of the free exhaust of the fluid without the aid of any distributing part, and of compression of the fluid which remains in the cylinder and is imprisoned by the return of the piston, means being provided whereby the said compression is prevented from appreciably exceeding the boiler, substantially as described. 3rd. The combination in an engine of the kind above specified of several single acting cylinders opening into a common closed chamber situated between them and at their lower part, and through which extends the engine shaft, and which is filled up to a normal level with lubricating oil, with: (a) the cam *j* having two symmetrical inclines the points of which are separated by a distance equal to the width of the rollers, for effecting the forward and backward running, and also the stoppage of the engine, and for allowing of varying either by hand or by means of a governor of the point of cut-off of the fluid by means of the rollers 1, 1, rods *k*, springs *k*<sup>1</sup>, and valves *e*; (b) the orifices *f*, *f*<sup>1</sup>, allowing of the free and constant exhaust from each cylinder, and also the compression in said cylinders on the return of the piston, of the fluid imprisoned therein, part of which may be returned to the holder, substantially as described. 4th. In an engine of the kind described, the arrangement of a distributing gear for several vertical cylinders situated in one and the same plane, having a chamber containing the moving parts underneath (Fig. 8) operated by means of a single central cam J situated on the outer end of the engine shaft, and acting successively upon each of the rollers for producing the distribution to be effected in each cylinder, the said rollers being actuated successively by the single central cam, and the valves being arranged on a circular conduit which supplies the steam, and their chambers being connected to the cor-

responding cylinders by pipes of the same capacity, substantially as described. 5th. Fluid pressure engine, constructed, arranged and operating substantially as hereinbefore described and shown with reference to the accompanying drawings.

**No. 68,515. Car Truck for Motor Propulsion, etc.**

(Truc de char.)



John A. Brill, assignee of George Martin Brill, both of Philadelphia, Pennsylvania, U.S.A., 24th August, 1900; 6 years. (Filed 3rd July, 1899.)

*Claim.*—1st. The combination with the running gear of a truck, of the side frames located outside of the truck wheel gauge, transversely swinging links hung from the side frames, longitudinally disposed semi-elliptic springs suspended by spring supported links below the top bar of said frame, a bolster supported on and transversely connecting said springs, and restraining guides secured to the bolster ends and embracing said top bar, substantially as described. 2nd. The combination in a car truck and its running gear, of the side frames supported outside of the wheel gauge, extensible spring links depending from the side frames, semi-elliptic springs supported by said links, and a bolster on and transversely connecting said latter springs, substantially as described. 3rd. The combination in a car truck and its running gear, of the side frames supported outside of the wheel gauge, the truck bolster, longitudinally disposed semi-elliptic springs hung from the side bars at or near the axle boxes outside of the wheel gauge by spring supported links, the bolster resting on and transversely connecting said semi-elliptic springs, and vertically disposed guides extending between the bolster and side frames, substantially as described. 4th. In a car truck, the combination with means for pivotally securing a car on the truck, of supporting devices for said means, said devices comprising spring links and longitudinally disposed semi-elliptic springs connecting said links, the links being extensible in the direction of their length, and springs for opposing the extension of said links, substantially as described. 5th. In a car truck, the combination with car pivoting devices, said devices comprising transversely swinging links, semi-elliptic springs connecting the links, said links being extensible in the direction of their length, and an additional spring or springs to oppose such extension, substantially as described. 6th. The combination of a truck having a frame, springs supported by said frame, hangers movably supported on said springs, semi-elliptic springs connecting said hangers, and means for supporting a car body on the truck connected with said semi-elliptic springs, substantially as described. 7th. The combination in a car truck, its running gear and side frames, of the inflexible bolts 28 movably secured to the side frames at or near the axle boxes, springs 34 on the bolts, hangers on the springs 34, semi-elliptic springs connected at their ends with the hangers, and a bolster supported on said semi-elliptic springs mounted so as to swing in unison with the said bolts and hangers from a point in the side frames, substantially as described. 8th. The combination in a car truck, of the side frames, extensible swing links having load supporting springs ranged in the direction of the length of the truck and pendant from the side frames, semi-elliptic springs ranged in the plane

of the side frames and connecting the links, and a bolster supported on said semi-elliptic springs, substantially as described. 9th. In a car truck, the combination with the side frames, a bolster, the semi-elliptic springs supporting the bolster, swing links supporting said semi-elliptic springs, and a spring in said links, substantially as described. 10th. The combination in a car truck, of the truck frame, spring links depending from the truck frame, semi-elliptic springs connecting the links, and means for connecting said latter springs with a car body, substantially as described. 11th. The combination in a car truck, of the truck frame, transversely swinging links depending from the truck frame, semi-elliptic springs connecting said links, and a bolster supporting car-connecting means thereon, said bolster being fixedly secured to said springs, and swinging in unison therewith, substantially as described. 12th. The combination in a car truck, of the side frames, with extensible swinging links carrying springs, said links depending from the side frames, semi-elliptic springs connecting said links, and a bolster secured to said latter springs, substantially as described. 13th. The combination in a car truck, of the side frames, the semi-elliptic springs movably and resiliently suspended from the side frames, and a bolster secured to said springs, substantially as described. 14th. In a car truck, the combination with the side frames having axle box pedestals, the longitudinally disposed semi-elliptic springs, extensible and resilient connections between the ends of the said springs and the side frames at or near said pedestals, and a bolster secured to said springs, substantially as described. 15th. In a car truck, the combination with the side frames having axle box pedestals, the bolster, longitudinally disposed resilient supports for the bolster, and resilient connections between the ends of said supports and the side frames, substantially as described. 16th. The combination in a car truck, of the side frames having axle box pedestals, each frame having an upper and lower chord, links supported from the upper cord by springs, longitudinally disposed semi-elliptic springs supported between the chords by the said links, a transverse bolster resting on said semi-elliptic springs below the upper chord, and guides between said upper chord and bolster embracing said chord, substantially as described. 17th. The combination in a car truck, of the side frames having axle box pedestals, each frame having an upper and lower chord, longitudinally disposed semi-elliptic springs lying between said chords of each frame, a spring suspension for the ends of said semi-elliptic springs from the top chord, and a bolster supported on said latter springs and tying them together transversely, substantially as described. 18th. The combination in a car truck, of the side frames having axle box pedestals, each frame having an upper and lower chord, semi-elliptic springs disposed between said chords, a swinging and extensible suspension for the ends of said semi-elliptic springs from the upper chord at or near the pedestals, and springs included in said suspension, substantially as described. 19th. The combination in a car truck, of the side frames, the semi-elliptic springs, a cross bolster secured to said semi-elliptic springs, links suspended from the side bars and attached to said springs, and further springs carried by said links adapted to oppose the motion of the side frames or the semi-elliptic springs, substantially as described. 20th. In a car truck, the combination of the side frames, the links suspended from the side frames, each link carrying a double acting spring, semi-elliptic springs secured to said links, and a bolster secured to said semi-elliptic springs, substantially as described. 21st. The combination in a car truck, of the side frames having axle box pedestals, springs interposed between the axle boxes and the pedestals, a bolster, springs hung from the side bars, a resilient support for said bolster on said springs, side bearings, and springs for supporting the side bearings on the bolster, substantially as described. 22nd. The combination in a car truck, of the side frames having axle box pedestals, springs interposed between the axle boxes and pedestals, a bolster, springs hung from the side bars, and a resilient support for said bolster on said latter springs, substantially as described. 23rd. The combination in a car truck, of the side frames having axle box pedestals, springs interposed between the axle boxes and said pedestals, a further set of springs supported by the side frames, a bolster transversely connecting said semi-elliptic springs, other springs on the bolster, and side bearings on said latter springs, substantially as described. 24th. The combination in a car truck, of the side frames having axle box pedestals, springs interposed between the axle boxes and said pedestals, a further set of springs supported by said further springs, a bolster on said element, other springs on the bolster, and side bearings on said latter springs, substantially as described. 25th. The combination in a car truck, of the side frames having axle box pedestals, springs interposed between the axle boxes and said pedestals, a further set of springs supported by the side frames, semi-elliptic springs supported by said further springs, a bolster transversely connecting said semi-elliptic springs, other springs on the bolster, and side bearings on said latter springs, substantially as described. 26th. The combination in a car truck, of the side frames having axle box pedestals, springs interposed between the axle boxes and said pedestals, links with interposed springs supported from the side frames, a bolster supported by said link springs, springs on the bolster, and side bearings on said latter springs, substantially as described. 27th. The combination in a car truck, of the side frames having axle box pedestals, spiral springs interposed between the axle boxes and said pedestals, a set of spiral springs of greater carrying capacity supported from the side bars, semi-elliptic springs

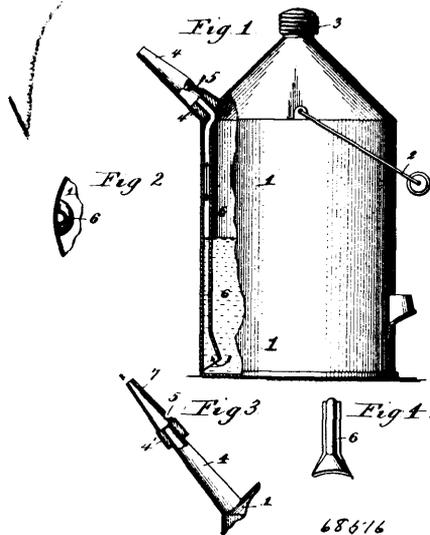
connecting said latter springs, and a bolster on said semi-elliptics, substantially as described. 28th. The combination in a car truck, of the side frames having axle box pedestals, spiral springs interposed between the axle boxes and said pedestals, spiral springs of greater carrying capacity supported from the side bars, a resilient equalizing connection between said latter spiral springs, a bolster on said connection, springs on the bolster, and side bearings on said springs, substantially as described. 29th. The combination in a car truck, of the side frames having axle box pedestals, spiral springs of greater carrying capacity supported from the side bars, semi-elliptic springs supported by said latter springs, a bolster on said semi-elliptics, springs on the bolster, and side bearings on said springs, substantially as described. 30th. In a car truck, the combination with the side frames, of the longitudinal leaf springs, a bolster tying said springs together, links pendant from the truck frame and adapted to move perpendicularly relatively to said frame, the ends of said springs resting on said links, and further springs adapted to resist the downward movement of the links, substantially as described. 31st. In a car truck, the combination with a truck frame having upper and lower chords on each side, upwardly arched semi-elliptic springs disposed below the upper chords, a cross bolster secured to the arch of said springs below the upper chords, spiral springs deriving their support from the upper chords, and a perpendicularly movable connection between spiral springs and the ends of the semi-elliptics, substantially as described. 32nd. A truck having a frame, a car body and means for supporting the body on the truck, comprising longitudinal semi-elliptic springs, links extending between the ends of the semi-elliptic springs and the truck frame, and spiral springs adapted to co-act with the semi-elliptic springs in supporting the car body, substantially as described. 33rd. A truck having a frame, a car body, combined with means for upholding the body on the truck, comprising semi-elliptic springs, spiral springs adapted to co-act with the ends of the semi-elliptics, and connections between the ends of said semi-elliptics and the truck frame, substantially as described. 34th. The combination in a car truck, of the side frames, transversely swinging links pendant from the side frames, horizontal semi-elliptic springs suspended by said links, a bolster on said springs, guides extending between said bolster and frames, and springs between said guides and said frames, substantially as described. 35th. The combination, in a car truck, of the side frames, the pendant swing links, springs supported on the links, horizontal semi-elliptic springs suspended by said links and springs, and a bolster on said semi-elliptic springs, substantially as described. 36th. The combination, in a car truck, of the side frames, the pendant links hung to swing in the direction of the length of the side frames, springs on the links, horizontal semi-elliptic springs supported by said link springs, a bolster on said semi-elliptics, and guides between the bolster and side frames, substantially as described. 37th. The combination, in a car truck, of the side frames, the pendant swing links, springs supported on the links, horizontal semi-elliptic springs suspended by said link springs, and a bolster transversely connecting and resting on said semi-elliptics, substantially as described. 38th. The combination, in a car truck, of the side frames, the pendant swing links, springs supported on the links, horizontal semi-elliptic springs suspended by said link springs, a bolster transversely connecting and resting on said semi-elliptics, springs on the bolster, and side bearings on said springs, substantially as described. 39th. The combination, in a car truck, of the side frames, the transversely swinging pendant links, said links being extensible in the direction of the length, springs on said links, horizontally disposed semi-elliptic springs connecting said links and resting on the link springs, and a cross-bolster rigidly secured to said semi-elliptics, the semi-elliptics, the links, and bolster swinging bodily together, substantially as described. 40th. The combination in a car truck, of the side frames, the transversely swinging links depending below the upper element of the side frames, the semi-elliptic springs disposed below said upper element and connected at their ends with said links, a bolster secured to said springs below the said element, guides extending between said element and the bolster, and springs interposed between said guides and said element, substantially as described. 41st. The combination, in a car truck, of the side frames having upper and lower chords, the transversely swinging links depending below the upper chords of each of the side frames, the semi-elliptic springs disposed below said upper chord on each side and connected at their ends with said links, a bolster secured to said springs below said chord, a yoke on each end of said bolster embracing said chord, and a thrust spring between each of said yokes and said chord, substantially as described. 42nd. The combination, in a truck, of the side frames, the transversely swinging links having interposed springs depending below the upper element of each of the frames, the semi-elliptic springs disposed below the said element on each side and connected at their ends with said links, a bolster secured to said springs below said element, a yoke on each end of the bolster embracing each of said elements, a spring on the yokes, and side bearings on the springs, substantially as described. 43rd. The combination, in a car truck, of the side frames, extensible links each with an interposed spring hung on the side frames, semi-elliptic springs suspended by said link springs, and a bolster supported by said semi-elliptics, substantially as described. 44th. The combination, in a car truck, of the side frames, the pendant and transversely swinging links suspended from the side frames, semi-elliptic springs connecting said links, a bolster on said springs, yokes on the bolster

embracing the side frames, and further springs in the yokes bearing against the side frames, substantially as described. 45th. The combination, in a car truck, of the side frames, a hanger pivotally suspended from said frame, said hanger having a bolt, a follower on the bolt, a spring interposed between the hanger and follower, semi-elliptic springs secured at their ends to said hanger, and a bolster on said semi-elliptic springs, substantially as described. 46th. The combination, in a car truck, of the side frames, swing links hung from the side frames, the horizontal semi-elliptic springs suspended by the links, a bolster secured on said springs, yokes on the ends of the bolster embracing a part of each of said frames, springs on the yokes, and side bearings on the springs, substantially as described. 47th. The combination in a car truck, of the side frames having upper and lower chords, horizontal semi-elliptic springs suspended from the upper chords, a bolster secured to said springs below the upper chords, yokes embracing the upper chords and secured to the ends of the bolster, springs on the yokes, and side bearings on the springs, substantially as described. 48th. The combination in a car truck, of the side frames, the horizontal semi-elliptic springs suspended from the side frames, a bolster secured on said springs, yokes on the bolster embracing a part of each of said frames, a spring on each of the yokes, and side bearings on the springs, substantially as described. 49th. The combination in a car truck, of the side bars, horizontal semi-elliptic springs suspended from and below the side bars, a bolster secured to said springs below the side bars, a yoke on each end of the bolster and embracing the side bars, a spring on each yoke, a center bearing on the bolster extending above the side bars, and a bearing on the yoke springs, substantially as described. 50th. The combination in a car truck, of the side bars, the semi-elliptic springs suspended by and below the side bars, a yoke supported by each of the springs and straddling the side bar, and extending above it, springs on the yokes, and side bearings on the yokes above the side bars, substantially as described. 51st. In a car truck, the combination of the side bars spring, supported on the axle boxes, the semi-elliptic springs suspended from the side bars, a cross bar uniting the latter springs below the side bars, the yokes on the semi-elliptic springs embracing the side bar, and side bearings on the yokes, substantially as described. 52nd. In a car truck, the combination with the side bars, links depending from the side bars, a ball and socket connection between the links and side bars, semi-elliptic springs connecting the links, and a bolster on said semi-elliptics, substantially as described. 53rd. In a car truck, the combination with the side bars and bolster, of links included in a support for the bolster on the side bars, said links having a ball head, a conical aperture formed in the side bar for said links, and a seat for the link ball in said aperture, substantially as described. 54th. In a car truck, the combination with the side bars and bolster, of the bolts depending from the side bars, a spring on each of the bolts, a strap movable on each of the bolts and resting on the spring, and connections between the straps and said bolster, substantially as described. 55th. In a car truck, the combination with the side bars, of the bolts depending from the side bars, a spring on each of the bolts, a strap movable on each of the bolts and resting on the spring, semi-elliptic springs, the ends of which rest on said straps, and a bolster on said semi-elliptic springs, substantially as described. 56th. The combination in a car truck, of the side bars, the depending bolt, the spring seat on the bolt, a spring on the seat encircling the bolt, a rectangular strap resting on said spring, the bolt passing through said strap, and a bolster supported on said strap through an intermediate connection, substantially as described. 57th. The combination in a car truck, of the side bar, a depending bolt, a head on the bolt engaging the side bar, a detachable nut on the lower end of the bolt, a rectangular and apertured strap, the bolt passing through said aperture, a spring about the bolt resting on said nut and supporting said strap, and a bolster supported on said strap through an intermediate connection, substantially as described. 58th. The combination with the side bar, of the bolt depending therefrom, a head on the bolt engaging the side bar, a seat on the bolt, a spring on the seat, a strap resting on said spring and engaging the bolt, a seat on the strap consisting of the cross bar 39 having a transverse aperture, and a leaf spring resting on the cross bar, said leaf spring having a lug on the end lying in said aperture, substantially as described. 59th. The combination with the side bars, of the semi-elliptic springs supported thereon, a transverse bar resting on said springs, the flanged yokes on the bar embracing the side bars, and a strap secured to the ends of said bar and to the yoke flanges and embracing said springs, substantially as described. 60th. The combination with the side bars, of the semi-elliptic springs supported thereon, a tie band about the centre of the springs, a transverse bar resting on said band, the flanged yokes on the bar embracing the side bars, and U-shaped straps secured to the ends of said bar and to the flanges and embracing the said springs, substantially as described. 61st. The combination with the side bars, of the longitudinally disposed semi-elliptic springs suspended therefrom, a transverse bar resting on said springs below the side bars, the flanged yokes resting on the bar and embracing the side bars, straps connecting the yoke flanges, transverse bar and springs, side bearings supported by said yokes, and a centre bearing on said transverse bar, substantially as described. 62nd. The combination with the side bars, of the longitudinally disposed semi-elliptic springs, straps at the ends of said springs, a bolt depending from the side bars and guiding the strap, and a spring on the bolt supporting the strap, substantially as described. 63rd. The com-

ination with the side bars, of the longitudinally disposed semi-elliptic springs, straps at the ends of each of the said springs, a bolt for each of said straps movably hung from the side bars, the strap being adapted to move up and down on the bolt as a guide, a spring on each of the bolts supporting the straps, and a cross bolster transversely connecting said semi-elliptic springs, substantially as described. 64th. The combination with the side bars of the longitudinally disposed semi-elliptic springs, rectangular straps engaging the ends of each of said springs, a bolt for each of said straps depending from the side bars and extending into said strap, a seat on each of the bolts, a spring on each of the bolts extending between the seat and the top of said strap, and a cross bolster transversely connecting said semi-elliptic springs, substantially as described. 65th. The combination with the side bars, of the conical aperture formed in and extending through the side bars, bolts movably suspended from the side bars and passing through the apertures, the seat on the bolt, a rectangular strap having a top cross bar in line with the side bar, an aperture formed in the said cross bar through which the said bolt passes, and a spring extending between the seat and said top cross bar, substantially as described. 66th. The combination with the side bars, of the longitudinal semi-elliptic springs suspended therefrom, a transverse plank connecting said springs below the side bars, a bar with a central elevation on said plank, transoms secured to said side bars longitudinally in line with said bar, yokes on said bar, springs on the yokes, side bearings on the springs, and a centre bearing on said elevation, substantially as described. 67th. In a car truck, the combination with the side bars and a bolster, of the upwardly extending bifurcated castings on the bolster, said castings straddling the side bars and having a solid head above the side bars, springs in separated recesses in said head, and a bearing plate having depending lugs, the plate resting on the springs and the lugs entering the springs, substantially as described. 68th. The combination with the casting having separated recesses formed in the top thereof, a coiled spring in each of said recesses, a plate on said spring, and lugs depending from said plate into said recesses and into the coil of each of the springs, substantially as described. 69th. The combination with the casting having a recess in its top, a spring in the recess, a flush top bearing plate on said spring, a lug depending from said plate and extending into said spring, and a recess in said lug opening out of the plate, substantially as described. 70th. The combination with the side bars, of the cross bar supported by the side bars, the yokes secured to said bar and straddling the side bars, and a spring interposed between each of the side bars and the inner members of each of the yokes, substantially as described. 71st. The combination with the side bars, of the cross bar supported by the side bars, the yokes secured to said bar and straddling the side bars, a barrel extending from the inner members of each of the yokes, and a spring in each of the barrels engaging the side bars, substantially as described. 72nd. In a car truck, the combination of the cross bar, the leaf springs below the cross bar, the bearing yokes above the cross bar, flanges on each of the yokes, straps passing through said flanges and cross bar and embracing said springs, and nuts on the ends of the straps resting on said flanges, substantially as described. 73rd. In a car truck, the combination of the cross bar, the leaf springs below the cross bar, the arch bar resting at its ends on the cross bar, the bearing yokes on the arch bar, flanges on the yokes, straps passing through said flanges, cross and arch bars and embracing said springs, and nuts on the ends of the straps resting on said flanges, substantially as described. 74th. In a bolster, the combination with the horizontal cross bar 23, of the superposed arched bar having intermediate portions 67 converging to the cross bar, and horizontal ends resting on the cross bar, a central arched block having wedge-shaped ends interposed between the cross and arched bars, elevated castings on the horizontal ends, side bearings on the castings, and means for supporting the bolster, a centre bearing on the arch, substantially as described. 75th. In a body bolster, the combination with the car sills, of the flat cross bar 95 having ends bent down and outward to engage the side and bottom of each of the sills 100, the inverted arch bar 96 having ends 97, 98, likewise disposed on the ends of the cross bar 95, an inverted arch block having wedge-shaped ends interposed between the cross and arch bars, and a body bearing secured to said arch, substantially as described. 76th. In a motor support, the combination with the truck frame, hangers 115 depending from the frame, outwardly extending seats 116 on the hangers, an upwardly extending bolt on the seats, a cross bar, springs about each bolt and above and below the cross bar and resting on the seats, and a nut on the bolt above the top spring, substantially as described. 77th. In a motor support, the combination with the upper and lower chord of the side frames, of the hangers secured to the upper and lower chords of each side frame, seats extending inwardly from the lower ends of said hangers, bolts on the seats, springs on each of the seats, and a cross bar interposed between the springs on each of the seats, substantially as described. 78th. The combination with the depending arms of the axle box yokes, of the pedestal tie bar of angle iron, the vertical web of which is secured in a recess in each of said arms, the horizontal web extending under the arms, substantially as described. 79th. In a car truck, the combination with the side frames, of links suspended by engagement with the integral portion of said frame and adapted to swing both longitudinally and transversely from a point within said frames, semi-elliptic springs movably secured to the ends of said links, and a bolster resting on said springs below the side bars,

substantially as described. 80th. In a car truck, the combination with the side bars of the truck frames, of longitudinally disposed semi-elliptic springs supported by the side bars, a bottom cross beam resting on and extending between said springs below the side bars, a top cross beam having a central elevation for supporting a centre bearing, and horizontal ends resting on the ends of the bottom cross beam below the side frames, straps securing the springs and beams together, and transoms extending between the side bars for guiding the top beams, substantially as described. 81st. In a car truck, the combination with the side frames having axle box pedestals, longitudinal semi-elliptic springs disposed below the top bar of the side frames, links having enlarged heads depending from the top bars at or adjacent to said pedestals and providing a universal joint for the support of said springs within the top bars, substantially as described. 82nd. The combination in a car truck, of the side frames, the semi-elliptic springs, a cross bolster secured to said semi-elliptic springs, links suspended from the side bars and attached to said springs, and further springs combined with said links adapted to oppose the motion of the side frames or the semi-elliptic springs, substantially as described. 83rd. The combination in a car truck, of the side frames, the semi-elliptic springs, a cross bolster resting on the semi-elliptic springs, links, and springs combined with said links, said links deriving their support from the side frames and connecting the ends of the semi-elliptic springs with the side frames, substantially as described. 84th. The combination in a car truck, of the side frames, springs suspended from the side frames, resilient members suspended by said springs, and a cross bolster resting on said members, substantially as described. 85th. The combination with the side frames of a car truck, of the jointed links depending from the side frames, semi-elliptic springs secured to the ends of the links and suspended from the side frames, further springs included in said suspension, and a cross bolster connecting the semi-elliptic springs, substantially as described. 86th. The combination with the side frames, of the longitudinal semi-elliptic springs, jointed links secured to the ends of the semi-elliptic springs and hung from the side frames, spiral springs surrounding the links and providing a resilient support of the semi-elliptic springs through the links from the side frames, and a bolster connecting the said semi-elliptic springs, substantially as described. 87th. The combination in a car truck, of the side frames, springs supported by the side frames, links suspended from the side frames and combined with said springs, a bolster, a resilient support for said bolster on said springs, side bearings, and springs supporting the side bearings on the bolster, substantially as described. 88th. The combination in a car truck, of the side frames, spiral springs supported by the side frames, jointed links suspended from the side frames and combined with said springs, a bolster, leaf springs supporting said bolster on said spiral springs, side bearings, and spiral springs supporting the side bearings on the bolster, substantially as described. 89th. In a car truck, the combination with the side frames, of a car body supporting bolster, pivotal supports for the bolster depending from the truck frame, a resilient element directly secured to the bolster, and springs for supporting said resilient element through said pivotal supports, substantially as described. 90th. In a car truck, the combination with the side frames, of the cross bolster suspended below the side frames, by semi-elliptic springs and pivotal links, said links comprising a plurality of sections movably secured together, and further springs combined with said links to elastically suspend the said semi-elliptic springs from the side frames, substantially as described. 91st. In a car truck, the combination with the side frames, of the cross bolster suspended below the side frames, by semi-elliptic springs and pivotal links, said links comprising a plurality of sections movably secured together, and spiral springs about and combined with said links to elastically suspend said semi-elliptic springs from said side frames, substantially as described. 92nd. The combination in a car truck, of the side frames having openings formed therethrough at or near the axle boxes, the transversely swinging links extending through said openings and pivotally supported on the upper portions of the side frames, semi-elliptic springs connecting the links on each of said frames, and a bolster supported on said springs so as to swing in unison with said links, substantially as described. 93rd. In a car truck, the combination with the side frames, having perpendicular openings formed therein, of the cross bolster, the leaf springs supporting the bolster, and the inflexible links extending through said openings and pendant from the side frames at a point above the bottom of said opening, the leaf springs having an articulated support on said links, substantially as described. 94th. The combination with the side frames of the car truck, of the links pendant therefrom, a bolster supported by said links, an aperture in the side bar, a ball movable in said aperture, the upper end of said links being exteriorly screw threaded, and an interiorly threaded aperture in said ball to receive the threaded end of said links, substantially as described. 95th. In a car truck, the combination with the side frames, of a bolster, articulated links pivotally suspended from the side frames, springs on the links, and a connection extending between the links resting on said springs and supporting the bolster, substantially as described. 96th. The combination with the side bar having a conical opening therein, a bolt, a thread formed on the bolt, a ball on the bolt engaging the thread, a seat in the opening for the ball, a spring through an intermediate connection, substantially as described.

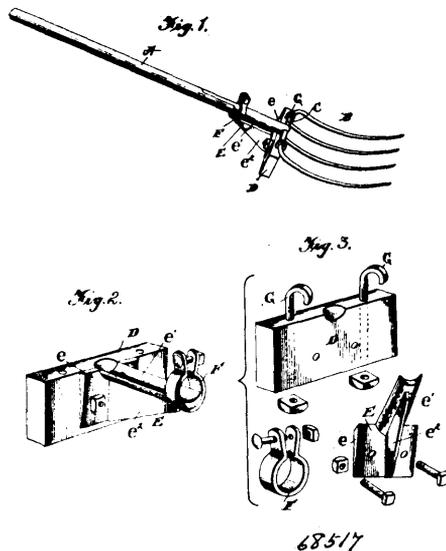
**No. 68,516. Non-Explosive Oil Cans. (Bidon à l'huile.)**



John Alexander Gray, Frederick Lehmann, both of Alleghany, and Nathan Laesen Brown, Pittsburg, all in the State of Pennsylvania, U.S.A., 24th August, 1900; 6 years. (Filed 29th June, 1900.)

*Claim.*—1st. A non-explosive oil can, consisting of the oil can 1, the spout formed on said can, a vent in said spout at a point between its base or entrance and its exit, the base or entrance of the spout being contracted to a less diameter than the exit thereof, all arranged and combined for service, as described. 2nd. A non-explosive oil can, consisting of the oil can 1, provided with a spout, a vent 5, formed in the said spout at a point near the base of the same, a cork or plug 4<sup>1</sup>, arranged in the interior of the spout located between the vent and the body of the can, an opening through the said cork or plug, a downwardly extending tube or passage 6, secured in the said opening, said tube or passage terminating at a point near the base of the can, the entrance of which is enlarged to freely admit the fluid, and the exit at the top contracted to a less diameter than the exit of the spout, all arranged and combined for service, substantially as described.

**No. 68,517. Potato Fork Attachment. (Fourche à patate.)**



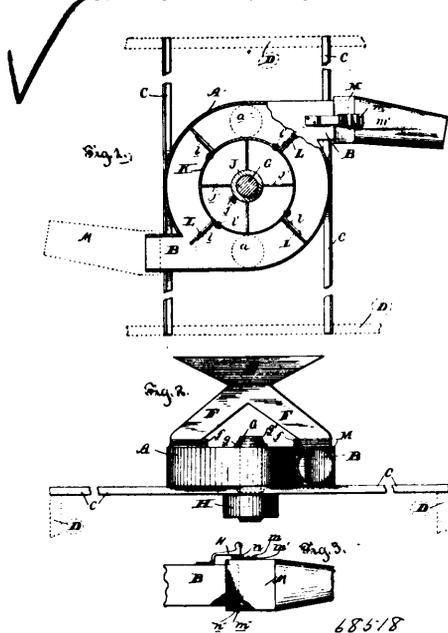
James Cavanagh, assignee of Joseph H. Sheehan, both of Lake City, Michigan, U.S.A., 24th August, 1900; 6 years. (Filed 26th July, 1900.)

*Claim.*—1st. The combination with the fork handle, tine head, and fulcrum block, and a brace comprising a flat portion for attachment to the fulcrum block, and a trough-shaped portion for engaging the handle, substantially as set forth. 2nd. In a brace for

attaching a fulcrum block to a fork, the combination of a flat portion for attachment to the fulcrum block, a trough-shaped portion for securing to the handle, and a bracket portion connecting the two said portions for strengthening the brace, substantially as set forth. 3rd. The combination with the fork handle, tine head, and fulcrum block, of a brace comprising a flat portion for supporting the said block, a trough-shaped portion having its axis approximately at right angles to said flat portion for engaging the handle, and a web portion for connecting the two said portions, substantially as set forth. 4th. In a brace for attaching a fulcrum block to a fork head, the combination of the flat portion *e*, for supporting the block, the trough-shaped portion *e*<sup>1</sup>, for supporting the handle, and the web portion *e*<sup>2</sup>, connecting the said two portions and extending the entire width of the said flat portion and almost to the free end of the said trough portion, substantially as set forth. 5th. The combination with the fork handle, tine head, and fulcrum block, of a brace comprising a flat portion for supporting the fulcrum block, a trough-shaped portion for engaging the handle, a web portion for connecting the two said portions, means for securing said trough-shaped portion to said handle, and means for securing said fulcrum block to said tine head, substantially as set forth. 6th. The combination with the fork handle, tine head, and fulcrum block, of the brace *E*, the clamping ring *F*, for securing said brace to said handle, and the hooked bolts *G*, *G*, for securing said fulcrum block to said tine head, substantially as set forth.

**No. 68,518. Automatic Car Loader for Grain.**

(Appareil pour charger le grain sur les char.)

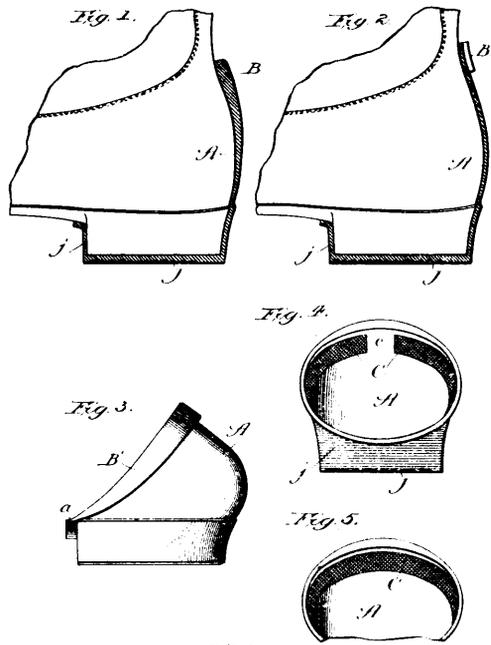


Charles D. Cole, assignee of John C. Bean, both of Sullivan, Illinois, U.S.A., 24th August, 1900; 6 years. (Filed 26th July, 1900.)

*Claim.*—1st. In a loader for grain and the like, the combination, of a fan casing provided with supporting means, and having inlets and tangential discharges, a rotary fan in the casing, means for holding said spouts in adjusted positions, substantially as set forth. 2nd. In a loader for grain and the like, the combination of a fan casing having a tangential discharge and an inlet adjacent the periphery of the casing, a circular grain passage in said casing having nearly the same cross area as the inlet and discharge, a fan working in said passage, and means for operating said fan, substantially as set forth. 3rd. In a loader for grain and the like, the combination of a fan casing, having a tangential discharge and an inlet adjacent the periphery of the casing, a fan in said casing, a drum secured to said fan and forming with the outer circular wall of the casing a grain passage of nearly the same cross area as that of the inlet and discharge, and means for operating the fan, substantially as set forth. 4th. In a loader for grain and the like, the combination, of a circular fan casing having a tangential discharge, and an inlet adjacent the periphery of the casing, a fan in the casing, a discharge nozzle movably connected to said discharge, means for holding the discharge nozzle in adjusted positions comprising a dog hinged to said discharge, and a series of projections or teeth on said discharge nozzle with which the dog is adapted to engage, substantially as set forth. 5th. In a car loader for grain and the like, the combination, of a fan casing, beams secured to the casing and adapted to rest on and be supported by the inner grain doors of the car, a hopper above said casing having chutes leading to the casing at points adjacent the periphery thereof, opposite tangential discharges for the casing,

a fan shaft passing centrally through said casing and having a belt pulley secured thereto, bearings secured to the top and bottom of said casing for said shaft, and a fan secured to said shaft within said casing, substantially as set forth.

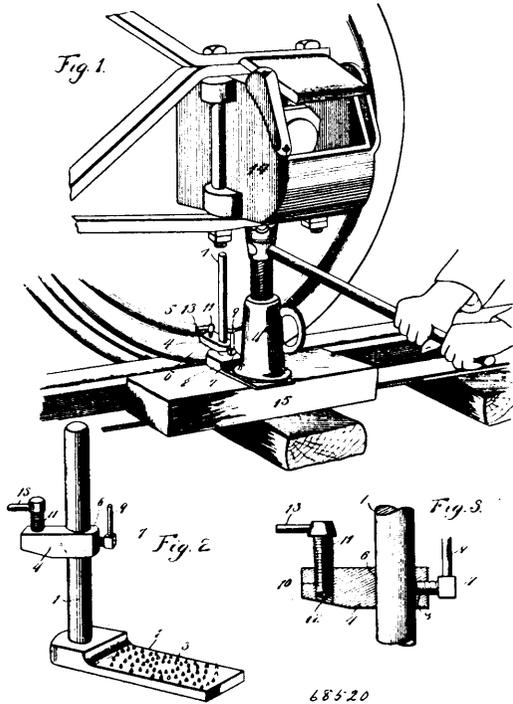
**No. 68,519. Heel Rubber.** (Talon en caoutchouc.)



John Harvey Morrow, Harry Erick Olson and Francis Oscar Stevens, all of Chicago, Illinois, U.S.A., 24th August, 1900; 6 years. (Filed 8th August, 1900.)

*Claim.*—1st. As a new article of manufacture, a heel rubber, comprising a heel portion, a counter portion, and a draw or compression band formed by a thickened or reinforced portion on the counter extending continuously from the front upper corner of the heel on one side to the front upper corner of the heel on the opposite side at the top or upper edge of the counter for producing a diagonal upward straight line pull when the heel is in place from the upper front corner on each side to the highest rear point of the counter and have the draw extend both sides of the heel, substantially as described. 2nd. As a new article of manufacture, a heel rubber, comprising a heel portion, a counter portion, a roughened or grated surface on the interior of the counter around the top or upper edge, a compression or draw band formed by a thickened or re-inforced portion on the exterior of the counter extending continuously from the front upper corner of the heel on one side to the front upper corner of the heel on the opposite side at the top or upper edge of the counter for producing a diagonal upward straight line pull when the heel is in place from the upper front corner of the heel on each side to the highest rear point of the counter and have the draw extend both sides of the heel and assisted by the roughened or grated inner surface of the counter, substantially as described. 3rd. As a new article of manufacture, a heel rubber, comprising a bottom, a heel flange rising from the bottom and extending around the same, and a counter rising from the heel flange having its rear upper portion split, forming flaps, and provided with a fastening device for drawing the flaps toward each other and securing them together, whereby the upper portion of the counter can be contracted to hold the rubber on a boot or shoe, substantially as described. 4th. As a new article of manufacture, a heel rubber, consisting of a bottom, a heel flange rising from the bottom and extending around the same, the said heel flange being provided with a flange projecting from its upper front edge, a counter rising from the heel flange and having its front portion projecting beyond the front of the heel flange and connected with the forwardly projecting flange thereof, said counter having its upper rear portion split and formed with over-lapping flaps and a fastening device for drawing the flaps together to contract the upper portion of the counter, substantially as described. 5th. As a new article of manufacture, a heel rubber, comprising at heel portion, a counter portion, and a roughened or grated surface on the interior rear portion of the counter to prevent the too easy slipping or displacement of the counter, substantially as described.

**No. 68,520. Railroad Car Wheel Clamp.**  
(*Crampe pour roue de char.*)

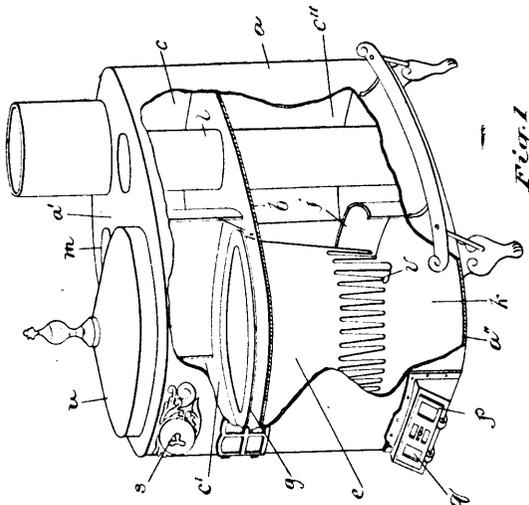


68520

William Dunning, Jamestown, and William J. Melchior, Fargo both of North Dakota, U.S.A., 24th August, 1900; 6 years (Filed 9th August, 1900.)

*Claim.*—1st. In a device of the class described, the combination with a jack, of a base having a horizontal upper face receiving the jack, a standard rising from one end of the base, a vertically adjustable jaw mounted on the standard and projecting outward beyond the base and arranged to engage a wheel, and means for securing the jaw to the standard, whereby it is retained in engagement with the wheel, substantially as described. 2nd. A device of the class described comprising a base plate arranged to receive a jack, a standard rising from the base plate, a horizontal jaw having an inner opening to receive the standard and provided with an outer threaded opening, a clamping screw mounted in the outer threaded opening and adapted to engage a wheel, and means for securing the jaw at the desired adjustment, substantially as described.

**No. 68,521. Heating Stove.** (*Poêlc.*)



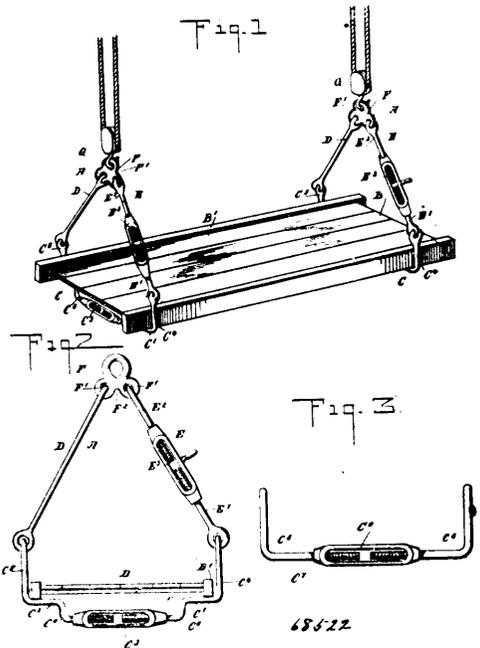
68521

John Simpson, Toronto, Ontario, Canada, 24th August, 1900; 6 years. (Filed 13th August, 1900.)

*Claim.*—1st. A heating stove embracing in its construction a division plate dividing the interior of the stove into two principal compartments, an opening through the front of the division plate,

a fire pot opposed to the opening, a baffle plate at the rear of the opening, connected to the division plate and top of the casing, having smoke passages at its sides, an upwardly directed shield connected to the bottom of the casing in the rear of the fire pot, a smoke outlet from the rear of the upper compartment and draft openings for the combustion chamber and fire pot, substantially as specified. 2nd. In a heating stove, the combination with a casing, of a horizontal division plate dividing the interior of the stove into two principal compartments, an opening through the front of the division plate, a fire pot opposed to the opening, a curved baffle plate in rear of the opening, connected to the division plate and top of the casing, passages between the ends of the baffle plate and sides of the casing, the baffle plate dividing the upper principal compartment into combustion and smoke chambers, an outlet from the smoke chamber for the products of combustion, a draft opening for the combustion chamber, an upwardly directed shield connected to the bottom of the casing in rear of the fire pot dividing the lower principal compartment into an ash pit and radiating chamber, a draft opening through the casing into the ash pit, substantially as specified. 2nd. A heating stove embracing in its construction a division plate dividing the interior of the stove into two principal compartments an opening through the front of the division plate, a fire pot opposed to the opening, a baffle plate at the rear of the opening connected to the division plate and top of the casing, having smoke passages at its sides, an upwardly directed shield connected to the bottom of the casing in the rear of the fire pot, a smoke outlet from the rear of the upper compartment and draft openings for the combustion chamber and fire pot, air tubes extending upwardly through the radiating and smoke chambers and communicating at the upper ends with the atmosphere, substantially as specified. 4th. In a heating stove, the combination with the casing of a horizontal division plate dividing it into upper and lower principal compartments, an opening through the front of the division plate, a downwardly and inwardly directed flange surrounding the opening, a fire pot having at its upper end an outwardly directed flange supported upon the flange of the opening through the division plate, a curved baffle plate connected to the division plate and top of the casing in rear of the fire pot having passages between its ends and sides of the casing for the products of combustion, the baffle plate dividing the upper principal compartment into combustion and smoke chambers, an outlet from the smoke chamber and a draft inlet into the combustion chamber, an upwardly directed shield connected to the bottom of the casing dividing the lower principal compartment into an ash pit and radiating chamber, an opening into the ash pit and air tubes passing through the radiating chamber and smoke chamber, substantially as specified. 5th. In a heating stove, the combination with a fire pot having diametrically opposed fingers provided with turned flanges, and a grate rest supported upon the turned flanges having a central bore, a grate having a downwardly directed pivot to enter the bore, and upwardly directed lugs to disintegrate the contents of the fire pot, substantially as specified.

**No. 68,522. Scaffold Hanger.** (*Echafaudage.*)

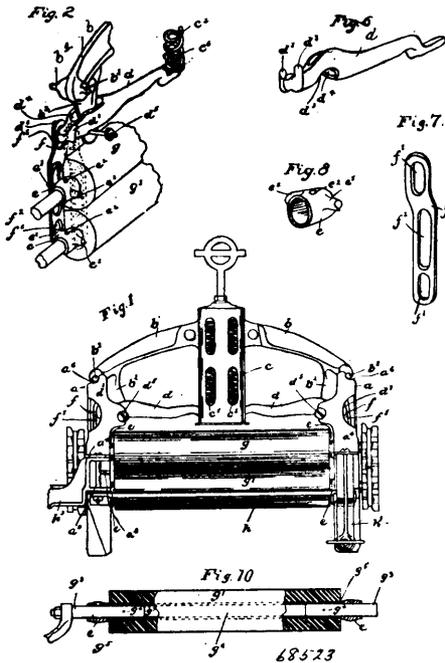


68522

John F. Barron, Rumford Falls, Maine, U.S.A., 24th August, 1900; 6 years. (Filed 10th August, 1900.)

*Claim.*—1st. A scaffold hanger, comprising a bottom consisting of adjustable sections, and sides hinged to the bottom and pivotally connected with each other at their ends, one of the sides being arranged to be lengthened or shortened, substantially as shown and described. 2nd. A scaffold hanger, having a bottom with sections adjustable one upon the other, to allow of lengthening or shortening the bottom, the ends of the bottom being turned up to form clamping lugs for engagement with the longitudinal scaffold beams, substantially as shown and described. 3rd. A scaffold hanger, having a bottom formed of sections connected with each other by a turnbuckle, the ends of the sections being turned to form clamping lugs for engagement with the longitudinal scaffold beams, said sections also having drops near their inner ends for bringing the turnbuckle below the bottom of the scaffold, substantially as shown and described. 4th. A scaffold hanger, having a bottom formed of sections connected with each other by a turnbuckle, the ends of the sections being turned up to form clamping lugs for engagement with the longitudinal scaffold beams, said sections also having drops near their inner ends for bringing the turnbuckle below the bottom of the scaffold, substantially as shown and described. 5th. A scaffold hanger, comprising a bottom made in sections to permit of lengthening or shortening the bottom, the latter having up-turned ends for clamping the longitudinal beams of the scaffold, sides pivotally connected with the up-turned ends of the bottom, one of the sides being made in sections connected with each other by a turnbuckle, and eyes independently engaged by the upper ends of said sides, substantially as shown and described. 6th. A scaffold hanger, comprising a bottom portion and side portions, and an eye plate having eyes for receiving the ends of the side portions and having an eye to receive a hook, and also having a recess between the first-named eyes, for the purpose described.

**No. 68,523. Clothes Wringer. (Tordouse.)**

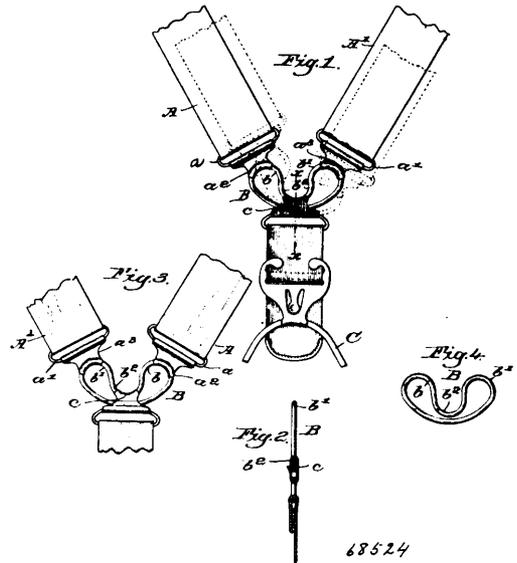


George D. Leedle, Springfield, Ohio, U.S.A., 24th August, 1900; 6 years. (Filed 10th August, 1900.)

*Claim.*—1st. In a frame for wringers, the combination of the upper brace rod, independent bifurcated side pieces supporting each end of said rod, a lower brace bar fastened at each end to one side of said side pieces and formed at each end with a hook-shaped arm adapted to fit into an opening in the opposite side of each side piece, and means for locking said side pieces at their upper ends to said upper brace rod. 2nd. In a frame for a wringer, the combination of an upper brace rod, independent side pieces supporting said rod, and levers pivotally held by said upper brace rod for supporting the bearings for said wringer, a lower brace rod fastened at each end to one side of the side pieces and formed with hook-shaped arms at each end adapted to fit into the openings in the opposite sides of the side pieces, and means for forming locking joints at the top and bottom of said frame. 3rd. In a frame of a wringer, the combination of an upper brace rod with studs projecting at each end therefrom, and supporting arms formed integral therewith and extending downwardly, independent side pieces formed with shoulders at the tops thereof adapted to bear against said studs with bearing surfaces at the sides, levers supported by said arms, and means for locking said side pieces against said levers and supporting arms for the purpose of forming a lock joint at the upper ends of said side pieces. 4th.

In the frame of a wringer, the combination of an upper brace rod with studs at each end and supporting arms extending downwardly at each end thereof, levers with bearing surfaces pivotally held by said supporting arms, independent side pieces adapted to be locked rigidly together against said levers by locking joints, a lower brace rod connecting said side pieces, and means for locking said lower brace rod to the opposite side pieces. 5th. In a wringer, a rigid frame, supporting levers with upwardly projecting studs at one end of same adapted to support independent links, independent swivelled bearings supported in said links to incase the roller journals and adapted to adjust themselves to the positions assumed by said rollers. 6th. In a wringer, a rigid frame formed with lock joints, levers with upwardly projecting studs at one end of same, independent links with slotted openings, the upper ends of same being bent inwardly and adapted to be supported on said levers, independent swivelled bearings supported in openings in said links incasing the roller journals and adapted to adjust themselves to the varying positions assumed by said rollers. 7th. A wringer, consisting of upper and lower brace rods rigidly connected to independent side pieces, independent levers bearing at their inner ends against a spring with upwardly projecting studs at the opposite ends of the same, independent barrel-shaped bearings for each of the rollers with V-shaped lugs projecting from the sides and independently swivelled to the links supported on said levers and adapted to line up with the positions assumed by said rollers. 8th. A wringer such as described, having the rollers journalled in solid cylindrical bearings each of which is provided with projecting trunnions having V-shaped or knife edges for supporting the same, said V-shaped or knife edges being formed in line with the axis of said journal, substantially as specified.

**No. 68,524. Suspenders. (Bretelles.)**



Alfred May Ziegler, Boston, Massachusetts, U.S.A., 24th August, 1900; 6 years. (Filed 11th August, 1900.)

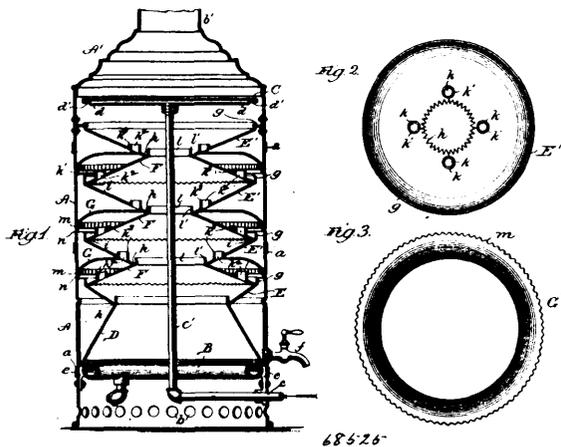
*Claim.*—1st. In a suspender, shoulder straps, a back end and a rigid swinging and sliding loop loosely connecting said straps and end, whereby unequal shoulder motions may be compensated for by the sliding and swinging motion of the loop with relation to the back end. 2nd. In suspenders, shoulder straps, a back end and a rigid double loop uniting the shoulder straps with the back end, said loop having a single sliding connection with the back end. 3rd. In suspenders, shoulder straps, a back end, and a rigid loop uniting the shoulder straps and back end, said loop having at its extremities a sliding connection with each shoulder strap and centrally thereof, a sliding connection with the back end. 4th. In suspenders, shoulder straps, a back end, and a rigid loop uniting the shoulder straps and back end, said loop presenting two similarly curved portions, one at each end for loosely connecting the same to the shoulder straps, and a central oppositely curved portion for slidingly connecting said loop to the back end.

**No. 68,525. Water Heater. (Bouilloire.)**

Morris Isaac Cohen, Chicago, Illinois, U.S.A., 24th August, 1900; 6 years. (Filed 10th August, 1900.)

*Claim.*—1st. In an instantaneous water heater, the combination with the casing containing a burner, of a water supply pipe rising in the casing, a water spraying head in the upper part of the casing and to which said pipe leads, and a stack of annular alternately upwardly and downwardly flaring pans rising in the casing about

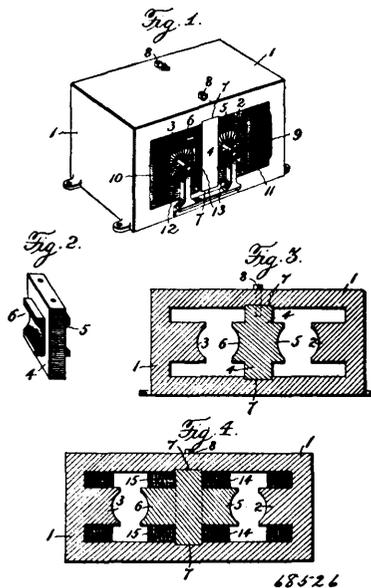
said pipe between the burner and head, and resting one upon the other, and open at their bases to the flow of water between them,



substantially as described. 2nd. In an instantaneous water heater, the combination with the casing containing a burner, of a water supply pipe rising in the casing, a water spraying head in the upper part of the casing and to which said pipe leads, and a stack of annular alternately upwardly and downwardly flaring pans rising in the casing about said pipe between the burner and head, and resting one upon the other and corrugated at their bases, substantially as described. 3rd. In an instantaneous water heater, the combination with the casing containing a burner, of a water supply pipe rising in the casing, and to which said pipe leads, and a stack of annular alternately upwardly and downwardly flaring pans rising in the casing about said pipe between the burner and head and resting one upon the other, said pans being corrugated at their bases, and having flanged openings in their body portions for the passage through them of the products of combustion from the burner, substantially as described. 4th. In an instantaneous water heater, the combination with the casing containing a burner, of a water supply pipe rising in the casing, a water spraying head in the upper part of the casing and to which said pipe leads, an annular trough supported in the casing about the burner and having an outlet, and a stack of annular alternately upwardly and downwardly flaring pans supported in said trough to rise in the casing about said pipe, said pans resting one upon the other and being open at their bases to the flow of water between them into said trough, substantially as described. 5th. In an instantaneous water heater, the combination with the casing containing a burner, of a water supply pipe rising in the casing, a water spraying head in the upper part of the casing and to which said pipe leads, and a stack of annular alternately upwardly and downwardly flaring pans rising in the casing about said pipe between the burner and head and resting one upon the other, said pans being spaced from the casing, and open at their bases to the flow of water between them, said head having outer openings for discharging water against the inner side of the casing and inner openings for discharging water upon said pans, substantially as described. 6th. In an instantaneous water heater, the combination with the casing containing a burner, of a water supply pipe rising in the casing, a water spraying head in the upper part of the casing and to which said pipe leads, an annular trough supported in the casing about the burner and having an outlet, a stack of annular alternately upwardly and downwardly flaring pans supported on the trough to rise in the casing about said pipe, said pans resting one upon the other, and being open at their bases and spaced from the casing, and said head having outer openings for discharging water against the inner side of the casing and inner openings for discharging water upon said pans, and one or more water spreading rings inclining downwardly toward the shell from between said pans, substantially as described. 7th. In an instantaneous water heater, the combination with the shell containing a burner near its base and in its upper portion a water supplying head connected with a water supply pipe, of a stack of annular alternately upwardly and downwardly flaring pans imposed one upon the other and rising in the shell between said burner and head, said pans being corrugated at their bases, and one or more circumferentially corrugated water spreading rings inclining downwardly toward the shell from between said pans, substantially as described. 8th. In an instantaneous water heater, the combination with the shell containing a burner near its base and in its upper portion a water supplying head connected with a water supply pipe, of a stack of annular alternately upwardly and downwardly flaring pans imposed one upon the other, and rising in the shell between said burner and head, said pans being corrugated at their bases, and one or more water spreading rings inclining downwardly toward the shell from between said pans, each ring having a circumferential corrugated flange, substantially as described. 9th. In an instantaneous water heater, the combination with a shell con-

taining a burner near its base and in its upper portion a water supplying head connected with the water supply pipe, of a trough in the shell extending above the plane of the heater and having a discharge spout leading from it, and a stack of annular flaring pans E, F, E<sup>1</sup>, rising in the shell from said trough, said pans F, E<sup>1</sup>, having flanged openings about their open centres, and the central openings in said pans decreasing in diameter upward through the stack, substantially as described.

**No. 68,526. Electric Motor. (Moteur électrique.)**



Patrick J. Collins, Scranton, Pennsylvania, U.S.A., 24th August, 1900; 6 years. (Filed 9th May, 1900.)

*Claim.*—1st. An electric motor, consisting of a hollow field frame having inwardly projecting pole pieces at its opposite sides, a partition extending across the interior of the frame transversely to the pole pieces and forming part of the magnetic circuit, said partition having pole pieces opposing the pole pieces upon the sides, and an armature between each pair of the opposing pole pieces. 2nd. In an electric motor, a hollow field frame having inwardly projecting pole pieces at its opposite sides, and a removable partition extending across the interior of the frame transversely to said pole pieces and forming part of the magnetic circuit, said partition having pole pieces opposing the pole pieces upon the sides, and an armature between each pair of opposing pole pieces. 3rd. In an electric motor, a hollow field frame having inwardly projecting pole pieces at its opposite sides, said pole pieces having coils thereon, and a removable partition extending across the interior of the frame transversely to said pole pieces and forming part of the magnetic circuit, said partition having consequent pole pieces opposing the pole pieces upon the sides, and an armature between each pair of opposing pole pieces. 4th. In an electric motor, a field frame having inwardly projecting pole pieces at either side and coils thereon, double consequent pole pieces arranged between the side pole pieces, and armatures arranged between the consequent pole pieces and each of the side pole pieces.

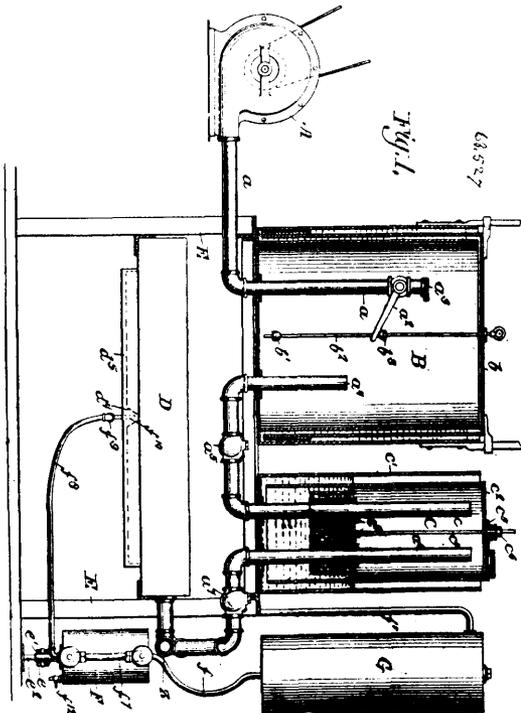
**No. 68,527. Gas Generating Apparatus.**

(Appareil à gaz.)

David J. Brown, New York City, New York, U.S.A., 27th August, 1900; 6 years. (Filed 5th March, 1900.)

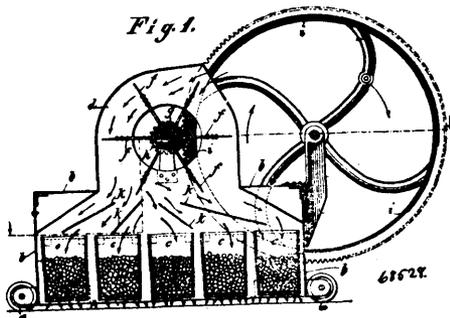
*Claim.*—1st. In a gas generating apparatus, a carburetter, comprising a plurality of compartments which are in communication with each other, an extension for each compartment forming a recess, a wicking suitably supported in each compartment and extending into the recess, a supply jet for each recess and a hydrocarbon oil supply tank connected with said jets. 2nd. In a gas generating apparatus, a carburetter, comprising a plurality of compartments in communication with each other, and each compartment having a recess into which a wick having a cut-out portion extends, the wick having a cut-out portion, a jet extending into each recess and the cut-out portion of the wick, and an oil supply tank for said jets. 3rd. The combination in a carburetter, of a plurality of compartments communicating with each other, a supply jet for each compartment, said jets being so arranged as to have their discharge ends at different altitudes, an oil supply tank connected with said jets, and means for changing the level of the oil relatively to the discharge ends of said jets, whereby all or less than all of said jets will discharge oil. 4th. The combination in a car-

burette, of a plurality of compartments connecting with each other, a supply jet for each compartment, said jets being arranged so as to



have their discharge ends at different altitudes, an oil supply tank connected with said jets and having a float valve, means for changing the altitude of the said supply tank relatively to the discharge ends of the said jets, and a reservoir connected with said tank. 5th. The combination in a carburettor, of a plurality of compartments connected with each other, a supply jet for each compartment, said jets being arranged so as to have their discharge ends at different altitudes, an oil tank having a float and connected with said jets, means for changing the altitude of the tank relatively to discharge ends of said jets, a reservoir connected with said tank, a connection leading from the bottom of the said reservoir to said tank and a valve operated by the float for controlling the said connection. 6th. In a carburettor, the combination of a compartment provided in said carburettor and having a recess, a wicking having a loop portion within said compartment and having a portion extending into said recess, a supply jet discharging into said recess and a hydro-carbon oil tank connected with supply jet.

**No. 68,528. Machine for the Destruction of Weeds, etc.** (*Machine pour détruire les mauvaises herbes.*)

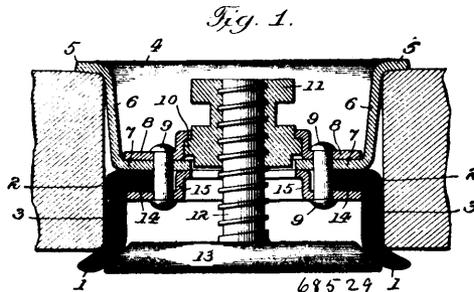


Carl Albert Leopold Panten, Thammenhain, Leipsic, German Empire, 27th August, 1900; 6 years. (Filed 2nd August, 1900.)

*Claim.*—1st. A machine for the destruction of weeds and the like on paths, in parks and on other roads, having ovens *c* carried at a suitable distance above the soil and adapted to scorch the weeds and plants and to heat the upper part of the soil to destroy the roots, germs, and the like therein, substantially as hereinbefore described. 2nd. A form of construction of a machine as claimed in claim 1 in which the ovens *c* are carried by a casing *b* mounted on wheels and adapted to be propelled on a path or road, and

having a fan *d* which feeds air to the ovens *c* past distributing partitions *k* to maintain combustion therein, substantially as hereinbefore described.

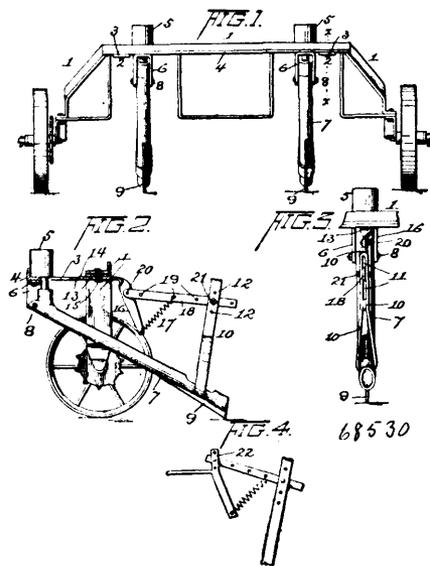
**No. 68,529. Expanding Bungs.** (*Boulon.*)



Elwood Galboun Phillips, Chicago, Illinois, U.S.A., 27th August, 1900; 6 years. (Filed 13th August, 1900.)

*Claim.*—An expanding bung, comprising in combination a main stationary member formed by a cup shaped portion, an upper confining ring for the operating nut, and a lower confining ring for the elastic packing member, a rotatable operating nut secured to the stationary member, an elastic packing member formed with a dependent skirt portion, and a movable member formed with a coned head and a central screw threaded stem engaging the operating nut, substantially as set forth.

**No. 68,530. Seeding Machine.** (*Semeuse.*)



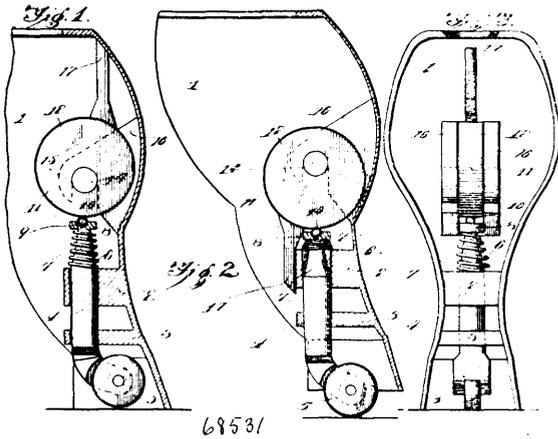
Matthes Zöllner and Carl Zöllner, both of Fate, Texas, U.S.A., 27th August, 1900; 6 years. (Filed 13th August, 1900.)

*Claim.*—1st. The combination, with a frame and the seed tubes, of means for flexibly and adjustably hanging the tubes from the frame, comprising the tube standard, the hanger, the lever pivoted to the standard and to the hanger, and the spiral spring connected to the lever and to the hanger. 2nd. The combination in means for flexibly hanging seed tubes, of the brackets to which the tubes are pivoted, the tube standards, the hangers adjustably secured to a suitable frame and having a depending portion, the levers pivoted to the said depending portion and to the said standards, and the spiral springs connecting the depending portions with the said levers. 3rd. The combination, with a seed tube having a vertically disposed standard forked at one end and slotted at the other, of the angle hanger having a flat end and a depending portion, the lever pivoted to the depending portion and to the said slotted end, and the spiral spring having one end secured to the said depending portion and the other end secured to the lever between the pivoted portions of the latter. 4th. The combination, with a frame, the hopper bar connected to the frame, and the tubes having a vertically disposed standard, of the brackets depending

from the said bar and in which the tubes are pivoted to swing vertically, and the flexible means to control the vertical movement of the tubes.

**No. 68,531. Stove Leg and Caster.**

(*Roulette pour pattes de poêle.*)

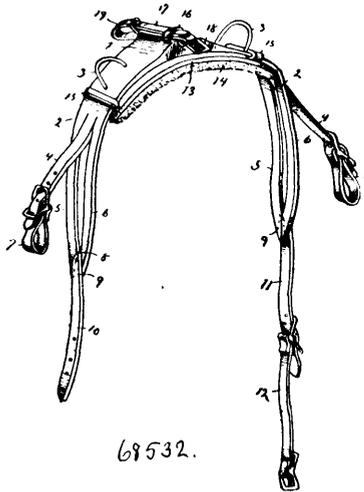


68531

William Jay Barber, of Honeoye Falls, New York U.S.A., 27th August, 1900; 6 years. (Filed 13th August, 1900.)

*Claim.*—1st. In a device of the class described, the combination with a stove leg having lower vertically aligned bearings and provided with upper bearings having recesses at their lower edges, a caster stem arranged in the vertically aligned bearings, a lever having pivots or trunnions arranged in the upper bearing recesses, and a spring engaging the stem and adapted to retain the pivots or trunnions of the lever in the bearing recesses, substantially as described. 2nd. In a device of the class described, the combination with a leg provided with upper and lower bearings, the upper bearings being open, a caster stem removably arranged in the lower bearings and provided with a caster wheel, a lever detachably mounted in the upper bearings, and a spring engaging the caster stem and retaining the same and the lever in the said bearings, substantially as described. 3rd. In a device of the class described, the combination with a leg provided with lower and upper bearings, a caster stem arranged in the lower bearings and having a tapered upper portion, and provided at the top thereof with a head, a lever mounted in the upper bearings, and a tapering spring arranged on the tapered portion of the stem and engaging the head thereof and the lower bearing and retaining the said stem in the said bearings, substantially as described. 4th. In a device of the class described, the combination with a leg having upper and lower bearings, a stem mounted in the lower bearing and provided at its top with a concavity, a lever mounted in the upper bearing, a ball arranged in the concavity and bearing against the said lever, and a spring engaging the stem and retaining the ball in contact with the lever, substantially as described.

**68,532. Harness Saddle.** (*Sellette.*)



68532.

James B. Tener, Sabina, Ohio, U.S.A., 27th August, 1900; 6 years. (Filed 14th August, 1900.)

*Claim.*—1st. A harness saddle having integral depending ends, each longitudinally slitted to form a central tongue or strap to support the shaft loops, and the two outer strips which latter are brought together and secured at their lower ends to the belly-band straps. 2nd. A harness saddle comprising the saddle proper and integral depending ends each of which is slitted longitudinally to form three parallel strips, the two outer strips being bevelled and secured together at their lower ends in combination with belly band straps secured to the joined outer strips of the saddle, and shaft secured to the ends of the central strips.

**No. 68,533. Wire Rope Tramway.**

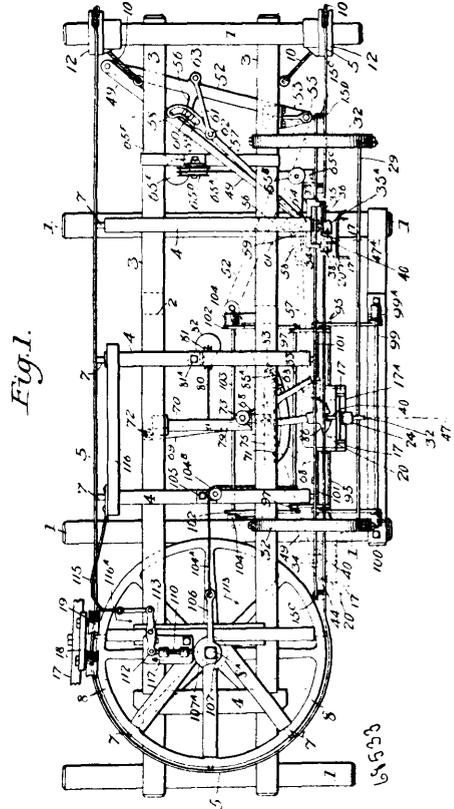


Fig. 1.

68533

Christopher T. Finlayson, Denver, Colorado, U.S.A., 27th August, 1900; 6 years. (Filed 8th August, 1900.)

*Claim.*—1st. The combination with the clip guide, the bucket and the rope clip of a slide arranged to reciprocate along one side of said terminal, two levers pivoted to said slide and arranged side by side, having a space or recess between the ends thereof, a projecting lug on said bucket adapted to move under one lever into said recess as the bucket moves along the terminal, and means including levers operated by said rope clip for moving said slide and bucket a predetermined distance along said terminal, substantially as described. 2nd. In a tramway terminal the combination with the traction rope, the clip and its guide way, of a slide mounted to reciprocate along the side of said terminal parallel with said clip, two dogs pivoted side by side in said slide and extending into the path of said rope clip and arranged so that when a clip enters said terminal it will raise one dog and pass under one, which will drop behind it and so that the two dogs will rest one on each side of it, and a spring for normally holding said dogs in the path of said clips, substantially as described. 3rd. In a continuously running wire rope tramway terminal, the combination with the traction rope, the rope clip and the bucket, of means for positively grasping and moving the buckets while the bucket holding rope clips are changing from the incoming bucket to the loading or dumping out-going bucket comprising a rope and clip guide, a slide reciprocally mounted on a guideway parallel with said rope, levers secured thereto arranged and adapted to grasp the incoming bucket as the clip leaves it, a second slide reciprocally mounted on said slide guide way, spring controlled dogs pivotally attached to said slide and projecting into the path of said clip, one of which is adapted to be raised by said clip as it passes by it and to drop down behind it, and the other is adapted to be pressed against it by said dog and said slide moved along by it on said guide way, a pin in the path of said dog at the end of its moving arranged to be engaged by and to raise said dog and to release said slide from said clip, a lever pivotally attached to said slide at one end and at its opposite end to one end of a second lever, the opposite end of

which is pivotally secured to a bearing secured to the terminal, a third lever pivotally attached to said last named lever at one end and at its other end to said bucket slide, and means connected with said lever whereby when said clip moves said clip slide and its lever, the bucket slide moves the incoming bucket at a retarded rate of speed to the loading or dumping station, and means including a rope and weight for returning said slides to their normal positions, substantially as described. 4th. In a wire rope tramway having a bucket normally standing at the loading and dumping station and a continuously running traction rope, the combination with the terminal frame, the traction rope, the rope clip and the buckets, of means for moving the incoming bucket after the clip leaves it to the loading or dumping station, comprising a clip channel on said bucket adapted to receive said clip, dogs pivoted in said channel on each side of said clip and adapted to confine said clip in said channel, means including a slide for manipulating said dogs to release said clip from said channel, a pin projecting from said slide, guide rods arranged to engage said pin and to raise and lower said slide to admit and release said clip to and from said channel and to lock it therein, a guideway for said clip and traction rope, a clip guide mounted to reciprocate on said slide way, spring controlled dogs pivotally secured to said clip slide and arranged to project normally into the path of said clips and arranged to receive the clip between them and to loosely attach said clip to said clip slide as the clip enters the terminal, a bucket operating slide mounted on the said clip and rope guideway, levers arranged thereon to be engaged by and to grasp each bucket loosely as it enters each terminal, and means including a bucket accelerating device and a series of levers pivotally attached to said clip and bucket slides and to each other for starting and gradually accelerating the standing, loading or dumping bucket on its trip from one terminal to the other and for locking the rope clip to it and for positively retarding the movement of the incoming bucket until the out-going bucket is out of the loading or dumping station and for moving the incoming buckets to the loading station and for attaching the accelerator to it, substantially as described. 5th. The combination with the terminals, of the traction and stationary ropes, buckets adapted to run on said stationary rope, means for automatically attaching and detaching said buckets to said traction rope, comprising clips on said rope, a channel member on said bracket adapted to receive said clips, dogs arranged to confine said clips in said recess, a vertically movable slide arranged to lock and to release said dogs to and from said clips by a predetermined movement of said slide, means for automatically moving said vertical slide to lock and to release said dogs as the bucket moves around a terminal, comprising rods arranged to first move at a predetermined point on the terminal, said vertical slide to unlock said dogs and thereby release said clip from said bucket, and at another point to move said vertical slide to lock one dog and to leave the other released so that said clip can enter said recess, a guideway for said clip and rope, a slideway arranged parallel with said traction rope, a bucket slide slidably mounted on said slideway, means including a projection on the buckets for detachably securing the buckets to the bucket slide at the point on the terminal where the clips are released from them, a clip slide on said slideway, means including spring controlled dogs for detachably securing said clip slide to each clip at the time it is released from each incoming bucket and a system of levers pivoted to said bucket and clip slides and terminal so arranged and adapted that as each continuously moving clip engages and is attached to the clip slide it will be carried along said slideway and its lever will draw the other levers connected to it after it, thereby causing the lever pivoted to said bucket holding slide to move said slide and bucket towards and to the loading or dumping station but at a much slower movement than said traction rope is moving at, thus retarding its movement while the clip picks up and starts the bucket at the loading or dumping station out on the line, substantially as described. 6th. In wire rope tramway terminals, the combination with the frame, the traction rope, the clip and the bucket, of a pendant pivoted to said bucket, a clip locking mechanism secured to said pendant, a movable slide for operating said mechanism and a guideway arranged to move said slide to lock and release said clip locking mechanism, substantially as described. 7th. In wire rope tramway terminals, the combination with the bucket and clip, of the pendant pivoted thereto, the clip locking mechanism and the guideway adapted to operate said slide to lock and unlock said clip from the buckets with the bucket slide, the bucket gripping levers, and means connected with said clip for moving said bucket and slide to the standing position and means for releasing said levers and slide from said bucket, substantially as described. 8th. In wire rope tramway terminals, having a bucket loading or dumping station at each terminal, the combination of the frame, tracks around said frame, one above the other, a stationary and a continuously running traction rope co-operating with said frame and tracks, a grip wheel carrying said traction rope operatively mounted in each terminal, a clip attached to said traction rope, buckets adapted to run on said stationary rope and said tracks, means including a moving slide and co-operating dogs, and a guideway arranged to move said slide reciprocally to lock and release said buckets to said clips at predetermined points in said terminal, with means including a clip gripping and releasing device and a co-operating bucket gripping and releasing device, and a bucket accelerating device operatively mounted on said terminal for positively starting the stationary loading or dumping bucket out of the terminals onto the ropeway and for positively

moving the incoming loaded or empty bucket into loading or dumping position, substantially as described. 9th. In wire rope tramways, the combination with the terminals, the stationary and traction rope, of a clip secured to said traction rope, buckets adapted to run on said stationary rope, means for attaching said buckets to said traction rope, means for releasing said incoming bucket from said traction rope at a suitable point in each terminal and for attaching a stationary loaded or empty bucket to said traction rope at another suitable point of each terminal, and means including suitable slides and gripping devices for positively gripping and moving the incoming buckets in relative operative unison to the movement of the outgoing buckets, substantially as described. 10th. In tramway terminals, the combination of the traction rope and the bucket holding clip, the clip and rope guideway with the clip slide reciprocally mounted on said guideway, the spring controlled dogs adapted to secure said slide to said clip and the pin for releasing said slide from said clip, substantially as described. 11th. In tramway terminals having a loading and dumping station and an incoming bucket clip releasing station, the combination of the frame, the tracks and the traction rope and clip with a trolley engaging said tracks, a pendant suspended from said trolley, a bucket pivoted to said pendant, a clip gripping and locking device secured to said pendant, projections on said pendant, means for releasing said clips from said bucket as they enter said terminal, a mechanism for gripping said buckets at the time said clips are released from them, a device for gripping said clips as they are released from said buckets and mechanism connected with said clip gripping device and said bucket gripping device whereby said clip moves said incoming buckets with a positive bucket controlling movement from the clip releasing station to the loading or dumping station in relative unison with the movement of the outgoing bucket, substantially as described. 12th. In wire rope tramway terminals, a bucket and clip releasing station and a loading and dumping station, the combination with the traction rope, the clips and the buckets, of a guideway for said rope and clip, a slideway on said guideway, a slide mounted on said slideway at the clip releasing station and provided with levers arranged to operatively grasp an incoming bucket, and means including inclined planes for releasing said levers at the loading or dumping station, a second slide mounted on said slideway, also at said clip releasing station and provided with dogs arranged to grasp said clip, means for releasing said clip slide at the end of said guideway, a lever pivoted to said clip slide at one end and pivoted at its opposite end to one end of a second lever having its opposite end pivoted to a bearing attached to a terminal frame, a third lever pivoted at one end to said bucket grasping slide and having its opposite end curved, a curved slot in said curved end, a lateral extension on said second named lever towards the first named lever, a pin loosely extending through said curved slot of the curved end of said third lever and secured to the end of the extension of the said second lever, a fourth lever pivotally attached at one end to said third lever just above its curved end, and pivotally attached to said second lever opposite said extension, and means including a weight for returning said levers and slides to the clip releasing stations whereby said clip and clip slide as they move through and along said guideway, carry the first named lever with them, and this first lever moves the second and third and fourth levers to impart a positive but a slower and a retarding movement to the said bucket slide and the buckets from said clip releasing station to said loading or dumping station, substantially as described. 13th. The combination in tramway terminals having a bucket standing, loading or dumping station, of the frame, the traction rope, the clip and the buckets, of a bucket gripping and positive bucket accelerating device comprising an arm pivoted at one end to a suitable bearing attached to said frame opposite said station, and having its opposite end free to swing in a segment of a circle and extending to the bucket at said station, a support for the free end of said arms, a head portion on the free end of said arm adapted to slide axially on and provided with a slot thereat, means including a spring for holding said head at the outward end of its movement on said arm, a projection on said bucket adapted to fit loosely in said slot, backwardly curved, laterally extending slides on said head, and means including a cam shaped lever for imparting a gradually accelerating speed to said arm throughout its segmental movement, substantially as described. 14th. In wire rope tramways, the combination of terminals comprising a frame structure, an upper and a lower track, a stationary and a traction rope, a grip wheel supporting said traction rope, with a bucket and pendant arranged to operatively engage said tracks and stationary rope, means including a slide locking device, attached to the pendant portion of said bucket and a clip attached to said traction rope for detachably securing said buckets to said rope, means including a differential guideway operatively arranged to engage said locking device for retarding and locking said buckets to said clips at predetermined points on said terminals, an accelerating device, comprising a pivotal arm arranged to swing in a segment of a circle, a head on the free end of said arm arranged and adapted to loosely engage and hold said buckets and to move them with said arm throughout said arm's segmentary movement, a cam lever arranged and adapted to move said arm and to gradually start and accelerate its movement throughout the radius of its segmental movement, means including said traction rope and clip for operating said cam lever to operate said arm in the operative direction of its movement,

means including a gravity device for returning said arm to its normal position, and a buffer device adapted and arranged to receive and cushion the return movement of said arm, substantially as described. 15th. In tramway terminals, the combination with the traction and clip of the accelerating device, comprising a segmentally swinging arm having a resiliently movable bucket engaging head, a cam member operatively arranged to start and gradually accelerate said arm, the supports for said arm and cam lever, the buffer, and means connected with said clip whereby said accelerating device is caused to start and to gradually accelerate the movement of each bucket until it has attained substantially the speed of said traction rope while said clip is being attached to said buckets and before it takes it from the accelerator, and means for returning said accelerating device to its normal position, substantially as described. 16th. The combination in tramway terminals, of the traction rope, the clip and slide arranged to engage said clip, the traction rope and clip guideway and slide mounted to reciprocate on said guideway with the accelerating device, comprising the bucket carrying arm, the cam lever arranged to start and accelerate said device, the buffer, the weight for returning said arm to its normal position, and the pin in said slide arranged to engage said cam lever, substantially as described. 17th. The combination in wire rope tramway terminals having a clip releasing station and a loading and dumping station at each terminal, of the traction rope, the clips and the buckets operatively arranged and adapted to automatically and intermittently engage and separate from said clips at said clip releasing station and to engage said buckets at said loading or dumping station at predetermined points on said terminals, with means including an automatic gripping and releasing device and an automatic bucket gripping, holding and releasing device and intermediate mechanism between said clip gripping and said bucket gripping device, whereby said clip gripping device operates said bucket gripping device to move said incoming bucket from the clip releasing station to said bucket loading or dumping station, and a bucket starting and accelerating device co-operatively arranged and adapted to be operated by said clip and clip gripping device, and comprising a swinging arm arranged to engage and hold said bucket at the loading or dumping station, a cam member arranged to engage said swinging arm and to start and gradually accelerate its movement and the movement of the buckets throughout the radius of its movement until said bucket is moving substantially as fast as said traction rope, and while said clip is being locked to said clip, substantially as described. 18th. In tramway terminals, the combination with the traction rope and buckets having a depending pin, of the dumping device, comprising a rod arranged to be engaged by said pin at said dumping station, levers pivoted to said rod and arranged to move said rod to turn said buckets to discharge its contents, a rope secured at one end to said dumping levers, a shaft arranged vertically in said frame, a grip wheel operatively supporting said traction rope and mounted on said shaft, a disc loosely mounted on the top of said shaft, and an arm extending from said disc and secured to the opposite end of said rope, a notched clutch surface on the lower periphery of said disc, a second disc having a notched clutch surface registering opposite to said notched clutch surface of said first named disc and secured to said shaft, a cam formed on said disc, mechanism adapted to normally hold said disc and cam out of engagement with said clutch disc and arranged to be intermittently engaged by the passing buckets to cause engagement of said clutch surface and a revolution of said disc and cam to dump said buckets, substantially as described. 19th. The combination in tramway terminals of the frame, the upper and lower tracks, the stationary and traction ropes, the grip wheel and its shaft, the clip, the buckets and the clip and the bucket engaging, locking, releasing and moving mechanism comprising the bucket tilting rods and levers, the combined clutch and cam disc and actuating arm loosely mounted on said shaft, the clutch disc secured to said shaft in operative relation to said clutch and cam disc, the pin reciprocally arranged to engage said cam, a lever member arranged to extend normally over the said tracks and into the path of said buckets, intermediate mechanism between said lever member and said pin and a flexible connection between said arm of said combined disc and cam and said bucket tilting members, substantially as described. 20th. In tramway terminals having a dumping station, the combination with the frame and the traction rope, the clip, the tracks and the buckets, of the grip wheel and its shaft operatively supporting said traction rope, a clutch disc loosely mounted on said shaft, an opposing clutch member secured to said shaft and revoluble with it and arranged in operative relation to said clutch disc, an arm extending from said clutch disc, a series of levers and rods arranged on the base of said frame, a suitable connection between said series of rods and levers and the arm of said clutch disc whereby when said arm moves said system of levers are moved to tilt said buckets at said dumping station, an inclined cam on a portion of the diameter of said clutch disc, a pin arranged to engage said cam portion and to normally hold said clutch disc out of engagement with said clutch member, a reciprocating lever arranged to project normally into the path of the outgoing buckets and intermediate mechanism between said pin and reciprocating lever, substantially as described. 21st. In tramway terminals, the combination with the tracks, the buckets, the traction rope, the clip, the grip wheel and its supporting rope, of the disc clutch secured to said shaft, the combined clutch and cam disc loosely mounted on said shaft in operative relation to said disc clutch, the pin engaging said cam,

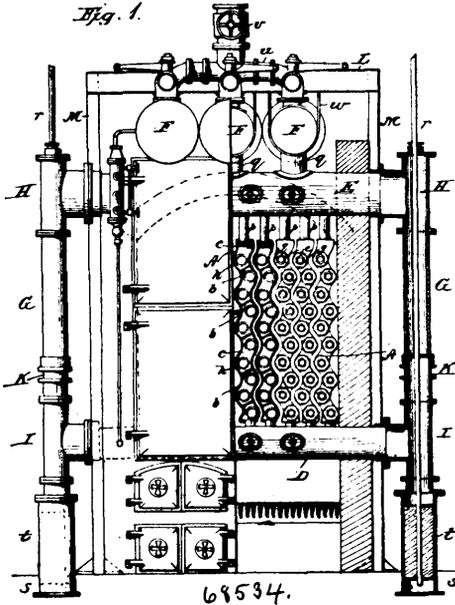
the rock arm pivoted at one end to said pin, the lever pivoted to the opposite end of said rock arm and the spring lever secured at one end to said lever and at its opposite end to said terminal and arranged to extend over said tracks into the path of the passing buckets and to be engaged by said buckets and moved to withdraw said pin from said clutch cam and allow it to engage said disc clutch whereby said clutch disc and its arm are rotated by said disc clutch and grip wheel, a partial revolution, and said clutch disc is disengaged from said disc clutch by said disc clutch by said cam and pin at the end of its revolution, substantially as described. 22nd. The combination of a traction rope, the clips and the buckets with the bucket gripping device, the clip gripping device and the levers pivotally connected together and to said clip and bucket gripping device, and arranged and adapted to actuate said clip and bucket gripping device, substantially as described. 23rd. The combination of a wire rope tramway terminal frame having a clip releasing and a bucket loading and dumping station, with a traction rope, clips attached to said traction rope, a bucket engaging and gripping device adapted to engage and grip loosely the buckets at the clip releasing station, and means detachably secured to said clip for actuating said bucket gripping device to move said buckets from the said clip releasing to the loading or dumping station, substantially as described. 24th. In a wire rope tramway terminals having a clip releasing station, a bucket loading and unloading station and a bucket gripping and accelerating device, the combination with the terminal frame, the traction rope, the clips, the buckets and the bucket and clip locking and unlocking mechanism, of a bucket gripping and releasing device arranged and adapted to reciprocate along said terminal and a clip gripping and releasing device arranged and adapted to reciprocate along said terminal, means connected with said clips and bucket gripping devices whereby said clips and traction rope move said buckets from said clip releasing station to said loading or unloading or dumping station, and an accelerating device adapted to grip and hold to a bucket at said dumping station, and means connected with said clip for actuating said accelerating device to start said bucket and accelerate their speed to substantially that of said traction rope, substantially as described. 25th. The combination with the frame, the traction rope, the clips, and the buckets, of the bucket gripping, moving and releasing mechanism and the accelerator comprising the swinging arm, the cam lever, and the buffer and means connected with said clip and bucket gripping, moving and releasing mechanism for actuating said bucket accelerator, substantially as described. 25th. The combination with the traction rope and the clip, of a device for accelerating the buckets comprising means including a bucket gripping device for holding the bucket, a cam lever for moving said bucket gripping device and means connected with said clip for actuating said cam lever, substantially as described. 27th. In wire rope tramway terminals having a clip releasing and a bucket loading and dumping station, the combination with the terminal frame, the tracks, the traction rope, the clips, the buckets and the bucket and clip locking and unlocking mechanism, of a bucket gripping device for gripping a bucket at the clip releasing station, a clip gripping device for gripping the clips at the clip releasing station, means for operating said bucket gripping device to move said buckets from said clip releasing station to said loading or dumping station, an accelerating device comprising a reciprocating arm adapted to engage and grip said buckets at the loading or dumping station, means including a cam for starting and accelerating said reciprocating arm throughout its operative movement, and means connected with said clips for actuating said cam, substantially as described. 28th. In a wire rope tramway, the clip composed of the clasp, the shouldered projection, the enlarged head and the neck connecting the head with the shouldered part, substantially as described. 29th. In a wire rope tramway, the combination with the traction rope, of the clip consisting of the clasp, the shouldered projection, the reduced neck and the circular head, substantially as described.

#### No. 68,534. Sectional Steam Generator. (Boullotire.)

Samuel Early Light, Lebanon, Pennsylvania, U.S.A., 27th August, 1900; 6 years. (Filed 2nd August, 1900.)

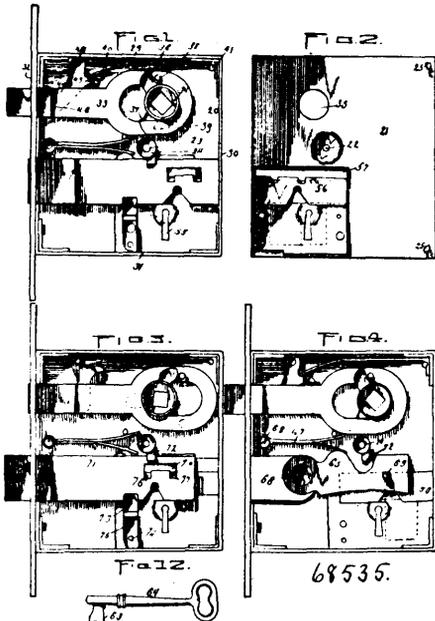
*Claim.*—1st. A header having openings on one side thereof, detachable packing boxes in said openings and provided with packing glands adjustably secured therein. 2nd. A header having screw-threaded opening on one side thereof, screw-threaded packing boxes engaging said openings and provided with externally screw-threaded packing glands adjustable in said packing boxes, and openings on the other side of the header opposite said former openings, of less diameter than the packing boxes, and openings at each end of the header opposite said former openings, of less diameter than the packing boxes, and openings at each end of the header. 3rd. A serpentine header having opposite openings arranged in pairs, transverse partitions between each pair of openings, screw-threaded openings on end side of the header provided with detachable packing boxes, adjustable packing glands connected to said boxes, and openings at each end of the header. 4th. A serpentine header having openings arranged in pairs, a transverse partition between each pair of openings and forming separate chambers, detachable packing boxes in each chamber on one side of the header, and openings on the opposite side of the header of less diameter than the packing

boxes, and openings at each end of the header. 5th. A steam generator having serpentine headers at each end provided with



openings arranged in pairs, a transverse partition between each pair of openings and forming separate chambers in the headers, detachable packing boxes in each chamber, and openings opposite thereto, fire tubes connected to the headers by said packing boxes and their glands and extending through the headers, and water tubes connected to said opposite openings in the headers and surrounding the fire tubes. 6th. A steam generator having serpentine headers at each end provided with openings arranged in pairs, a transverse partition between each pair of openings and forming separate chambers in the headers, detachable packing boxes in each chamber, and openings opposite thereto, water and steam distributing pipes to which the headers are connected, fire tubes secured in said packing boxes to expand therein and extending through the headers, and water tubes surrounding the fire tubes and connected to the headers.

No. 68,535. Lock. (Serrure.)



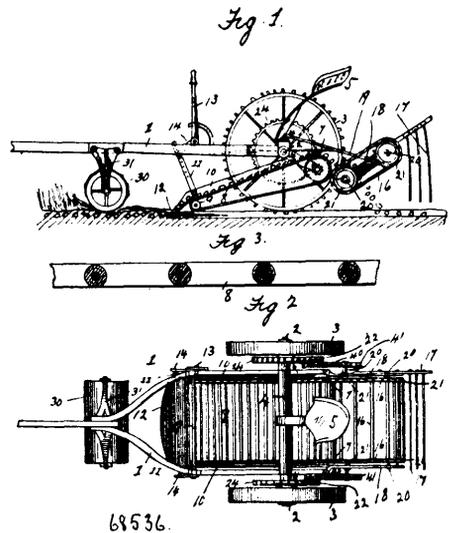
John Frederick Anderson, Paso Robles, California, U.S.A., 27th August, 1900; 6 years. (Filed 14th August, 1900.)

Claim.—1st. The combination in a lock, of a bolt provided with a notch in its lower edge, and a longitudinal slot in its face having downwardly projecting extensions, a guard plate provided with ex-

tensions lying against the bolt and provided with a registering notch at its lower edge and notches at its upper end to correspond with the downwardly projecting extensions of the above mentioned longitudinal slot, the notches in the lower edges of the guard plate and bolt being adapted to receive the ward of a key when turned to project the bolt, and spring pressed tumbler carrying a lug projecting from its face, lying in the longitudinal slot of the bolt and adapted to engage one of the notches in the under edge of the guard plate and one of the extensions of longitudinal slot, substantially as described. 2nd. The combination, in a lock, of a bolt provided with a notch in its lower edge, a longitudinal slot in its face having right angle extensions at each end, a key-hole-guard comprising sliding bar carrying a downwardly extending wing, and having notches in its upper edge to register with the extensions in the longitudinal slot in the bolt, a securing plate designed to hold and retain said guard in operative position and a pivoted spring pressed tumbler carrying a laterally projecting lug normally lying in the longitudinal slot and adapted to engage one of the extensions in said slot and one of the notches in the guard simultaneously, substantially as described. 3rd. The combination with the case of the lock, of the bolt 71 having longitudinal slot 70 with the extensions 76 and 77 and a notch 76 in its lower edge, the tumbler 65 provided with projections 69 to engage in the slot 70 during the movement of the bolt, and in either of its extensions at the ends of it throw, and a guard plate on the opposite side of the lock from which the key is inserted provided with notches which are duplicates and register with those of the bolt whereby the guard plate is thrown in either direction with the bolt and locked at either end of its throw by the tumbler, substantially as described.

No. 68,536. Potato Digger.

(Machine pour arracher les patates.)



Paul Tiedemann, North Linndale, Ohio, U.S.A., 27th August, 1900; 6 years. (Filed 14th August, 1900.)

Claim.—1st. In a potato digger, the combination with a frame provided with axle wrists one upon each side, rearwardly depending arms, and an elevated transverse bar, upon which the seat is supported, of a shaft for sprocket wheels supported in the depending extremities of the frame, side bars supported at their rear extremities upon said shaft, and connected in front by an inclined shovel, an endless sifting apron provided with cross-bars at regular intervals, and adapted to move between said side bars, sprocket-wheels mounted upon front and rear shafts adapted to operate and support said apron, spur gears upon the main wheel, hubs and rear sprocket shaft, an auxiliary sifting apron provided with cross-bars spaced at greater distance apart than the first named apron, and an inclined fork for turning aside materials carried up the second apron, substantially as described. 2nd. In a potato digger, the combination with a main frame, provided with a transverse bar upon which the seat is supported and with axle wrists on each side, of said bars pivotally supported in the rear beneath the frame, and connected in front by means of an inclined shovel, an endless sifting apron mounted between said side bars upon sprocket wheels, an auxiliary sifting apron adapted to receive refuse too large to pass through the first named apron, a diagonally placed fork adapted to turn said refuse away from the path of the machine, and a roller secured to the front of the machine and adapted to press down and mat grass or weeds in advance of the shovel, substantially as described.

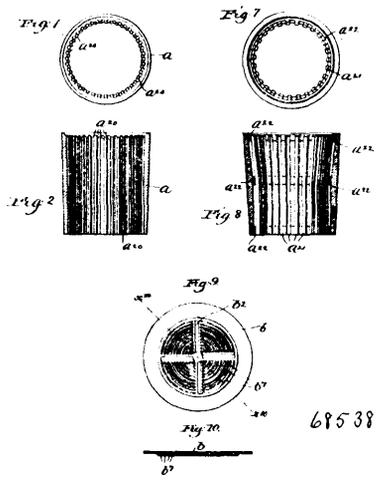
No. 68,537. Yeast. (Ferment.)

Georgina Philomène Bordue, St. Hyacinthe, Québec, Canada, 27th August, 1900; 6 years. (Filed 12th July, 1899.)

Déposé.—1. Une composition pour faire lever la pâte, composée d'une chopine d'eau, cinq onces de sucre, un once de sel, trois onces de patates, et un quart d'once de levure, tel que décrit. 2. Une composition pour faire lever la pâte, composée d'eau, de sucre, de sel, de patates et de levure, tel que décrit.

No. 68,538. Apparatus for Compressing Cotton, etc.

(Appareil pour presser le coton.)



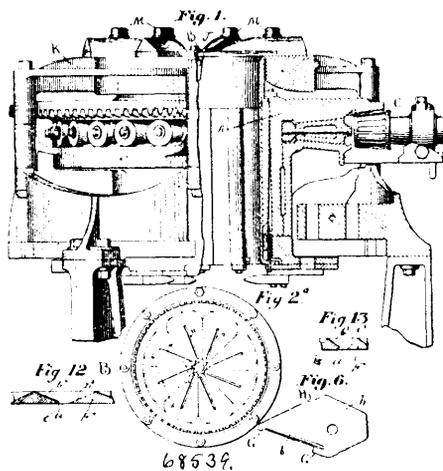
The Indo-Egyptian Compress Company, Boston, Massachusetts, assignee of George Archibald Lowry, Chicago, Illinois, all in the U.S.A., 27th August, 1900; 6 years. (Filed 18th August-1899.)

Claim.—1st. A machine for compressing fibrous metal, comprising a holder adapted to engage the sides of a column of compressed material, a cap or abutment provided with one or more inlet openings, each having an inclined compressing edge or lip, means for moving one of said elements with relation to the other to cause the said inlet openings to travel with relation to the end of the column of compressed material in contact with said abutment, and a resisting counter abutment for receiving the other end of said compressed column and preventing expansion thereof as the column emerges from the holder, as and for the purpose set forth. 2nd. In a machine for compressing fibrous material, a chamber forming a holder adapted to embrace a portion of a column of compressed material, means for condensing the material upon one end of said column and correspondingly advancing said column through the holder including a cap or abutment, and a support for the column as it emerges from the holder, said support and cap serving to sustain and prevent expansion of the mass of compressed material after emerging from the holder, as and for the purpose set forth. 3rd. In a machine for compressing fibrous material, a chamber, and means for continuously feeding the material into and through such chamber and subjecting the same to pressure, in combination with means for receiving, supporting and preventing expansion of the material after it is compressed and as it emerges from such chamber, as and for the purpose set forth. 4th. In a machine for compressing fibrous material, a holder adapted to embrace a portion of the column of compressed material, means for condensing the material upon one end of said column and correspondingly advancing said column through the holder, a movable support for the column as it emerges from the holder, between which and an abutment at the other end of the holder the column is maintained under compression, and means for yieldingly resisting the receding movement of said support, as and for the purpose set forth. 5th. In a machine for compressing fibrous material, a chamber, and means for continuously feeding the material into and through such chamber and subjecting the same to pressure, in combination with a receding support adapted to receive the compressed material as it emerges from such chamber and support the same against expansion, as and for the purposes set forth. 6th. In a machine for compressing fibrous material, a chamber, a slotted cap for one end of such chamber, and means for relatively rotating said chamber and cap, whereby material supplied to said cap is drawn into said chamber and compressed, in combination with a support arranged to receive said compressed material as it emerges from said chamber and hold it against expansion, as and for the purpose set forth. 7th. In a machine for compressing fibrous material, a chamber open at both ends, a slotted cap for one end of such chamber, said chamber contracting in internal diameter from one end toward the other, and means for relatively rotating said chamber and cap, whereby material supplied to said cap is drawn into and forced through

said chamber and is compressed, in combination with a receding support arranged to receive the compressed material as it emerges from such chamber, as and for the purpose set forth. 8th. In a machine for compressing fibrous material, a chamber open at both ends, a stationarily mounted slotted cap plate for one end of said chamber, and means for rotating said chamber in combination with a receding support arranged to receive the compressed material as it emerges from said chamber, said support mounted to rotate, as and for the purpose set forth. 9th. In a machine for compressing fibrous material, a chamber, a stationarily mounted cap for one end of such chamber, said cap being slotted, and means for rotating said chamber, in combination with a receding support arranged to receive the compressed material as it emerges from the chamber, said support mounted to rotate with the material, and means for yieldingly resisting the receding movement of said support, as and for the purpose set forth. 10th. In a machine for compressing fibrous material, an open-ended chamber, a slotted cap for one end of said chamber, and means for relatively rotating said chamber and cap, said chamber provided with longitudinal ribs on the inner surface thereof, said ribs varying in width and thickness from the inlet toward the delivery end of said chamber, as and for the purpose set forth. 11th. In a machine for compressing fibrous material, an open-ended chamber, a slotted cap for one end of said chamber, and means for relatively rotating said chamber and cap, said chamber provided with ventilating spaces in the inner surface thereof, whereby the compressed material is ventilated, as for the purpose set forth. 12th. In a machine for compressing fibrous material, a holder for the compressed material, a slotted cap for one end of said holder, said cap forming an abutment for the compressed material, and means for relatively moving said holder and cap, said cap provided with grooves on the inner surface thereof, whereby the area of frictional contacting surface between the cap and material is reduced, as and for the purpose set forth. 13th. In a machine for compressing fibrous material, a holder for the compressed material, a slotted cap for one end of said holder, said cap forming an abutment for the compressed material, and means for relatively rotating the holder and cap, said cap being provided with concentric grooves on the inner surface thereof, as and for the purpose set forth. 14th. In a machine for compressing fibrous material, a holder for the compressed material, a cap for one end of said holder, said cap provided with one or more inlet openings or slots, and having grooves on the inner surface thereof, said grooves increasing in dimension from the compressing edge of one of said slots toward the next adjacent slot, and means for relatively rotating said holder and cap, as and for the purpose set forth. 15th. In a machine for compressing fibrous material, a holder for the compressed material, a cap for one end of such holder, said cap provided with one or more slots and forming an abutment for the compressed material, the end of said holder adjacent to said cap being chamfered or bevelled, as and for the purpose set forth. 16th. In a machine for compressing fibrous material, an open-ended holder, a slotted cap for one end of said holder, the surface of said cap being bevelled or inclined toward the slot therein, and means for relatively rotating the holder and cap, in combination with an open-ended basket or receptacle arranged over the cap and arranged to receive and guide the material supplied to the cap, as and for the purpose set forth.

No. 68,539. Apparatus for Compressing Cotton, Etc.

(Appareil pour presser le coton.)



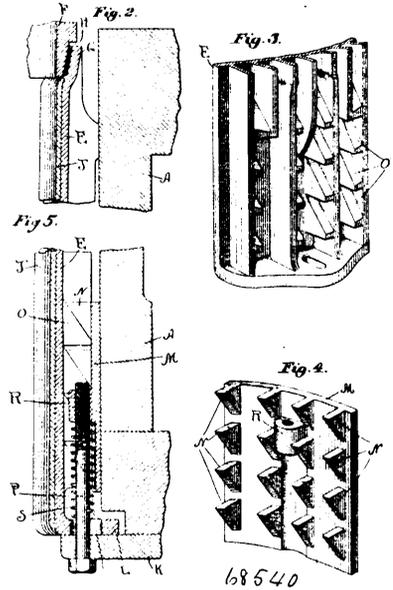
The Indo-Egyptian Compress Company, Boston, Massachusetts, assignee of George Archibald Lowry, Chicago, Illinois, all in the U.S.A., 27th August, 1900; 6 years. Filed 1st February, 1900.)

*Claim.*—1st. In a machine for compressing fibrous or other material, a chamber or holder for the compressed material, a cap for one end of said chamber, said cap forming an abutment for the compressed material, means for relatively moving said chamber and cap, said cap provided with a plurality of slots therein, as and for the purpose set forth. 2nd. In a machine for compressing fibrous or other material, a chamber or holder for the compressed material, a cap for one end of said chamber, said cap forming an abutment for the compressed material, means for relatively moving said chamber and cap, said cap provided with a plurality of slots therein, the compressing edge of each slot being inclined toward the inner surface of the cap, as and for the purpose set forth. 3rd. In a machine for compressing fibrous or other material, the combination with a chamber, of a cap for one end thereof, said cap provided with one or more openings or slots, each of which is inclined to the radius of the cap running from the outer end of the slot to the centre of the cap, and means for relatively rotating said chamber and cap, as and for the purpose set forth. 4th. In a machine of the class described, the combination of a chamber or holder, of a cap for one end thereof, said cap provided with one or more slots, terminating at a point to one side of the centre of the cap relative to a radius or radii through the outer end of said slot or slots, and means for relatively rotating said chamber and cap, as and for the purpose set forth. 5th. In a machine for compressing fibrous or other material, a cap or abutment, and means for rotating the mass of compressed material in contact therewith, said abutment being provided with one or more slots extending from near the middle to near the periphery thereof, said slots being inclined to the path of travel of the compressed material past them, to effect the desired distribution of the material entering the slots, substantially as and for the purpose set forth. 6th. In a machine for compressing fibrous material, a chamber or holder for the mass of compressed material, a cap or head, against the inner surface of which one end of the compressed material contained in said holder contacts, said cap provided with one or more slots, the width between the lips of which is insufficient to permit the compressed material to rise therein, and the under surface of said cap, the outer surface of the cap on each side of each slot being inclined toward said slot, and means for causing a relative movement of the cap and chamber, substantially as and for the purpose set forth. 7th. In a machine for compressing fibrous material, a chamber or holder, a cap having one or more openings or slots therein, the outer surface of said cap on opposite sides of each slot or opening being inclined toward said slot or opening, and means for relatively rotating said chamber and cap, as and for the purpose set forth. 8th. A machine for compressing fibrous material comprising one end of said chamber forming a holder for the compressed material, a cap for one end of said chamber forming an abutment for the compressed material therein, means for producing rotary movement of one of said elements relative to the other, said cap being provided with a plurality of inlet openings, each in the form of a slot, the compressing edge of each inlet slot being inclined toward the inner surface of said cap and the outer surface of the cap converging toward the edges of each inlet slot, substantially as and for the purpose set forth. 9th. In a machine for compressing fibrous material, a chamber, a cap having an opening or slot therein, the outer surface of said cap on opposite sides of said slot being inclined toward said slot, and the compressing edge or lip of said slot being inclined toward the inner surface of said cap, and means for relatively rotating said chamber and cap, as and for the purpose set forth. 10th. In a machine of the class described, the combination with a chamber or holder, of a cap for one end thereof, said cap provided with one or more slots, each arranged to one side of a radius drawn from the centre of the cap to the outer end of the slot, and means for relatively rotating said chamber and cap, as and for the purpose set forth. 11th. In a machine of the class described, the combination with a chamber, a cap for one end thereof, said cap having one or more slots thereof, each slot terminating at its inner end at a point on the left hand side of the centre of the cap, and means for relatively rotating said chamber and cap, as and for the purposes set forth. 12th. In a machine of the class described, a chamber, a cap for one end thereof, said cap provided with one or more slots, said slots being curved in the direction of the length thereof, and means relatively rotating said cap and chamber, as and for the purpose set forth. 13th. In a machine of the class described, a chamber, a cap for one end thereof, said cap made in sections, and means for relatively rotating said cap and chamber, as and for the purpose set forth. 14th. In a machine of the class described, a chamber, a cap for one end of said chamber, said cap composed of sections arranged edge to edge and offset from each other to form feed slots and means for relatively rotating said chamber and cap, as and for the purpose set forth. 15th. In a machine of the class described, a chamber, a cap for one end of said chamber, said cap composed of series of thin plates arranged edge to edge and offset from each other to form feed slots therethrough, strengthening blocks or braces secured to said sections or plates, and means for relatively rotating said chamber and cap, as and for the purpose set forth. 16th. In an apparatus of the class described, a feed cap comprising plates or sections arranged edge to edge and having their inner ends presenting toward a common centre, means for securing said end together, said plates or sections being offset from each other to form feed slots, as and for the purpose set forth. 17th. In a machine for compressing fibrous material, a cap or abutment, and means for rotating a mass of compressed material in contact there-

with, said abutment being composed of a main annular frame or head, and a plate composed of a number of sections, each securely fastened to said annular frame, the edges of said sections being formed to produce slots in the plate or cover composed of said sections, substantially as and for the purpose set forth. 18th. In a machine for compressing fibrous material, a cap or abutment, and means for rotating a mass of compressed material in contact therewith, said abutment being composed of a main annular frame or head, and a plate composed of a number of sections, each securely fastened to said annular frame, the edges of said sections being formed to produce slots in the plate or cover composed of said sections, and reinforcing blocks or ribs overlying said sections of the cap plates, substantially as described.

**No. 68,540. Apparatus for Compressing Cotton, Wool or other Material.**

(Appareil pour presser le coton.)



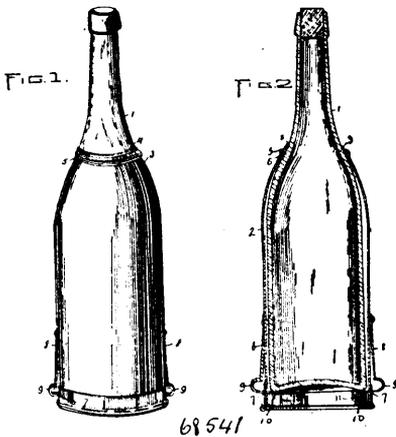
The Indo-Egyptian Compress Company, Boston, Massachusetts, assignee of George Archibald Lowry, Chicago, Illinois, all in the U.S.A., 27th August, 1900; 6 years. (Filed 10th February, 1900.)

*Claim.*—1st. In an apparatus for compressing or condensing fibrous or other material, an open ended chamber or holder, and means for contracting the area thereof from the receiving towards the delivery end, to vary the taper of the bore thereof, in combination with mechanism for advancing the material through such chamber, as end for the purpose set forth. 2nd. In an apparatus for compressing or condensing fibrous or other material, a series of plates or slats arranged to form a passage for the material to be compressed, and means for adjusting the delivery ends of said slats or plates, whereby the taper of said passage may be increased towards the delivery end of such passage, and means for advancing the material through such passage, as and for the purpose set forth. 3rd. In an apparatus of the class described, a holder for the material to be compressed, including a series of plates or slats arranged to form a passage through which the material advances, and means for adjusting the ends of said plates or slats at the delivery end of said passage towards and from the center of said passage, whereby the taper thereof, from the receiving towards the delivery end, may be varied, and means for advancing the material through such passage, as and for the purpose set forth. 4th. In an apparatus of the class described, a holder, including a series of slats or plates, arranged to form a passage for the material, said slats or plates being loosely held at the receiving end of such passage, means for adjusting the opposite ends of said slats or plates, whereby the taper of said passage is varied, and means for advancing the material through such passage, as and for the purpose set forth. 5th. In an apparatus of the class described, a holder, including a series of slats or plates, arranged to form a passage for the material, and loosely held at one end, a movable piece having an inclined surface arranged to engage a co-operating surface on the opposite ends of said plates or slats, whereby when said movable piece is adjusted the taper of said passage is varied, and means for advancing the material through such passage, as and for the purpose set forth. 6th. In an apparatus of the class described, a series of plates or slats arranged to form a passage, and loosely mounted at one end, said plates or slats provided with an inclined surface at the opposite ends thereof, an adjustable slide having co-operating inclined surfaces, and means for advancing the material through such passage, as and for the purpose

set forth. 7th. In an apparatus of the class described, a holder or chamber, a series of slats or plates arranged longitudinally on the inner surface thereof, said slats or plates being loosely held at the receiving ends thereof, and means for adjusting the delivery ends thereof towards and from the axial center of said chamber, whereby the taper of the passage through such chamber is varied, and means for advancing the material to be compressed through such passage, as and for the purpose set forth. 8th. In an apparatus of the class described, a chamber or holder, open at both ends, a sleeve arranged at the receiving end thereof, a series of slats or plates arranged in substantial continuation of the inner surface of said sleeve, means for adjusting the ends of slats or plates at the delivery end of said chamber or holder, whereby the taper of the passage through said chamber or holder may be varied, and means for advancing the material through such passage, as and for the purpose set forth. 9th. In an apparatus of the class described, an open ended chamber or holder, and a slotted cap or head, and means for relatively moving these parts, in combination with means for varying the taper of the bore of said chamber, as and for the purpose set forth. 10th. In an apparatus of the class described, a series of plates or slats arranged to form an open ended passage, and a slotted cap for one end of said passage, and means for relatively moving these parts, in combination with means for adjusting said slats or plates to vary the taper of said passage, as and for the purpose set forth.

**No. 68,541. Shield or Protector for Bottles.**

(*Enveloppe pour bouteilles.*)



Henry Seelinger, of Norfolk, Virginia, U.S.A., 27th August, 1900; 6 years. (Filed 14th August, 1900.)

*Claim.*—1st. A shield or protector for bottles, comprising a casing adapted to fit over a bottle and provided with slots or openings near its lower end, and spring catches secured to the casing and projecting through said slots or openings. 2nd. A shield or protector for bottles, comprising a casing open at the top and bottom, and formed with diametrically opposite openings near its lower end, and springs secured to the casing and having their lower ends projected through said openings and formed with finger pieces and contact lugs. 3rd. A shield or protector for bottles comprising a casing adapted to fit over a bottle and provided with an annular bead near its upper portion to receive an annular cushion, and provided with slots or openings near its lower end, and spring catches secured to the casing and projecting through said slots or openings. 4th. A shield or protector for bottles, comprising a casing adapted to fit over a bottle, and provided with slots or openings near its lower end, spring catches secured to the casing above the base thereof, the upper portion of the spring catches resting against the outside of the casing and the lower ends projected through said slots or openings, substantially as described, and for the purpose set forth.

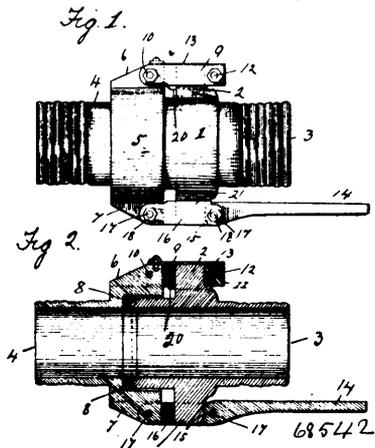
**No. 68,542. Hose or Pipe Couplings.**

(*Joint de tuyau.*)

George W. Stultz and John M. Pierce, both of New Kensington, Pennsylvania, U.S.A., 27th August, 1900; 6 years. (Filed 14th August, 1900.)

*Claim.*—1st. In a hose and pipe coupling, the combination with a sleeve formed with diametrically opposite lugs, of a co-operating sleeve having an enlarged collar provided with diametrically opposite lugs, a cam lever pivotally secured to one of the lugs of the collar, parallel plates secured to the opposite lug of the collar, and connected by a block, and a spring arranged adjacent to said plates against which one of the lugs of the sleeves bears. 2nd. In a hose and pipe coupling, the combination with a sleeve formed with diametrically opposite lugs, of a co-operating sleeve formed with a circumferentially enlarged collar provided with diametrically opposite lugs, a yielding gasket within said collar, parallel plates secured at one end on opposite sides of one of the lugs of the collar and con-

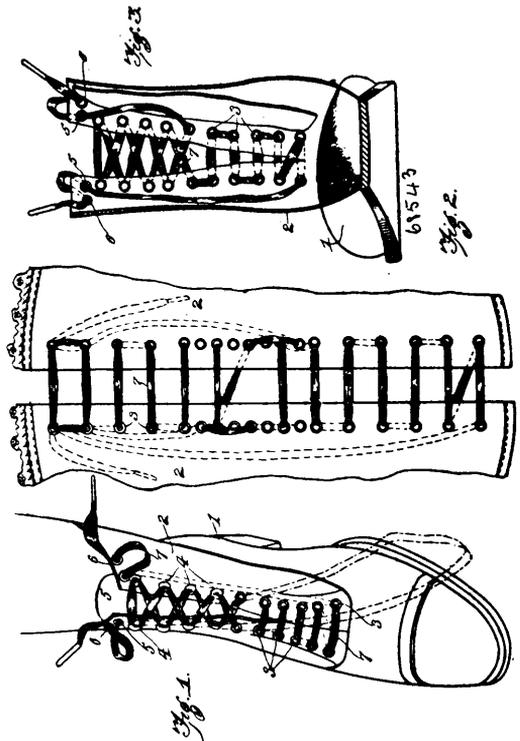
nected at their opposite ends by a block, a flat spring extending from one of the collar lugs to said block, a cam lever, and parallel



links for connecting said lever to the other lug of the collar. 3rd. In a hose and pipe coupling the combination with a sleeve formed with opposite lugs having bevelled enlargements, of a co-operating sleeve formed with an enlarged collar having opposite lugs, parallel plates secured at one end to one of the lugs of the collar, and connected at their opposite ends by a block, one of said plates having a projecting contact lip, a spring extending from one of the collar lugs to said block, and a cam lever connected to the other lug of the collar by parallel links, and adapted to bear against the adjacent lug of the first named coupling sleeve.

**No. 68,543. Shoe String Fastener.**

(*Attaches pour lacets de chaussures.*)

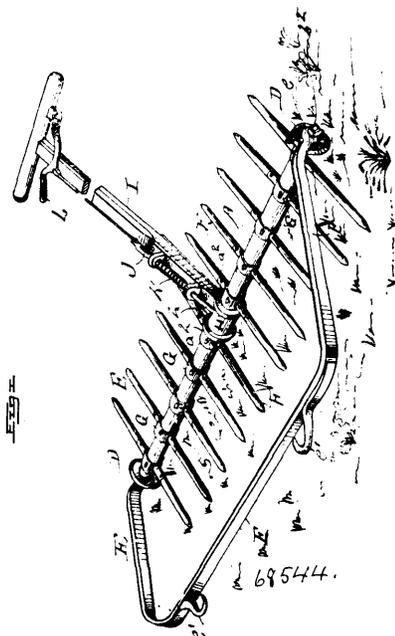


Timothy Shea, Milford, Massachusetts, U.S.A., 27th August, 1900; 6 years. (Filed 13th August, 1900.)

*Claim.*—1st. The combination with an article of apparel, of lacing devices, and a lace arranged therein to provide two independent adjustable sections. 2nd. The combination with an article of apparel, of lacing devices in connection therewith, and a lace arranged therein to provide two independent adjustable lace sections having the lace extremities extending from different portions thereof

3rd. The combination with an article of apparel, of a lace arranged in connecting relation thereto in such a manner as to produce two independently movable sections, whereby one portion of the article may be laced tightly and the other slackened. 4th. The combination with an article of apparel, of a series of relatively arranged lacing eyelets and studs and additional pairs of eyelets and studs to provide two independent adjustable lace sections. 5th. The combination with a shoe having the usual lower lacing eyelets and upper lacing studs, of additional pairs of eyelets at the upper portion of opposite sides thereof, and a lace arranged in connection with said devices to provide two independent adjustable lace sections having the lace extremities in engagement with the additional pairs of eyelets.

**No. 68,544. Revolving Hay Rake. (Rateau.)**

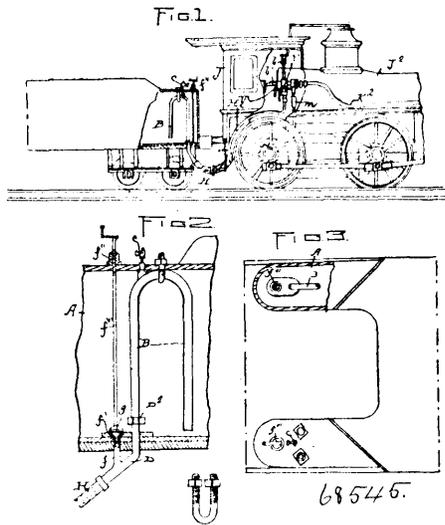


Henry B. Cluxton, Ripley, Ohio, U.S.A., 27th August, 1900; 6 years. (Filed 14th August, 1900.)

*Claim.*—1st. In combination with the hollow toothed shaft, and its operating handle, means for locking the latter to said shaft and releasing the same at will, the rod passing through said shaft having polygonal end portions, the sleeves fitting over the polygonal portions of said rod, and extending partly without and partly within the hollow shaft, a suitable draft bar and means for securing the several parts together, substantially as described. 2nd. The combination with the hollow toothed shaft and its operating handle, means for locking the latter to said shaft, and releasing the same at will, the rod passing through said shaft having polygonal end portions, the sleeves fitting over the polygonal portions of said rod, and extending partly without and partly within the hollow shaft, the discs journaled on the projecting portions of said sleeves, a suitable draft bar, and means for securing the several parts together, substantially as described. 3rd. A rake of the character described, comprising a bifurcated draft bar or frame having its arms fixedly connected to the ends of the connecting rod, a tubular shaft revolvably journaled on said rod and through which the latter extends, said shaft being provided with a series of teeth projecting from opposite sides thereof, a handle pivotally connected at one end to said shaft, a spring actuated dog carried by said handle, adapted to automatically engage the shaft, and lock the handle thereto, and means for actuating said dog so as to release the shaft at will, substantially as described. 4th. The combination, in a revolving rake, of a hollow shaft having a series of teeth projecting from opposite sides thereof, a rod or bar extending through said shaft, and provided at its ends with polygonal portions on which are fitted removable sleeves or plugs on which said shaft has its bearings, a suitable draft bar having its rear ends secured to said rod, and means for confining the latter to the rod, and securing the several parts together, substantially as described. 5th. In combination with the revolving rake, head or shaft, a tooth holding clip composed of two parts, each having its intermediate portion arranged to partially embrace said shaft, and each provided with projecting end portions extending in opposite directions from the shaft, between which projecting end portions the shanks of oppositely extending teeth are clamped and removably secured, substantially as described. 6th. In a revolving rake having teeth projecting in opposite directions from the rake head, means for securing the teeth of said head, con-

sisting of tooth holding clips constructed in two parts, each part having its intermediate portion adapted to partially embrace the tooth holding shaft or bar and having end portions which project in opposite directions therefrom, said end portions facing the correspondingly projecting ends of the other part of the clip, and a tooth at each side of the bar having its shank fitted between opposed projecting end portions of said parts, together with bolts passing through the clip ends and tooth shank for securing the bar, clip and teeth together. 7th. A revolving rake comprising a bifurcated draft bar having its branches secured to the ends of the rod forming the axis of the rake head, a hollow shaft suitably journaled on said rod, a series of teeth projecting from opposite sides of said shaft, an operating handle pivotally connected at one end with said shaft, and means for locking the shaft thereto so as to prevent rotation of the latter in the normal position of the parts, together with means for unlocking or releasing the shaft to permit a partial rotation thereof at will, and for automatically locking the handle to the shaft after a partial rotation thereof, substantially as described. 8th. In a rake, the combination with the rake head or shaft, of a tooth holding clip composed of two parts having intermediate substantially semi-circular portions adapted to partially encircle said shaft with a teat for engaging the shaft to prevent rotation of the clip thereon, and substantially semi-circular perforated end portions extending in opposite directions from the shaft and adapted to receive and confine between them the shank of a tooth, which may be removably secured thereto by bolts passing through said perforated end portions of the two parts of the clip and the shank of the tooth, substantially as described.

**No. 68,545. Boiler Feed. (Alimentateur de bouilloire.)**



Ruther McDougall, Des Moines, Iowa, U.S.A., 27th August, 1900; 6 years. (Filed 14th August, 1900.)

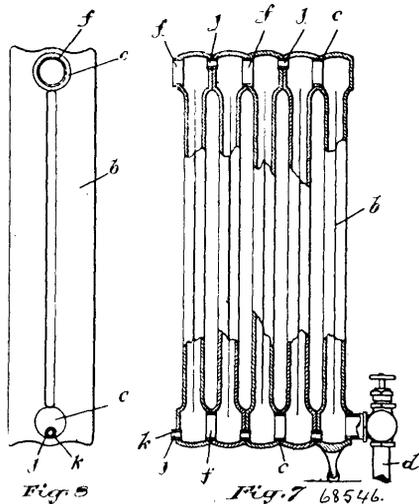
*Claim.*—1st. In a water tank for a locomotive steam engine, a siphon fixed in the tank and one end extended through the bottom of the tank, a section of hose attached to said end of the siphon, an injector connected with the boiler, a section of hose connected with the injector and a coupling for connecting the two sections of hose, arranged and combined with the cabin and tender of a locomotive engine to operate in the manner set forth for the purposes stated. 2nd. In the tank of a locomotive engine, a fixed siphon, an elbow-shaped pipe extended from one end of the siphon through the bottom of the tank, a valve seat at the top of said branch, a valve fitted to said valve seat and provided with a stem extended up through the top of the tank, arranged and combined to operate in the manner set forth for the purposes stated.

**No. 68,546. Radiator. (Radiateur.)**

Fergus J. Travers, Toronto, Ontario, Canada, 27th August, 1900; 6 years. (Filed 13th August, 1900.)

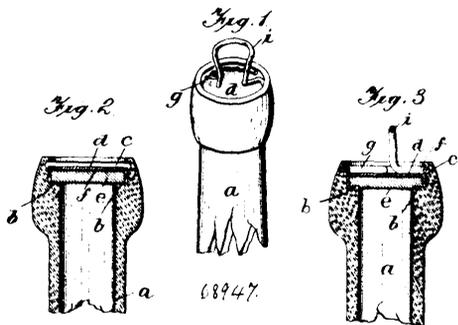
*Claim.*—1st. A radiator, embracing in its construction a plurality of loops or sections, each consisting of a leg terminating at both ends in a chamber, a port at each side of each chamber, coupling nipples uniting the adjoining ports of two adjacent sections, one nipple having an unrestricted passage and the other nipple provided with a web having a restricted passage, substantially as specified. 2nd. A radiator, embracing in its construction a plurality of loops or sections, each consisting of a leg terminating at both ends in a chamber, a port at each side of each chamber, coupling nipples uniting the adjoining ports of two adjacent sections, one nipple having an unrestricted passage, and the other nipple having a restricted

passage, substantially as specified. 3rd. A coupling nipple for radiators, embracing in its construction an annular band provided



with a web having an unrestricted passage therethrough, substantially as specified.

**No. 68,547. Bottle Seal. (Bouteille et seau.)**



William Elisha Heath, Baltimore, Maryland, U.S.A., 27th August, 1900; 6 years. (Filed 13th August, 1900.)

*Claim.*—1st. The bottle seal comprising a removable sealing plug, in combination with the expansive spring retainer seated on the plug and springing into the bottle neck and provided with the extractor thumb or finger piece projecting to the exterior of the bottle mouth, and having an offset connection with the retainer whereby lateral pressure on said piece will spring the retainer from its locked position and from the bottle mouth and release the sealing plug, substantially as described. 2nd. In combination, a bottle having a sealing shoulder or seat, a removable sealing plug thereon, and a removable spring retaining ring within the bottle neck and springing outwardly against the wall thereof and holding the sealing plug down in sealing position, said ring provided with an approximately rigid upwardly projecting piece, having a lateral connection therewith whereby lateral pressure applied to said piece will spring the ring from the bottle neck, substantially as described. 3rd. The bottle, having a sealing shoulder within the mouth and a locking seat above the shoulder, a removable sealing plug having the cylindrical portion fitting the bottle mouth below the shoulder and having the top flange opposing the shoulder, the sealing washer on the plug and between the shoulder and flange, the separate split spring retaining ring fitting on said flange and sprung into said locking seat, said plug being forced down to tightly compress said washer and permit said ring to spring into said seat and lock the plug, said ring provided with a rigid lever piece projecting upwardly to a point above the bottle mouth and forming a broad bearing surface, whereby lateral pressure against said lever piece tilts the ring from the bottle mouth, substantially as described. 4th. The bottle seal comprising the sealing plug, and the expansible split spring retaining ring formed with a lateral and upwardly projecting loop constituting the upwardly projecting lever piece, whereby the plug is retained in its sealing position in the bottle mouth by the said ring expanded in the bottle mouth above said plug, and whereby the seal is broken by lateral pressure applied to said piece which tilts the ring from the bottle mouth and releases the plug, substantially as described. 5th. A bottle seal compris-

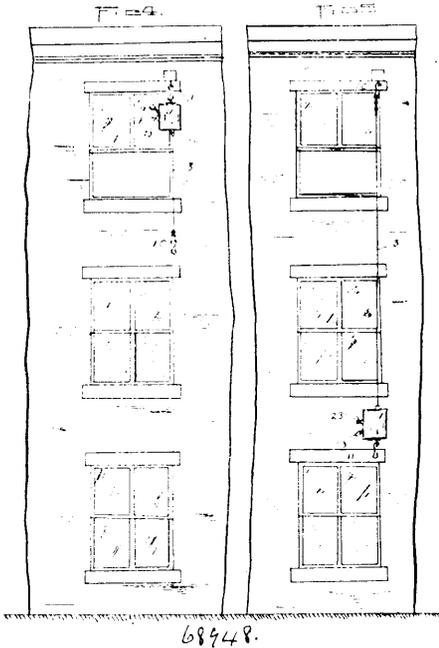
ing the cup shaped thin metal plug having the top annular flange and a sealing washer surrounding the plug beneath the flange, in combination with an expansible retaining ring provided with a deflected lateral loop forming the upwardly projecting lever piece, the plug adapted to fit removably in and sealing the bottle neck and to be held down therein compressing the washer by said ring expanded in to a groove in the bottle neck, whereby lateral pressure in said piece will spring the ring from the groove and rock the same from the bottle and release the plug, substantially as described. 6th. A bottle having its neck formed with an internal sealing seat and a locking groove or shoulder above the same in combination with a cup shaped metal sealing plug having a top flange and a sealing washer around the plug beneath the flange, said plug removably sealing the bottle neck with the washer compressed beneath said flange and sealing seat, and an annular retainer resting on said flange of the plug and expanded in said locking groove and thereby holding the plug down with the washer compressed, said retainer having a level piece approximately rigid therewith and projecting laterally and upwardly therefrom to the exterior of the bottle mouth, whereby lateral pressure on said piece will tilt said retainer from the groove and from the bottle and release the plug, substantially as described. 7th. A bottle seal comprising a readily removable sealing plug adapted to seal the bottle, in combination with a split spring metal retaining ring adapted to expand into a locking seat in the bottle neck above and holding down said sealing plug, said ring formed with an upward projection united to the ring by an inwardly projecting offset, whereby said projection forms a lever piece by which the ring can be sprung from said locking seat and tilted from the bottle to release the plug, substantially as described. 8th. The bottle seal comprising a removable plug or sealing means, and the split spring retaining ring resting on and holding down the plug and expanded into a locking seat within the bottle mouth, and provided with an upward rigid loop forming a broad bearing surface above the bottle mouth and constituting a lever piece for the purpose described. 9th. The internal bottle seal consisting of the thin flat elastic sealing disc, the cup shaped cap fitting on the disc, the disc projecting a distance below the lower surrounding edge of the cap, and the separate spring retainer arranged to rest on the flat top end of the cap and to expand in a groove in a bottle mouth holding said disc compressed within the cup, substantially as described. 10th. A bottle having an annular sealing shoulder in its mouth and a groove or enlargement a distance above said shoulder, in combination with a flat flexible sealing disc resting on or opposing said shoulder, and a metal cap enclosing said disc and having the approximately flat upper end, and the spring retainer expanded in said enlargement and resting on the upper end of the cup and holding said disc compressed up into the cup, substantially as described. 11th. A sealing plug and a separate spring retainer ring having the inwardly deflected loop within the end extended upwardly from the open centre of the ring and forming a lever projection, the inward bends from the ring being separated to permit contraction of the ring, substantially as described. 12th. In a bottle seal, the internal sealing plug, and a spring retainer ring therefor, provided with an upwardly projecting lever having two plies joined to the ring with an intervening space permitting contraction of the ring, substantially as described. 13th. A bottle seal comprising a sealing plug adapted to rest on a sealing shoulder with a bottle mouth, and comprising a cup shaped cap and a sealing disc inserted therein, and a split spring retaining ring adapted to rest on said cap and expand into a locking seat on the bottle mouth and hold said cap down with said disc compressed between the same and said shoulder, said ring provided with a rigid upwardly projecting lever piece formed by a loop, substantially as described. 14th. In a bottle seal, a sealing plug and an expansible spring retainer having the upwardly projecting lever extractor formed of a wide loop arranged diametrically within the ring opening, substantially as described. 15th. The spring retainer ring for a bottle seal substantially as described, formed of a split ring having one end extended inwardly and deflected to form the wide upwardly projecting loop extending diametrically of the ring for the purpose described.

**No. 68,548. Fire Escape. (Sauveteur d'incendie.)**

Charles Colosse Halstead, Blodgett, Missouri, U.S.A., 27th August, 1900; 6 years. (Filed 14th August, 1900.)

*Claim.*—1st. A fire escape comprising a suitable casing, a spindle mounted in the same, a tape adapted to be wound around or unwound from the spindle, a gear wheel carried by the spindle and adapted to rotate therewith during the unwinding of the tape therefrom, a pinion meshing with said gear wheel, a second gear wheel actuated by said pinion, a second pinion actuated by said second gear wheel, a rock shaft, a brake lever extending from said shaft and bearing against the hub of the second pinion, an arm carried by the rock shaft, a spring bearing against said arm and rocking the shaft in a direction to cause the brake lever to frictionally engage the hub of the second pinion, a regulating screw controlling the spring, and a lever or operating handle projecting through the casing, for rocking the rock shaft, the parts operating, substantially as and for the purpose set forth. 2nd. In a fire escape, a suitable casing, a train of gearing confined within the same, a tape adapted to set said gearing into motion when under tension, a spring controlled brake for nor-

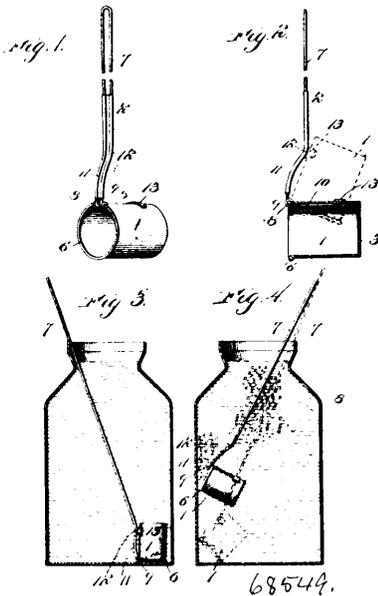
mally holding the gear mechanism against movement, means for releasing the brake mechanism, and devices for regulating the frictional contact between the brake mechanism and gearing after the latter has been once set in motion, substantially as set forth.



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tional contact between the brake mechanism and gearing after the latter has been once set in motion, substantially as set forth.

**No. 68,519. Milk Aerators.** (*Érateur pour le lait.*)



68549.

David Daniel Kimberlin, Hudson, Ohio, U.S.A., 27th August, 1900; 6 years. (Filed 13th August, 1900.)

*Claim.*—1st. In a device of the class described, a handle, an air cup pivoted to the handle, said air cup being so arranged with relation to the handle that it can swing into an inverted position when thrust downwardly into liquid and thereby carry air into the same, and tilt to another position upon an upward movement, and means for limiting said tilting movement, substantially as described. 2nd. In a device of the class described, a handle, having an abutment, and a cup hinged to the handle and adapted to rest against the abutment, substantially as described. 3rd. In a device of the class described, a handle, a cup hinged to the handle, and a stop arranged to limit the movement of the cup, substantially as described. 4th. In a device of the class described, the combination with a cup, of a handle formed by a single piece of wire, the ends of which are coiled

around the rim of the cup, whereby the cup and handle are hinged together, substantially as described. 5th. In a device of the class described, the combination with a cup, of a handle formed of a single piece of wire or similar material bent upon itself, the ends of said wire being coiled around the rim of the cup forming a hinge and extending into the cup, whereby a stop is formed to limit the movement of the cup, substantially as described. 6th. In a device of the class described, the combination with a handle, of a cup hinged to the handle, said handle having an off-set bend forming an abutment or stop to hold the cup at an angle to the handle, substantially as described. 7th. In a device of the class described, the combination with a handle, of a cup hinged to the handle, and a stop carried by the handle and projecting into the cup, whereby said cup is limited in the winging movement, substantially as described. 8th. In a device of the class described, handle having an off-set bend forming an abutment, a cup hinged to the handle, and a stop carried by the handle and projecting into the cup, whereby the cup is limited in its swinging movement by the abutment of the handle and the stop, substantially as described.

**No. 68,550. Valve.** (*Soupape.*)

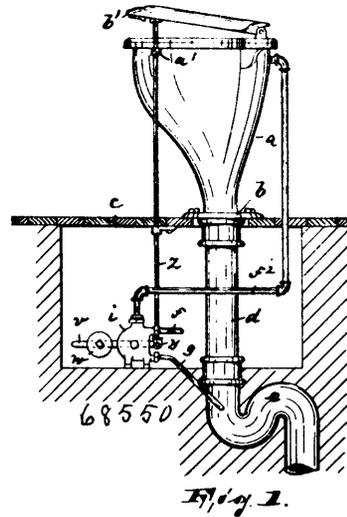


Fig. 1.

Sylvester John Asbell, Peterson, New Jersey, U.S.A., 27th August, 1900; 6 years. (Filed 3rd August, 1900.)

*Claim.*—1st. In a water closet, the combination with the bowl and its waste pipe, of a valve casing arranged below the bowl and near its waste pipe, and provided with a supply inlet in its uppermost portion and with a drain or outlet in its lowermost portion, a pipe connecting said valve casing with the bowl, valves controlling the supply inlet and drain outlet and operatively connected together, and means for simultaneously opening one of the valves and closing the other or *vice versa*, substantially as and for the purpose described. 2nd. In a water closet, the combination with the bowl and its waste pipe, of a valve casing arranged below the bowl and near its waste pipe, and provided with a supply inlet in its uppermost portion, and with a drain or outlet in its lowermost portion, a pipe connecting said valve casing with the bowl, valves controlling the supply inlet and drain or outlet, and operatively connected together, a weighted lever for holding said valves in normal position, and means for operating said weighted lever to thus operate the valves, substantially as and for the purposes described. 3rd. In a valve structure, the combination of a valve casing having a supply port, a discharge port and a drain port, and having its rear wall flat and its front wall provided with an internally threaded aperture or opening, a disc or cover removably arranged in said aperture or opening, a shaft or spindle penetrating said disc and removably mounted therein and having its inner end journaled in the rear wall of the casing, an arm or lever in the casing and securely mounted on said shaft or spindle, a pin at or near each end of said arm and projecting rearwardly at right angles therefrom, a valve stem revolvably mounted on each pin and spacing said arm or lever from said rear wall, a valve at the free end of each valve stem and adapted to control its respective port, and means for oscillating the spindle or shaft, all said parts, substantially as and for the purposes described. 4th. In a valve structure, the combination of a valve casing having a supply port, a discharge port, and a drain port, and having its rear wall flat and its front wall provided with an internally threaded aperture or opening, a disc or cover removably arranged in said aperture or opening, a shaft or spindle journaled in said disc or cover and also in the rear wall of the casing, an arm or lever in the casing and securely mounted on the shaft or spindle, a pin at or near each end of said arm and projecting at right angles toward the rear wall of

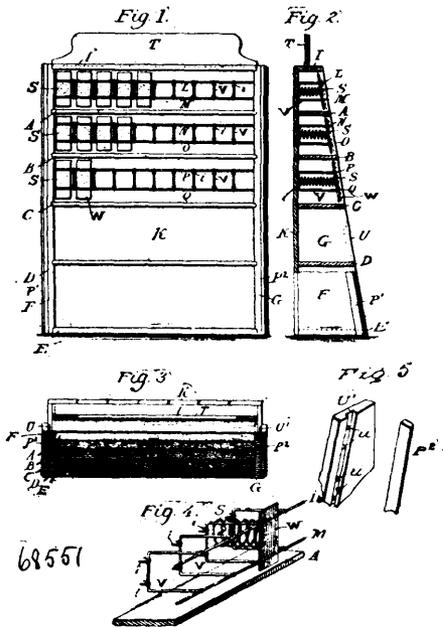
the casing, a sleeve revolvably mounted on each pin and spacing said arm or lever from said rear wall of the casing, a valve stem projecting from each sleeve, a valve at the free end of each valve stem and adapted to control its respective port, and means for oscillating the spindle or shaft, substantially as and for the purposes described.

5th. In a valve structure, the combination of a valve casing having a supply port, a discharge port and a drain port, and having its rear wall flat and its front wall provided with an internally threaded aperture or opening, a disc or cover removably arranged in said aperture or opening, a shaft or spindle penetrating said disc and revolvably mounted therein and having its inner end journaled in the rear wall of the casing, an arm or lever in the casing and securely mounted on said shaft or spindle, a pin at or near each end of said arm, and projecting rearwardly at right angles therefrom, a valve stem revolvably mounted on each pin and spacing said arm or lever from the rear wall of the casing, a plug or valve carried by each valve stem, one part of the corresponding port, and having its seating end of conical form, a tapering guiding collar disposed on each valve stem with its larger end adjacent the reduced or seating end of the valve or plug, the thickness of said collar merging off from that of the stem to approximately that of the adjacent end of the collar, and means for oscillating the shaft or spindle, all said parts, substantially as and for the purposes described.

6th. In a valve structure, the combination of a valve casing having a supply port, a discharge port and a drain port, and having its rear wall flat and its front wall provided with an internally threaded aperture or opening, a disc or cover removably arranged in said aperture or opening, and provided with an outwardly extending internally threaded sleeve, a bushing adjustably arranged in said sleeve, a shaft or spindle journaled in said bushing and disc, and also in the rear wall of the casing, an arm or lever in the casing and securely mounted on said shaft or spindle, a pin at or near each end of said arm and projecting rearwardly at right angles therefrom, a valve stem revolvably mounted on each pin, and spacing said arm or lever from said rear wall of the casing, a valve at the free end of each valve stem, and adapted to control its respective port, and means for oscillating the spindle or shaft, all said parts, substantially as and for the purposes described.

7th. In a valve structure, the combination of a valve casing having a supply port, a discharge port and a drain port, and having its rear wall flat and its front wall provided with an internally threaded aperture or opening, a disc or cover removably arranged in said aperture or opening, and provided with an inwardly extending sleeve, a shaft or spindle journaled in said sleeve and in the rear wall of the casing, an arm or lever in the casing and securely mounted on said shaft or spindle, and bearing against the inwardly extending sleeve of the disc or cover, a pin at or near each end of said arm or lever, and projecting rearwardly at right angles therefrom, a valve stem revolvably mounted on each pin and spacing said arm or lever from the rear wall of the casing, a valve at the free end of each valve stem and adapted to control its respective port, and means for oscillating the spindle or shaft, all said parts, substantially as and for the purposes described.

**No. 68,551. Seed Cabinet.** (*Cabinet à graine de semence.*)

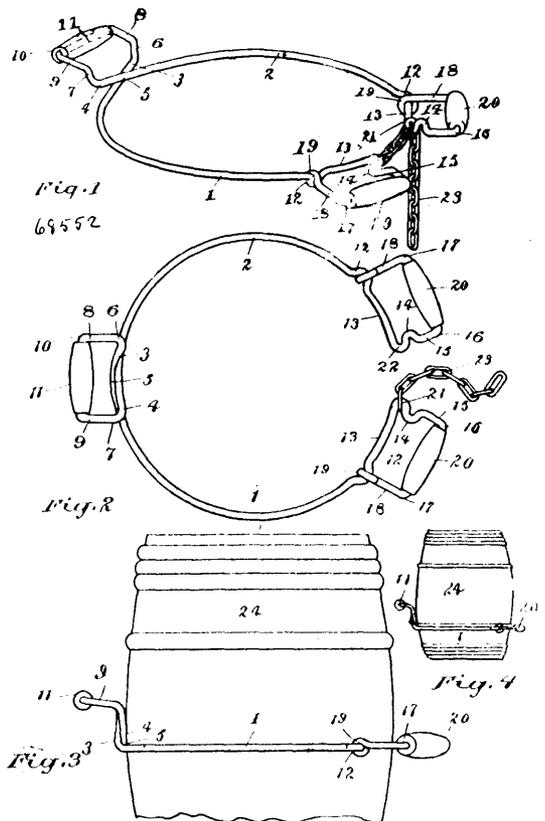


68551

Fenton David Craig, Memphis, Tennessee, U.S.A., 27th August, 1900; 6 years. (Filed 15th August, 1900.)

*Claim.*—1st. A seed cabinet, having a plurality of shelves, a series of compartments between adjacent shelves, the sides and front of said compartments being formed of wire supported entirely from the rear wall of the cabinet. 2nd. A seed cabinet, having a plurality of shelves, a series of compartments between adjacent shelves, the sides and front of said compartments being formed of wire supported entirely from the rear wall of the cabinet, and a spring-pressed plate in each compartment. 3rd. A seed cabinet, having a plurality of shelves, a series of compartments between adjacent shelves, rods extending horizontally of the cabinet and forming the front wall of said compartments, and wire frames extending rearwardly from said rods and connected to the rear wall of the cabinet, said frames forming the side walls of the compartments. 4th. A seed cabinet, having a plurality of shelves, a series of compartments between adjacent shelves, the sides and front of said compartments being formed of wire supported entirely from the rear wall of the cabinet, a vertically arranged plate in each compartment, and a spring secured to the rear wall of the cabinet and supporting said plate. 5th. A seed cabinet, having a plurality of shelves, a series of compartments between adjacent shelves, horizontal rods extending the full width of the cabinet, and forming the front of the series of horizontal compartments and wire frames supporting said rods and connected to the rear wall of the cabinet, said frames forming the sides of the compartments. 6th. A seed cabinet, having a plurality of shelves, a series of compartments between adjacent shelves, horizontal rods extending the full width of the cabinet and forming the front of the series of horizontal compartments, and wire frames supporting said rods and connected to the rear wall of the cabinet, said frames forming the sides of the compartments, and a spring-pressed plate in each compartment entirely supported by the rear wall of the cabinet.

**No. 68,552. Barrel Carrier.** (*Porte-baril.*)

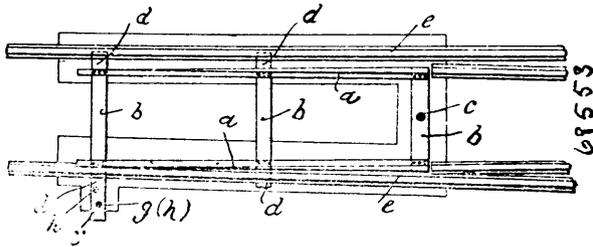


Moses H. Cartland, Dover, New Hampshire, U.S.A., 27th August, 1900; 6 years. (Filed 27th June, 1900.)

*Claim.*—1st. A barrel carrier, comprising a hoop or circle of metal rod or heavy wire provided on one side with two handles in the horizontal plane of said hoop and a single handle at the opposite side of the hoop raised above its horizontal plane, substantially as described. 2nd. A barrel carrier, comprising a hoop or rod of wire open at one side, bent at one side at the middle of the rod to form a single handle, and at its free ends to form two handles and means for connecting the free ends, substantially as described. 3rd. A barrel carrier, comprising a hoop of metal rod or wire open at one side, the middle of the rod being bent outward and upward forming

a raised handle, and bent outward at the free ends forming two handles on the horizontal plane of the hoop, and means for connecting the free ends, substantially as described. 4th. A barrel carrier, comprising a hoop of metal rod or wire open at one side, provided with a handle at the middle of the rod, two handles at the free ends, and a hoop at each free end, in combination with a chain secured to one loop and adapted to be engaged by the jother, substantially as described. 5th. A barrel carrier, comprising a hoop of metal rod or wire open at one side, the middle of the rod being bent at an inclination upward in both directions, said inclined sections crossing each other and the metal between them being formed into a raised handle, handles being also formed at the free ends with means for connecting them together, substantially as as described.

**No. 68,553. Railway Switch.** (*Aiguille de chemin de fer.*)



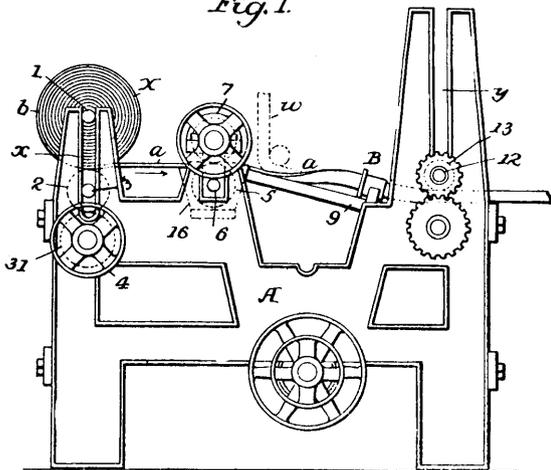
68553

Wilhelm Grossmann, Nicolaus Gfrerer, Schoch Frigyes, Budapest, VI Nagy-Janos 22, and Fritz Müller, Marmaros, Sziget, Föter I, all in the Kingdom of Hungary, 27th August, 1900; 6 years. (Filed 25th June, 1900.)

*Claim.*—1st. In a switch the combination with the rails *a a*, of cross pieces rigidly connected to said rails to form a rigid frame and a single pivot upon which the frame is adapted to move in a horizontal plane. 2nd. In a switch the combination with the rails *a a*, cross pieces rigidly connected to said rails to form a rigid frame and a single pivot upon which the frame is adapted to move in a horizontal plane, and lateral projections *d* on the frame adapted to pass underneath a firm portion of the immovable part of the permanent way. 3rd. In a switch the combination with the rails *a a*, of cross pieces rigidly connected to said rails to form a rigid frame and a single pivot upon which the frame is adapted to move in a horizontal plane, the frame having a hole *g*, an immovable part of the permanent way having holes *h* coinciding in the right or left position of the points with the hole *g*, and a pin *i* adapted to be inserted in said holes *g h* for locking the switch in the right or left position.

**No. 68,554. Manufacture of Flexible Tubing, and the Covering of Electric Wires.** (*Tuyau flexible.*)

Fig. 1.



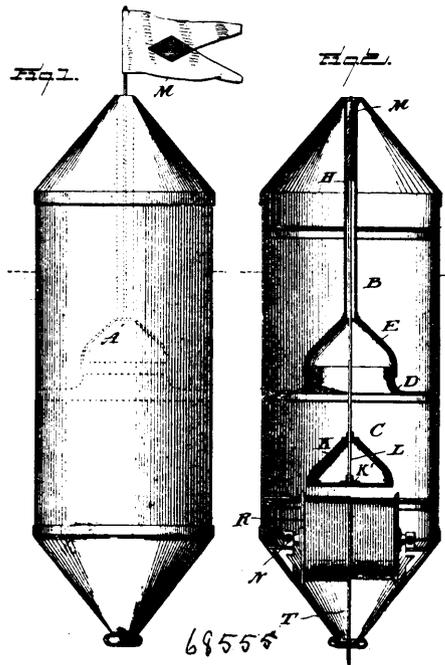
68554

Henry James Doughty, Providence, Rhode Island, U.S.A., 30th August, 1900; 6 years. (Filed 13th January, 1900.)

*Claim.*—1st. The combination in a machine for forming tubes or coverings from a sheet of soluble material, of means for supporting the sheet, means for cutting the sheet into strips and applying a solvent to the edges of the strips, and means for abutting the

opposite edges of each strip and holding them together under pressure, substantially as set forth. 2nd. The combination in a machine for forming tubes or coverings of soluble material, of a roller for supporting a sheet of said material, cutters for severing the sheet into strips and applying a solvent to the edges of each strip together, and means for securing said edges, substantially as set forth. 3rd. The combination in a machine for forming tubes or coverings of a soluble material, of a spindle supporting a roll of said material and superposed textile fabric, a roller for receiving the textile fabric as the material is unrolled, cutters for severing the strip, means for applying a solvent to the edges of the strip, and means for folding the strip and for holding the abutting edges together under pressure, substantially as set forth. 4th. The combination in a machine for forming tubes or coverings of soluble material, of a roller supporting a sheet of said material, rotary cutters arranged to sever the material into strips and simultaneously apply a solvent to the edges of each strip, and means for folding the strips and bringing the opposite edges of each strip together, substantially as set forth. 5th. The combination with a roll of soluble material, of a series of cutter discs, a roll pressing against said discs, a trough arranged adjacent to said discs and containing a supply of solvent, and means for holding the abutting edges together under pressure, substantially as set forth. 6th. In a machine for forming tubes or coverings of soluble material, the combination with a support for the material, of cutters, and a trough for containing a solvent arranged adjacent thereto whereby the cutters simultaneously sever the sheet into strips and apply the solvent to the edges of the strips, substantially as set forth. 7th. The combination of a shaft carrying a series of cutters, a trough beneath the cutters, a roller bearing upon the cutters, a series of folders *B*, a supporting roll and a shaft carrying a series of pressure discs *L*, substantially as set forth. 8th. The combination in a machine for forming tubes or coverings of soluble material, of a spindle supporting superposed layers of said material and a fabric, a roll for receiving the fabric, and means for applying a solvent to the material and for abutting the edges under pressure, substantially as set forth.

**No. 68,555. Device for Locating Sunken Vessels.** (*Boué.*)



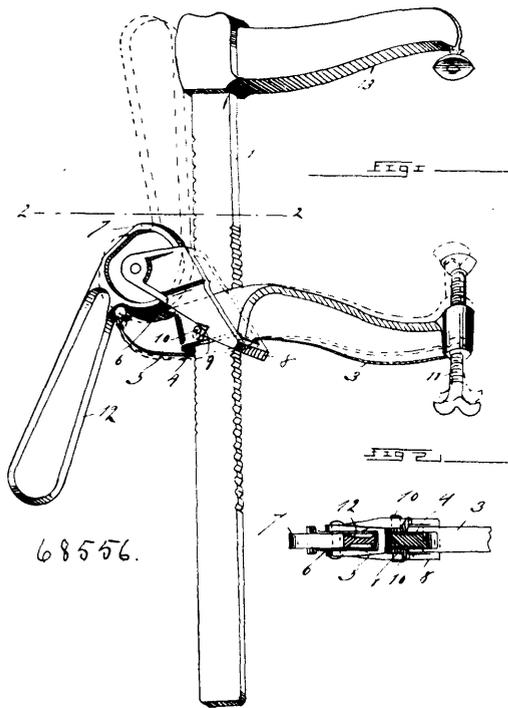
68555

Larry Bremen, West Superior, Wisconsin, U.S.A., 30th August, 1900; 6 years. (Filed 6th March, 1900.)

*Claim.*—1st. In a buoy for locating sunken vessels, a float mounted in a water compartment of the buoy adapted to be raised by the water, a stem to said float having a flag at its upper end which is adapted to be normally held in a central tube in the buoy and raised out of said tube as the float is raised by the water entering the water compartment, as set forth. 2nd. In a device for locating sunken vessels, a buoy having an air chamber at its upper end, a water compartment beneath said chamber, a float having a stem passing through a central longitudinal pipe or passage-way opening through an aperture at the apex of the buoy, a flag or signal mounted on the upper end of said stem, and normally held in said passage-way, adapted to be raised out of the buoy as water enters the water chamber, and a reel mounted in suitable brackets at the lower end of the buoy, a cable secured to said reel and wound

thereon, the opposite end of the cable adapted to be anchored to the sunken vessel and to unwind as the buoy rises to the surface of the water. 3rd. A device for locating sunken vessels, consisting of a metallic buoy having a partition preferably below its middle portion and upwardly bent, a dome secured to the upper end of the partition, an open-ended tube connected at its lower end to and communicating with the dome, its upper end opening through an aperture at the apex of the buoy, a float, consisting of an air-tight compartment, a stem secured therein, said float conforming to the shape of said dome, and to be seated therein when at its highest throw, said stem passing through an open-ended pipe and a flag or signal carried at the upper end of said stem, a reel mounted at the lower end of the buoy, and a cable secured at one end to said reel, wound about the latter and passing through an aperture at the lower tapering end of the buoy and adapted to be anchored to the sunken vessel, as shown and described.

**No. 68,556. Mechanical Device. (Appareil mécanique.)**



68556.

Francis Kimmel Caff, Hamilton, Ohio, U.S.A., 30th August, 1900; 6 years. (Filed 15th May, 1900.)

*Claim.*—1st. A mechanical device, comprising a bar, a jaw movable on the bar, a yoke engaging around the movable jaw and the bar, and a clamping head eccentrically mounted in said yoke and engaging with a projection upon the movable jaw, substantially as specified. 2nd. A mechanical device, comprising a bar, a jaw movable on the bar, a yoke engaging around said bar and movable jaw and having shoulders, lugs extended from the movable jaw for engagement with said shoulders, a clamping head eccentrically mounted in the yoke, and a projection from the movable jaw with which said clamping head engages, substantially as specified. 3rd. The combination with a bar, of a jaw mounted to slide and rock thereon, a yoke engaging around the bar and jaw, and an eccentric pivoted to the yoke and engaging with a projection of the jaw, substantially as specified.

**No. 68,557. Paper for Secret Correspondence.**

(*Papier pour correspondance secrète.*)

Dr. med. Ernst Kretschmann, Lafferde, Prussia, German Empire, 30th August, 1900; 6 years. (Filed 28th May, 1900.)

*Claim.*—Paper for secret writing, consisting of writing paper containing a non-hygroscopic salt or salts of cobalt and necessitating the use of a writing fluid, consisting of a solution of common salt and containing means for transforming non-hygroscopic cobalt salts into hygroscopic ones, substantially as described.

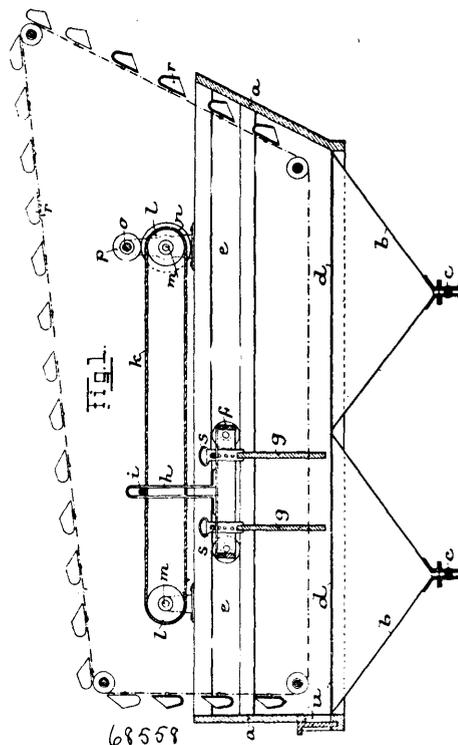
**No. 68,558. Apparatus for Cleansing Fibrous Material.**

(*Appareil pour nettoyer.*)

Amelia Ubbelonde, Celle, near Hanover, Germany, 30th August, 1900; 6 years. (Filed 1st May, 1900.)

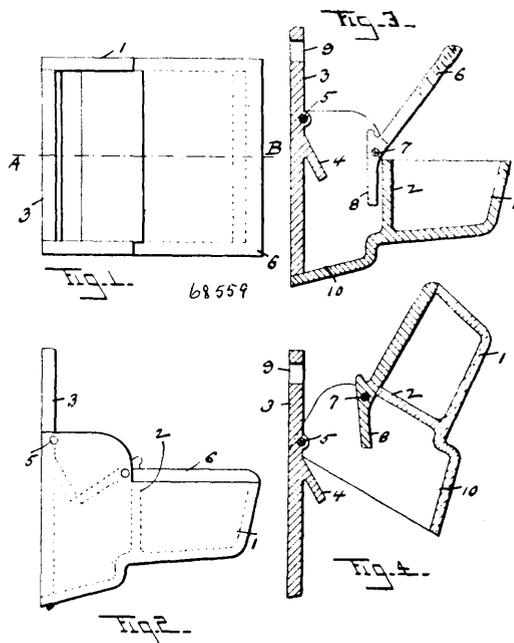
*Claim.*—1st. Apparatus for cleansing fibrous materials, consisting of a receptacle provided with a sieve bottom in combination

with a stirring apparatus and a chain bucket device which are alternately put in action. 2nd. Apparatus for cleansing fibrous



material, consisting of a receptacle provided with a sieve bottom in combination with a stirring apparatus and a chain bucket device, which is so arranged that a part of the chain is without buckets, such part being situated with in the receptacle at the time when the stirring apparatus is being moved to and fro for the purpose not to disturb the action of the latter.

**No. 68,559. Combined Match Safe and Burned Match Receiver. (Porte-allumettes.)**

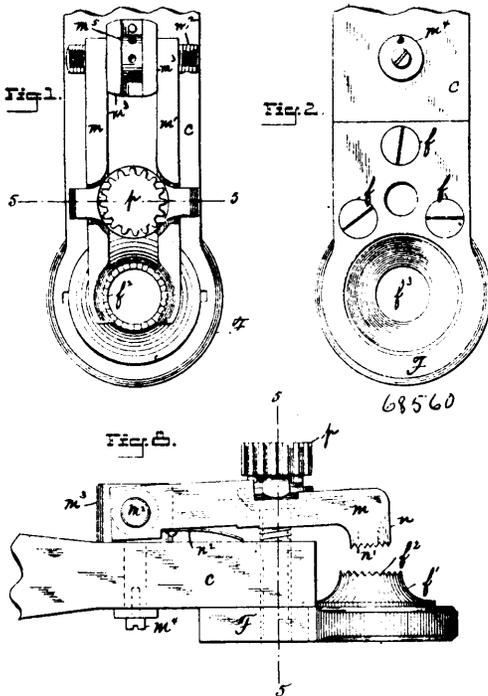


Joseph A. Collins, West Haven, Connecticut, U.S.A., 30th August, 1900; 6 years. (Filed 22nd January, 1900.)

*Claim.* 1st. In a device of the character described, the combination of a body member having two compartments, forming match

and refuse receptacles, a pivotally secured back member forming one of the sides of the said refuse receptacle and a hinged cover, closing the said refuse receptacle, substantially as described. 2nd. In a device of the character described, a body member having one side and the top thereof open, and a partition extending across said body member whereby two compartments are formed therein, the combination therewith of a back member pivotally secured to said body member and closing the said open side when in its normal position, substantially as described. 3rd. In a device of the character described, a body member having two compartments therein, the combination therewith of a cover member pivotally secured to the said body member and adapted when lifted, to uncover both of said compartments, substantially as described. 4th. In a device of the character described, the combination of a body member having two compartments therein, a cover member covering one of said compartments and projecting partially over the other of said compartments, a back member pivotally secured to said body member and having a projection extending over the latter of said compartments and joining with the said cover member to form a cover for the said compartments, substantially as described. 5th. In a device of the character described, the combination of a body member having two compartments therein, back and cover members pivotally secured to said body member, the said cover member covering one of said compartments and forming with the back member a separable cover for the other of said compartments, substantially as described. 6th. In a device of the character described, the combination with a body member having two compartments therein, of cover and back members pivotally secured to said body member and forming a single cover for one of said compartments and a separable cover for the other of said compartments, the said separable cover being preferably formed in the shape of a trough, substantially as described. 7th. In a device of the character described, a body member having two compartments therein, the combination therewith of pivotally secured back and cover members, which members form covers for both of said compartments, one of said compartments being adapted to be uncovered by swinging either the said body or cover members upon their pivot mountings, substantially as described. 8th. In a device of the character described, a body member having two compartments, the combination therewith of cover and back members, having deflecting lips thereon, the said lips co-operating to form a cover for one of said compartments, substantially as described.

**No. 68,560. Gripping Devices or Carriers.**  
(*Mécanisme de grippage.*)

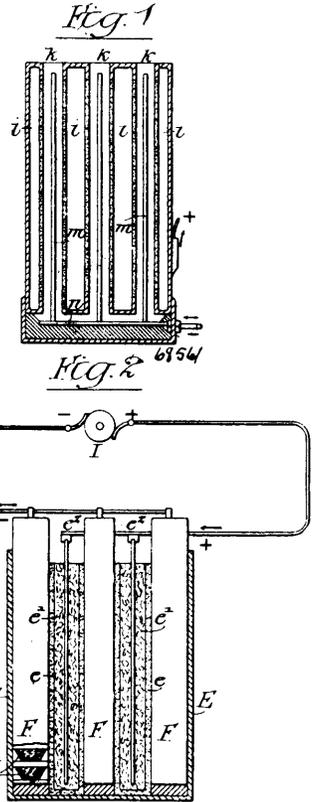


John Hornby, Brooklyn, New York, U.S.A., 30th August, 1900; 6 years. (Filed 10th July, 1900.)

*Claim.*—1st. In a grip carrier, the combination with a fixed jaw, of a movable jaw consisting of a plurality of separately movable members, and means for moving the said members simultaneously but independently toward the said fixed jaw, consisting of a pinion mounted upon a screw and a universally jointed bearing intermediate the pinion and the members of the movable jaw. 2nd. In a grip

carrier, the combination with a fixed jaw, of a movable jaw consisting of separate members, means for opening and closing the jaws, consisting of a pinion mounted upon a screw and two bearing pieces interposed between the pinion and the movable jaws adapted freely to oscillate with relation to the jaws, the pinion and each other.

**No. 68,561. Primary Batteries and Process of Operating the Same.** (*Batterie électrique.*)

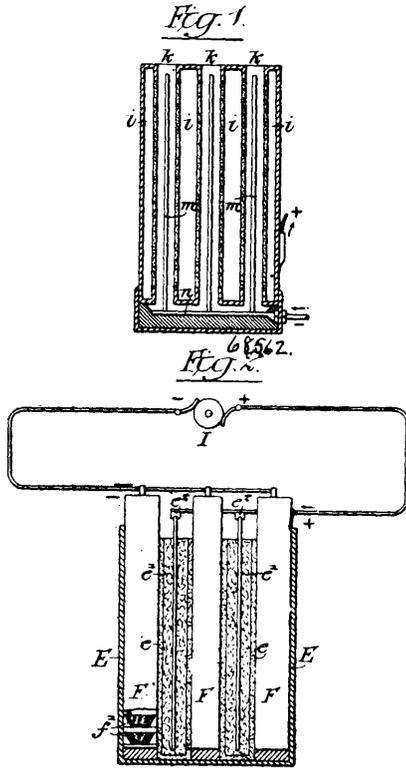


Henry Kasper Hess, Albert James Shinn and Carl Hering, all of Philadelphia, Pennsylvania, U.S.A., 30th August, 1900; 6 years. (Filed 30th March, 1900.)

*Claim.*—1st. The process herein described, of using and regenerating the liquids of a two-liquid primary battery, the same consisting in charging the cathode compartment with a mixture of a highly oxidized metallic compound as a depolarizer, and an acid excitant capable of combining with the exhausted product of the depolarizer, and charging the anode compartment with a mixture consisting of an acid excitant and a product of reduction of a depolarizing agent, removing the two liquids from the battery after the exhaustion and regenerating the said liquids, substantially as described. 2nd. The process herein described of using and regenerating the liquids of a two-liquid primary battery, the same consisting in charging the cathode compartment with a mixture of a highly oxidized metallic compound as a depolarizer, and an acid excitant capable of combining with the exhausted product of the depolarizer, and charging the anode compartment with a mixture consisting of an acid excitant and a product of reduction of a depolarizing agent, removing the two liquids from the battery after exhaustion, mixing them and regenerating the mixture by first throwing out the metal which composes the anode of the primary battery, and then bringing all or part of the liquid back to its original condition for use as a depolarizer in a primary battery, substantially as described. 3rd. The process herein described, of using and regenerating two liquid batteries, the said process consisting in using as a depolarizing agent a mixture consisting of chromic acid, or a salt thereof, and sulphuric acid and using as an excitant agent a mixture of chromium sulphate and sulphuric acid, transferring the said solutions after the battery has been exhausted to the cathode compartment of a regenerating cell, whereby the metal that forms the anode in the battery just discharged is thrown out, and then placing all or part of the liquid in the anode compartment of the regenerating cell so that the chromium sulphate may be changed by oxidation to chromic acid and sulphuric acid, substantially as described. 4th. The process herein described of regenerating the liquids of a two-liquid primary battery, said process consisting in mixing the exhausted depolarizer and excitant and regenerating said mixture

by first throwing out the zinc or other material which formed the anode of the battery, and then bringing all or part of the liquid back to its original condition for use as a depolarizing agent, substantially as described.

**No. 68,562. Primary Batteries and Process of operating the same. (Batterie électrique.)**

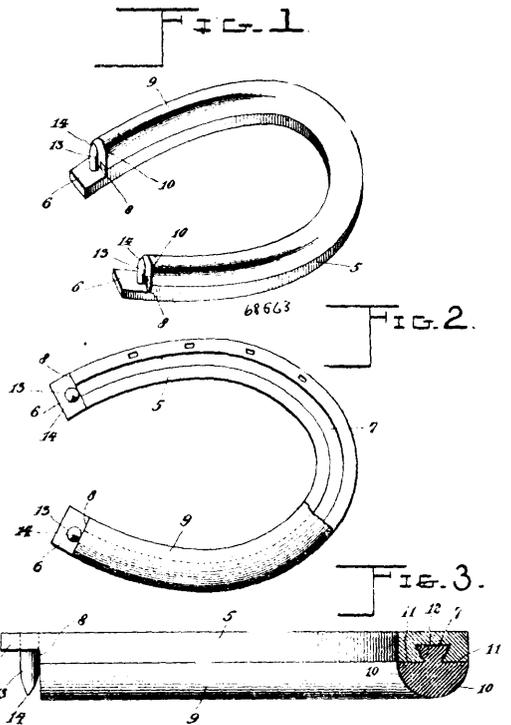


Henry Kasper Hess, Albert James Shinn and Carl Hering, all of Philadelphia, Pennsylvania, U.S.A., 30th August, 1900; 6 years. (Filed 30th March, 1900.)

*Claim.*—1st. The process herein described of using a liquid solution in a two liquid primary battery, said process consisting in mixing a depolarizing agent and an excitant agent as a compound, using said compound first as a depolarizer until the depolarizing agent is reduced, then using said compound as an excitant until the excitant is exhausted, substantially as described. 2nd. The process herein described of operating a two liquid primary battery, the same consisting in charging the cathode compartment of the battery with a mixture of a highly oxidized metallic compound as a depolarizing agent and an acid excitant capable of combining with the product of the reduction of the depolarizer, said acid excitant being in excess of that needed for this purpose and after exhaustion of the depolarizer transferring the liquid to the anode compartment of the battery to act as an excitant, substantially as described. 3rd. The process herein described of using a liquid solution in a two liquid primary battery, said process consisting in mixing sulphuric acid with a depolarizing agent, reducing the said depolarizing agent in the production of an electric current and then using said compound as an excitant until the excitant is exhausted, substantially as and for the purpose specified. 4th. The process herein described of operating a two liquid primary battery, the same consisting of charging the cathode compartment with a mixture of chromic acid, or acidified salt thereof, and sulphuric acid, the former serving as a depolarizer and the latter serving in part to combine with the reduction product of the depolarizer and in part for subsequent exciting action, and after reduction of the depolarizer transferring the liquid to the anode compartment of the battery to act there as an excitant, substantially as described. 5th. The process herein described of using a liquid solution in a two liquid primary battery, said process consisting in making a compound of oxidized chromium and sulphuric acid, using this solution as a depolarizing agent until the chromium compound is reduced, then using the said liquid as an excitant until the sulphuric acid is exhausted, substantially as specified. 6th. The process herein described of utilizing and regenerating a battery liquid containing a depolarizing agent and an excitant agent, said process consisting in first using the liquid in a two liquid battery as a depolarizer, then using the liquid as an excitant, then

transferring it to the cathode chamber of an electrolytic cell, passing a current through it, thereby throwing out the metal that formed the anode of the battery upon said cathode, then transferring all or part of the liquid to the anode chamber of the regenerator, and passing a current through it and thereby regenerating the liquid and bringing it back to its original oxidized state, substantially as described. 7th. The process herein described of using a liquid solution in a two liquid primary battery and regenerating the same, the said process consisting in mixing oxidized chromic acid and sulphuric acid, using the solution as the depolarizing agent until the chromic acid is reduced and then using the solution as an excitant until the free sulphuric acid is exhausted, then transferring it to the cathode chamber of an electrolytic cell, passing a current through it thereby throwing out the metal that formed the anode of the battery upon said cathode, then transferring all or part of the liquid to the anode chamber of the regenerator, passing a current through it and thereby regenerating the liquid and bringing it back to its original oxidized state, substantially as described.

**No. 68,563. Horse Shoe. (Fer à cheval.)**



Hervé Dyas de Saint Cyr, Montreal, Quebec, Canada, 30th August, 1900; 6 years. (Filed 18th August, 1900.)

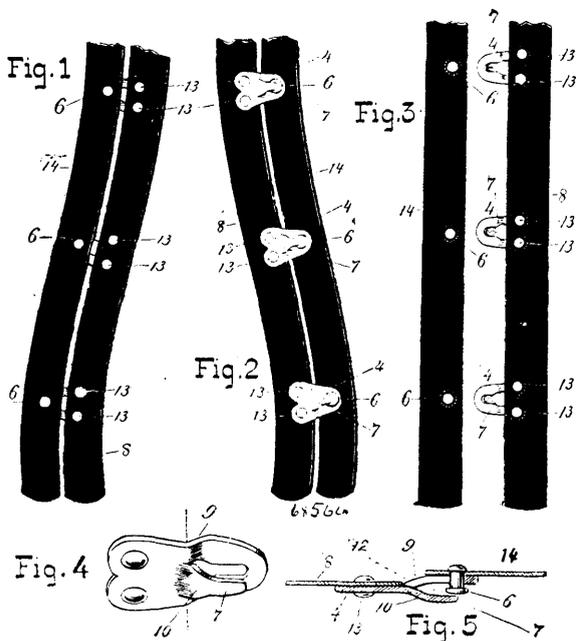
*Claim.* 1st. As a new article of manufacture, a soft tread horse shoe comprising a channelled metallic shoe, a cushion having a tongue connection therewith, and calks attached to the shoe in juxtaposition to the terminal positions of the cushion, as and for the purposes set forth. 2nd. As a new article of manufacture, a soft tread horse shoe comprising a channelled metallic shoe, a shoe provided with a tongue and united thereby to said shoe, and the pointed calk pins attached to the shoe at the heel portions thereof and in juxtaposition to the terminal portions of the cushion, the pointed ends of said calk pins terminating within the active face of the cushion, as and for the purposes set forth. 3rd. As a new article of manufacture, a soft tread horse shoe comprising a metallic shoe having the notched heel portions forming shoulders and also provided with the continuous dovetail channel which opens at its ends through said shoulders and the shoe, a cushion having the tongue and applied to the shoe for said tongue to fit the channel, and calks fast with the notched heel portions of the shoe and disposed adjacent to the terminal portions of the cushion, substantially as described.

**No. 68,564. Corset Clasps. (Astahe corset.)**

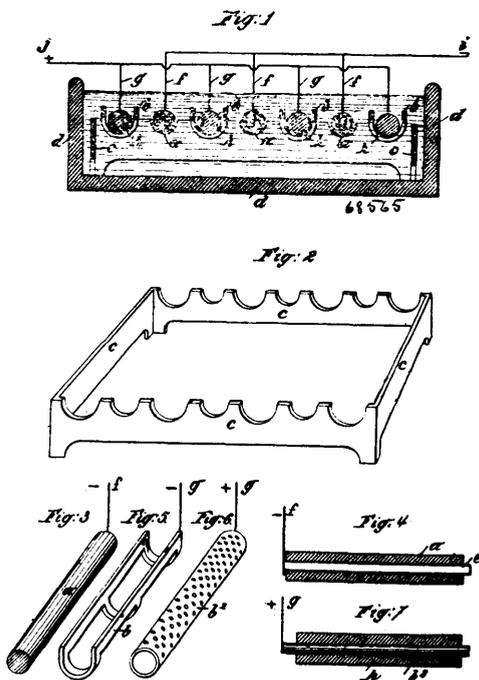
Samuel Graham, St. John, New Brunswick, Canada, 30th August, 1900; 6 years. (Filed 13th March, 1900.)

*Claim.*—1st. In a corset fastener comprising a stud secured to one side of a clasp in combination with a slotted eyelet secured to the other side of the clasp and adapted to engage the said stud, and a tongue formed on or secured to the eyelet and shaped to extend over

the slot in the eyelet to act as a releaser, substantially as and for the purpose specified. 2nd. In a corset a fastener comprising an



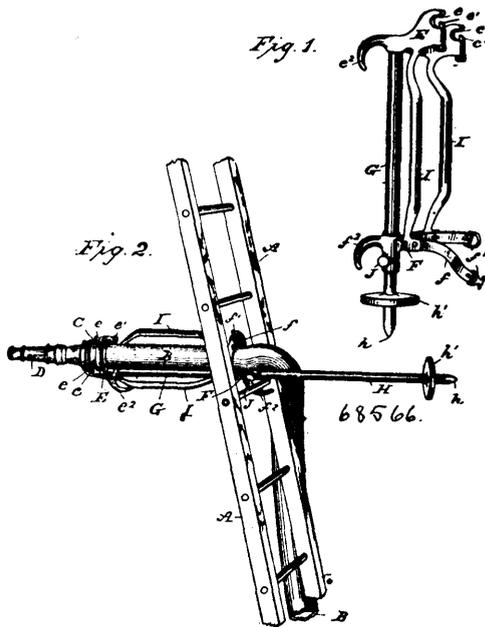
electrodes. 3rd. In an electrical battery, having an insoluble depolarizer, the special arrangement of the positive electrodes,



inwardly pointing stud secured to the under surface of one side of a clasp in combination with a slotted eyelet secured to the under surface of the other side of the clasp and having its narrow slotted portion formed with an outward set, and a tongue formed on or secured to the eyelet and extended with an inward set over the slot in the eyelet to act as a releaser, substantially as and for the purpose specified. 3rd. An eyelet for a corset fastener having a slot or ordinary shape formed therein and provided with a tongue extending over the slot, the parts being so shaped that the tongue and the narrower slotted part of the eyelet are in different planes but which approach one another and merge towards the portion of the eyelet which is secured to the corset clasp, substantially as and for the purpose specified. 4th. An eyelet for a corset fastener having a slot of ordinary shape formed therein and provided with a tongue extending over the slot, the tongue and the narrower slotted part of the eyelet being formed with sets in opposite directions relative to the plane of the part of the eyelet, to be attached to the clasp, substantially as and for the purpose specified. 5th. An eyelet for a corset fastener having a slot of ordinary shape formed therein and having the narrow slotted portion formed with a set to bring it in a different plane to the portion of the eyelet secured to the clasp, substantially as and for the purpose specified.

copper or lead, and their combination with the depolarizer, formed of any suitable salt of lead, melted or compressed.

**No. 68,566. Fire Hose Support.** (*Support pour boyaux.*)



**No. 68,565. Electrical Batteries.** (*Batterie électrique.*)

Victor Jeanty, 48 Boulevard Barbes, Paris, France, 30th August, 1900; 6 years. (Filed 20th July, 1900.)

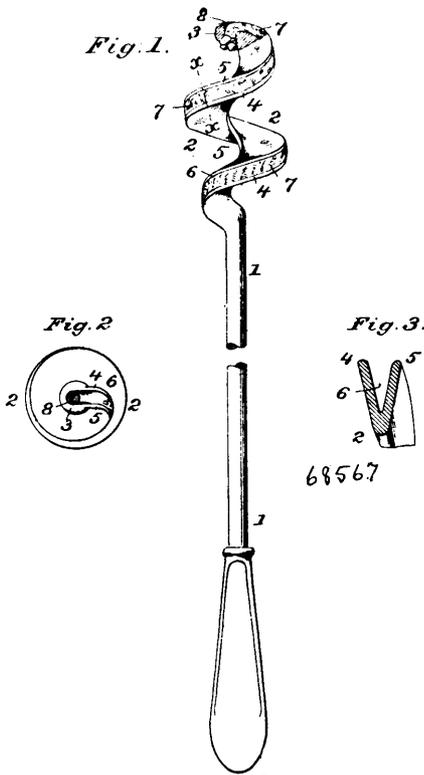
*Claim.*—1st. An electrical battery, having an insoluble depolarizer, characterized by the fact that the negative electrodes, zinc, and the positive electrodes, copper and antimoniated lead, these last-mentioned being charged with an insoluble depolarizing agent such as any suitable salt of lead, melted or compressed and moulded, are arranged parallel and horizontally at the upper portion of an electrolyte bath capable of dissolving the zinc such, for example, as water acidulated with sulphuric acid, but in such a manner as to be completely submerged so that the salts produced by the dissolving of the zinc fall by their own weight to the bottom of the said bath, without touching the positive electrodes and the said bath is maintained at a constant strength suited to its regular action upon the negative electrodes and positive electrodes. 2nd. In an electrical battery, having an insoluble depolarizer, the combination of the negative electrodes, zinc, with an axial container or chamber enclosing mercury for maintaining constant the amalgamation of the said

Cyrus R. Robinson, Concord, New Hampshire, U.S.A., 30th August, 1900; 6 years. (Filed 31st August, 1899.)

*Claim.*—1st. In a fire hose support, the combination with a tube having a telescoping adjustable extension bar, of a pair of brackets rigidly secured one to each end of said tube, a pair of handle bars covered with a suitable insulating material and connecting the brackets, and a pair of curved projections from each bracket and forming hooks, substantially for the purpose set forth. 2nd. In a fire hose support, the combination with a suitable tube, of a detach-

able telescoping extension bar having its outer end pointed and provided with a disc or collar near its end, suitable means for adjustment of the bar within the tube, a pair of brackets mounted at a point between their ends one upon each end of said tube, and a pair of handle bars covered with a suitable insulating material and connecting the brackets, said brackets having one end made in the form of a yoke and provided with suitable means for attachment to a hose section, and the other end of each being curved downward to form a hook, all substantially for the purpose set forth.

**No. 68,567. Curettes. (Curette.)**



Victor May, Chicago, Illinois, U.S.A., 30th August, 1900 ; 6 years. (Filed 30th May, 1900.)

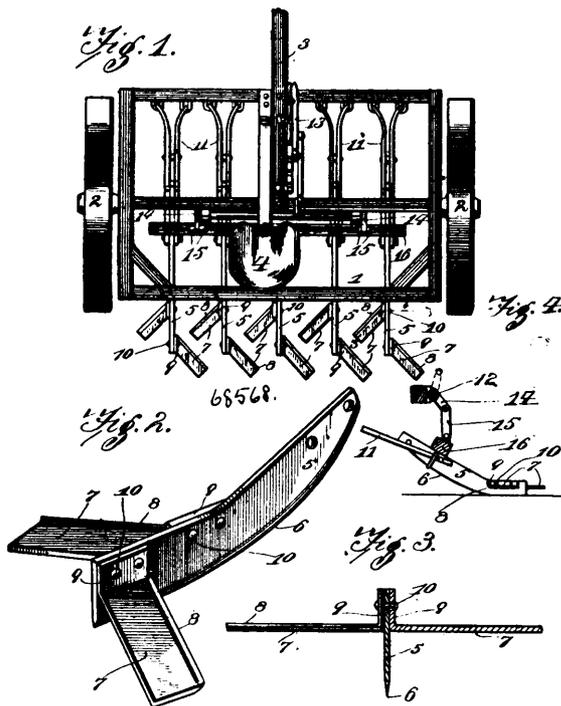
*Claim.*—1st. In a curette, substantially as herein described, the spiral body portion formed with a forward cleaning edge or margin, and a rearward supporting edge or margin located a distance back of the cleaning edge or margin and adapted to serve as an intermediate support between the convolutions of the spiral body portion, against muscular contraction of the uterus, the said spiral body portion being formed with a groove between the forward and rearward edge, substantially as set forth. 2nd. In a curette, substantially as herein described, the spirally formed body portion provided with a groove in its outer periphery, a filling of lint arranged in said groove, and means for attaching the lint in place, substantially as set forth. 3rd. In a curette, substantially as herein described, the spirally formed body portion provided with a groove in its outer periphery, a filling of lint arranged in said groove, and means for attaching the lint in place, the same comprising an orifice formed in the end button of the curette and adapted to receive a knotted end of the strip or roll of lint, substantially as set forth.

**No. 68,568. Cultivator. (Cultivateur.)**

William Franklin Magill, Dufur, Oregon, U.S.A., 30th August, 1900 ; 6 years. (Filed 16th August, 1900.)

*Claim.*—1st. In a cultivator, the combination with a draft frame, of a cutter blade (one or more) connected at its front end to the draft frame, whereby the cutter blade is adapted to be drawn or trailed, said cutter blade having a cutting edge on its lower side

extending throughout the length thereof, and provided with laterally extending cutter wings on its sides adapted to operate under



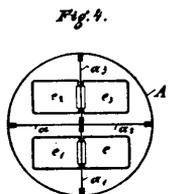
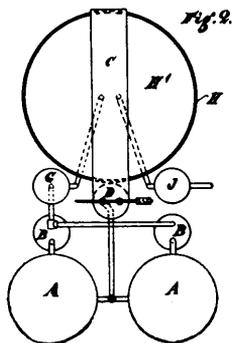
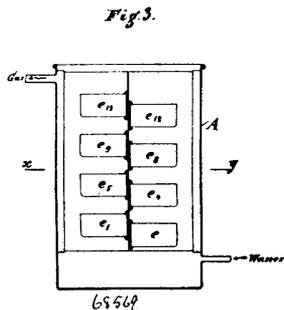
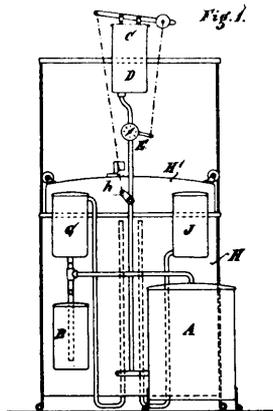
the surface of the soil and means to raise and lower said cutter blade, substantially as described. 2nd. In a cultivator, the combination with a draft frame, of a cutter blade (one or more) connected at its front end to the draft frame, whereby the cutter blade is adapted to be drawn or trailed, said cutter blade having a cutting edge on its lower side extending throughout the length thereof, and provided with laterally extending cutter wings on its sides adapted to operate under the surface of the soil and a lever mounted on the draft frame, and connections between said lever and said cutter blade to raise and lower the latter and hold the same when depressed, substantially as described. 3rd. In a cultivator, the combination with a draft frame, of a series of trailing cultivator blades connected at their front ends to the draft frame and having cutting edges on their lower sides and laterally projecting cutter wings on their sides adapted to operate under the surface of the soil, a bar bearing on and connecting said series of trailing cultivator blades, a rock shaft carried by the draft frame and having rock arms, a lever to turn said rock shaft, and links connecting said rock shaft to said bar, substantially as described. 4th. A cultivator cutter blade or runner adapted to be trailed or drawn from its front end and having the cutting edge on its lower side extending throughout its length, and the laterally extending cutter wings on its sides, for the purpose set forth, substantially as described. 5th. In a cultivator, a series of cutter blades having cutting edges on their lower sides adapted for entering the earth, and laterally disposed cutter wings on the sides of said cutter blades adapted to operate under the surface of the earth, the wings on the proximate sides of said series of cutter blades being disposed in overlapping relation to each other, for the purpose set forth, substantially as described.

**No. 68,569. Apparatus for Producing Pure Acetylene. (Appareil générateur d'acétylène.)**

Hans Richard Berger, of Berlin, Kingdom of Prussia, German Empire, 30th August, 1900 ; 6 years. (Filed 13th August, 1898.)

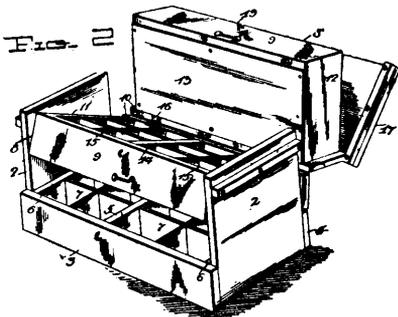
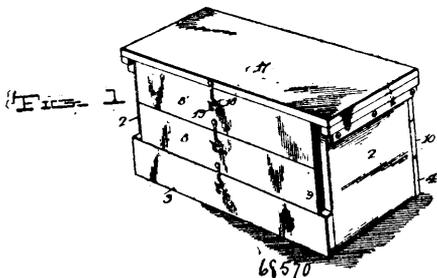
*Claim.*—1st. An apparatus for generating pure acetylene, consisting in the combination of a generator with vertical division plates and with carbide boxes attached to same in such way that no two boxes are on the same level, substantially as and for the purpose described. 2nd. In an apparatus for generating pure acetylene, the

combination with a gasometer and with a projection or catch on said gasometer of a double cistern and of valves controlling the com-



munication between and the outlet from said cisterns, substantially as and for the purpose described.

**No. 68,570. Egg Case.** (*Boite pour œufs.*)

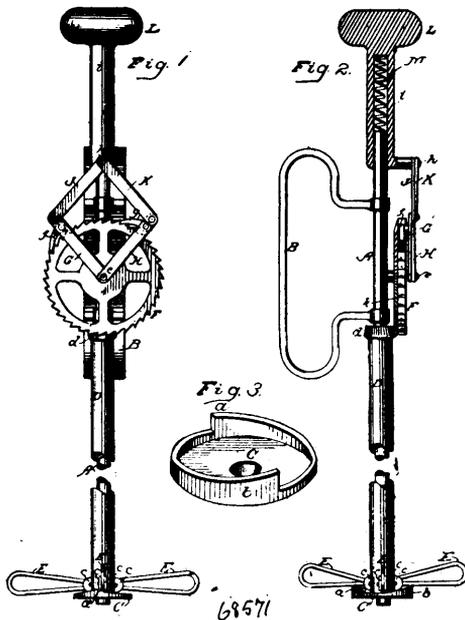


William I. Gallespie, Joseph Weber and Joseph Grishaber, all of Arbutus, West Virginia, U.S.A., 30th August, 1900; 6 years. (Filed 3rd July, 1900.)

*Claim.*—1st. An egg case or crate comprising a bottom tray formed with fixed end walls secured to the bottom board of said case or crate and extending to the top edge of the uppermost tray, a set of

superimposed hinged trays adapted to close in between said end walls, and a plain cover hinged to the uppermost superimposed hinged tray, substantially as and for the purpose set forth. 2nd. An egg case or crate comprising a base tray provided with extension end walls extending to the top edge of the uppermost superimposed hinged tray, a series of independent superimposed hinged trays adapted to fold down on said base tray, a cover hinged to the uppermost tray, and means as described for independently fastening said cover and trays, substantially as and for the purpose set forth.

**No. 68,571. Beater or Mixer.** (*Vergette de cuisine.*)

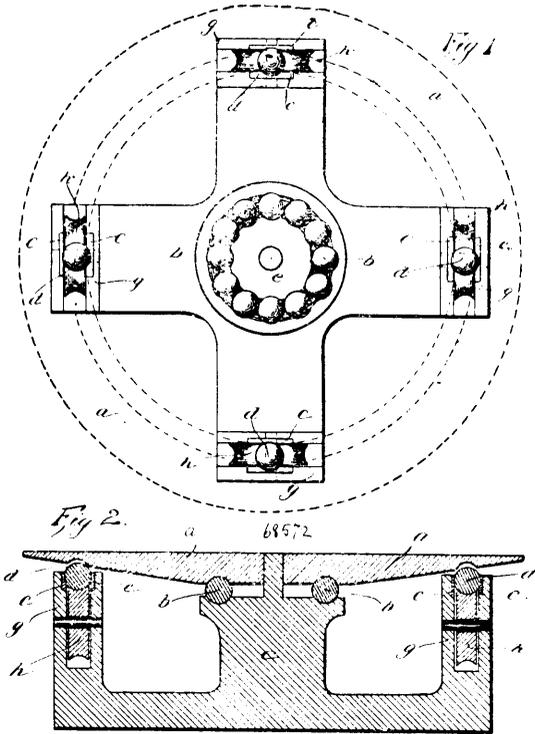


Andrew Stade, assignee of Waldemar Hugo Spanier, both of Devil's Lake, North Dakota, U.S.A., 30th August, 1900; 6 years. (Filed 14th July, 1900.)

*Claim.*—1st. A beater or mixer for liquids or semi-liquids or compounds, consisting of a rotatable tubular shaft and suitable agitator arms pivoted thereto, and a rod extending through the tubular shaft, and a suitable cam device upon the lower end thereof for imparting to the agitator arms an undulating motion during their rotation, substantially as and for the purpose set forth. 2nd. A beater or mixer for liquids or semi-liquids or compounds, consisting of a tubular shaft provided at its lower end with agitator arms, a rod extending into or through the shaft, a reciprocating handle engaging the upper end of the rod which acts as a guide therefor, and suitable mechanism connecting the handle with the tubular shaft by which said shaft is given a rotary motion by the reciprocating action of the handle, substantially as and for the purpose described. 3rd. A beater or mixer for liquids or semi-liquids or compounds, consisting of a tubular shaft and beater arms pivoted to the lower end thereof, a rod extending through the shaft and a suitable cam device upon the lower end thereof, a reciprocating handle engaging the upper end of the rod, and suitable mechanism connecting the handle with the tubular shaft by which said shaft is rotated, substantially as and for the purpose described. 4th. A beater or mixer for liquids or semi-liquids or compounds, consisting of a rotatable shaft, pivoted agitator arms upon the lower end thereof, and a cam device for imparting an undulating motion to the agitator arms, comprising a disc with inclined ways extending up from the periphery of the disc over which ride the agitator arms during their rotation, substantially as and for the purpose described. 5th. A beater or mixer for liquids or semi-liquids or compounds, consisting of a tubular shaft having pivoted agitator arms, a rod extending through the shaft and provided with a cam device at its lower end, a suitable stationary handle connected to the rod, a pinion upon the upper end of the tubular shaft, and a rotatable ratchet wheel provided with a bevel gear upon its inner side to engage the pinion, and suitable means for operating the ratchet wheel, substantially as and for the purpose specified. 6th. A beater or mixer for liquids or semi-liquids or compounds, consisting of a tubular shaft provided at its lower end with agitator arms, a rod extending through the tubular shaft, a reciprocating handle engaging the upper end of the rod, a ratchet wheel engaging the upper end of the tubular shaft by suitable gearing, and a plurality of arms pivoted together and to the reciprocating handle and to the bearing or pin supporting the ratchet wheel, said arms being provided with dogs for engaging the ratchet teeth on the wheel successively upon the downward and upward

stroke of the reciprocating handle, substantially as and for the purpose set forth. 7th. A beater or mixer for liquids or semi-liquids or compounds, consisting of a tubular shaft with suitable agitator arms at its lower end, means for imparting to the arms an uniplating motion during their rotation, a rod extending through the tubular shaft, a suitable handle connected to the rod below its upper end, a handle provided with a tubular shank engaging the upper end of the rod, a suitable spring located in the tubular shank, and a suitable driving mechanism connecting the reciprocating handle with the tubular shaft by which motion is imparted to the shaft by the action of the handle, substantially as and for the purpose set forth.

**No. 68,572. Turn Table.** (*Table tournante.*)



Edgar Burr and William W. Ryder, both of Reno, Nevada, U.S.A. 30th August, 1900; 6 years. (Filed 9th August, 1900.)

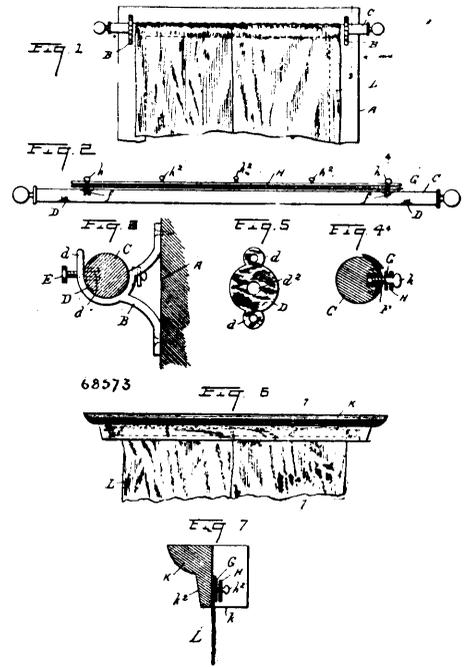
*Claim.*—A turn table in which the outer circular track is dispensed with, and the outer edge of the platform or disc, when requiring it, is supported by cast steel balls set in boxing and resting on concave faced wheels set in chairs in a circular foundation, substantially as aforesaid.

**No. 68,573. Curtain Support.** (*Support pour rideau.*)

Einna Damrau, Brooklyn, New York, U.S.A., 30th August, 1900; 6 years. (Filed 17th August, 1900.)

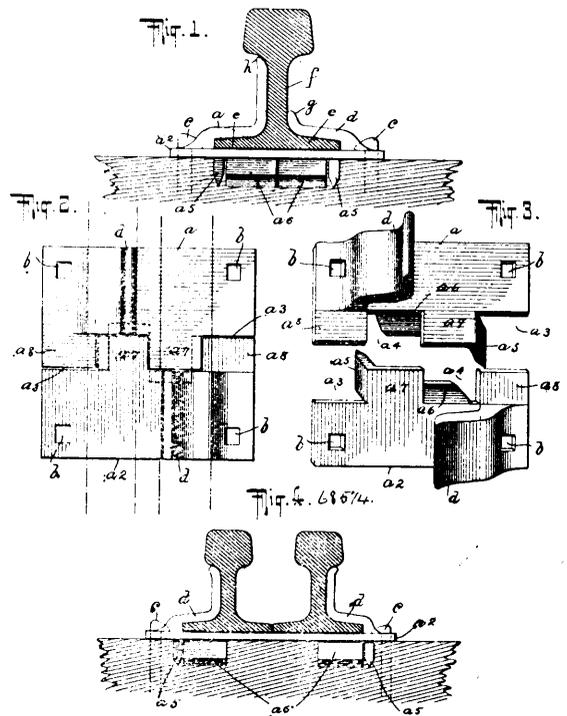
*Claim.*—1st. A support or holder for curtains, comprising a stationary member, a bar connected with one side thereof by devices which are passed through the ends of said bar and into the stationary member, and on which said bar is free to move, and a supplemental bar also mounted on said devices adjacent to the first named bar, and also movable on said devices, and set screws which are passed through the supplemental bar and adapted to bear on the last named bar, substantially as shown and described. 2nd. A curtain pole which is adapted to be mounted in brackets and provided with devices for preventing it from turning therein, a bar connected at its rear ends with the rear side of said pole, and between which and said pole the curtain is adapted to be passed, a supplemental bar also connected at its opposite ends with the rear ends with the rear end of said pole rearwardly of the first named bar, and adjusting devices which are passed through said supplemental bar and adapted to bear on the first named bar, substantially as shown and described. 3rd. A curtain pole provided with socket plates which are secured in the front side thereof near its opposite ends, and other socket plates which are secured to the rear side thereof adjacent to its opposite ends, a bar connected with the rear side of said pole by

means of screws passed through the opposite ends thereof and into the last named socket plates, and a supplemental bar also mounted



on said screws rearwardly of the first named bar, and provided with set screws which are passed therethrough and which are adapted to bear on the first named bar, substantially as shown and described.

**No. 68,574. Railway Wear Plate.** (*Chemin de fer.*)

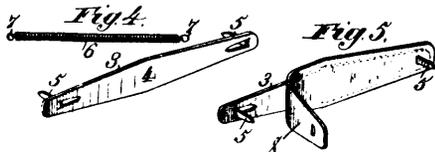
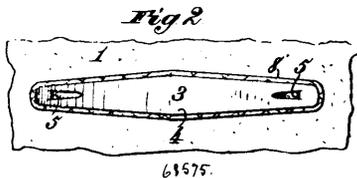


Calvin David Paxson, Limaville, Ohio, U.S.A., 30th August, 1900; 6 years. (Filed 17th August, 1900.)

*Claim.*—1st. A railway wear plate, comprising two separate members mutually abutting upon their longitudinal adjacent faces, or at an angle transverse to the rail, and provided upon said adjacent faces with interlocking parts which are angular in form, whereby

when said plate members are moved together longitudinally of the rail upon the same plane, said edges will interlock to prevent independent movement of said plate members, substantially as shown and described. 2nd. A railway wear plate, comprising two plate members of the same general form, said plate members being adapted to be placed together, and the adjacent edges thereof being provided with similar rectangular recesses and rectangular projections, whereby said edges are adapted to interlock, said plate members being also provided at their opposite ends with inwardly directed shoulders or projections which are designed to overlap the base flanges of the rail, and on their under sides with downwardly directed prongs or projections, substantially as shown and described. 3rd. In a railway wear plate, a member or plate formed from a rectangular blank having one side edge cut out to form rectangular recesses, and corresponding downwardly directed prongs or projections, said downwardly projecting prongs or projections ranging transversely of and longitudinally of the plate member, and being also angular in form, substantially as shown and described. 4th. In a railway wear plate, a member or plate formed from a rectangular blank having one side edge cut out to form rectangular recesses and corresponding downwardly directed prongs or projections, said downwardly projecting prongs or projections ranging transversely of and longitudinally of the plate member, and being also angular in form, said plate member being also provided at one end with an inwardly and upwardly curved shoulder, substantially as shown and described. 5th. A railway wear plate, comprising two plate members, one of which is provided with a shoulder adapted to engage the base flange of a rail to receive the lateral thrust thereof, and the inner and longitudinal abutting faces of the two plate members being provided with corresponding notches or recesses and corresponding projections, whereby the said plate members interlock and are held from movement transversely of the rail, and whereby any movement of said rail transmitted to the said shoulder of one plate member will be supported by the resistance of the other interlocking member, substantially as shown and described.

**No. 68,575. Pocket Protector.** (*Goussset.*)

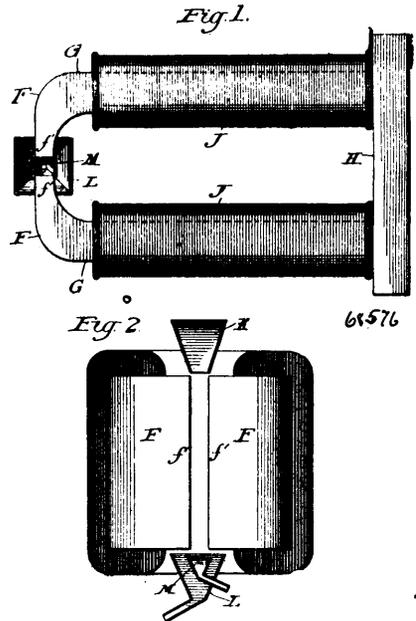


Joseph D. Heffner, J. J. Allen, and Wallace Collier, all of Lexington, Kentucky, U.S.A., 30th August, 1900; 6 years. (Filed 17th August, 1900.)

*Claim.*—1st. A pocket protector, consisting of a base plate having an integral tang struck up at or near each end, and a spring lying parallel to said base plate, and provided with loops or eyes engaged with the struck up tangs of the latter, said tangs being bent down upon the base plate to secure the spring, substantially as described. 2nd. A pocket protector, consisting of a base plate designed to lie upon the inside of a garment and having an integral tang struck up at or near each end, a coiled spring adapted to lie along the outside of the edge or lapel of the pocket and provided at its extremities with loops or eyes, said spring being secured in place by slipping said loops or eyes over the tangs and bending the latter back and down upon the base plate, substantially as described. 3rd. A pocket

protector, consisting of a resilient metal base plate curved longitudinally and designated to lie upon the inside of a garment, said base plate having an integral tang struck up at or near each end, a lengthwise expansible and contractible spring adapted to lie along the outside of the edge or lapel of the pocket and provided at its extremities with loops or eyes, said spring and base plate being secured in place by passing the tangs through the said eyes or loops and bending them back and down upon the base plate, substantially as described. 4th. A pocket protector, consisting of a resilient metal base plate curved longitudinally and tapering from its centre toward its ends, said base plate being adapted to lie upon the inside of a garment and having an integral tang struck up at or near each end and designed to be passed through the garment and the edge or lapel of the garment, a lengthwise expansible and contractible spring adapted to lie along the edge or lapel of the pocket and provided at its extremities with loops or eyes arranged to be clipped over the tangs and the latter bent back and down upon the base plate, substantially as described. 5th. A pocket protector, consisting of a resilient metal base plate designed to lie upon the inside of a garment said base plate having an integral tang struck up at or near each end, a leather lining secured on the face of the base plate by the tangs, a lengthwise expansible and contractible spring adapted to lie along the outside of the edge or lapel of the pocket and provided at its extremities with loops or eyes adapted to be slipped over the tangs and latter bent back and down on the base plate, substantially as described.

**No. 68,576. Diamagnetic Separation.** (*Séparateur.*)



Thodore J. Mayer, Washington, District of Columbia, assignee of Elmer Gates, Chevy Chase, Maryland, 30th August, 1900; 6 years. (Filed 10th July, 1900.)

*Claim.*—1st. The method of separating diamagnetic particles from a mixture containing them, which consists in feeding the mixture into a relatively intense part of a magnetic field, continuing it in and subjecting it to the action of the magnetic field until the diamagnetic particles to be separated have gradually moved out from the mixture into a relatively weak part of the field, and then collecting said particles separately as heads, substantially as described. 2nd. The method of diamagnetic separation which consists in introducing the mixture into a zone of median magnetic intensity, agitating the mixture while detained in said zone until the particles of varying susceptibility move in opposite directions, and collecting the separated particles and conducting them away separately, substantially as described. 3rd. The method of diamagnetic separation which consists in feeding the mixture on to a support midway between the boundaries of a belt or zone of magnetic intensity, agitating the support until the substances of different susceptibility move laterally in opposite directions across said belt or zone and collecting the separated substances at different points and conducting them away separately, substantially as described.

No. 68,577. Electrostatic and Diamagnetic Separation. (Separateur.)

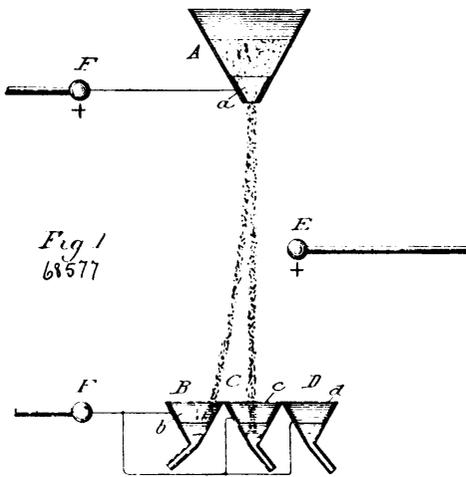


Fig. 1  
68577

Theodore J. Mayer, Washington, District of Columbia, assignee of Elmer Gates, Chevy Chase, Maryland, U.S.A., 30th August, 1900; 6 years. (Filed 10th July, 1900.)

*Claim.*—1st. The method of separating from a mixture particles of relatively greater electrostatic capacity than the remainder, which consists in passing the mixture through a field of convective discharge of static electricity, thereby charging said mixture electrostatically, and diverting the particles of greater electrostatic capacity by causing the electrified mixture to pass through another field of convective discharge of static electricity, the direction of whose lines of force intersects that of the first, substantially as described. 2nd. The method of separating from a mixture particles of relatively greater electrostatic capacity than the remainder, which consists in passing the mixture through a field of convective discharge of static electricity, thereby charging said mixture electrostatically, and diverting the particles of greater electrostatic capacity by causing the electrified mixture to pass through another field of convective discharge of static electricity, the direction of whose lines of force intersects that of the first, and whose discharge terminal is located midway between the terminals of the first, substantially as described. 3rd. The method of separating diamagnetic particles from a mixture containing them, which consists in feeding the mixture into a relatively intense part of a magnetic field, simultaneously charging the mixture electrostatically, and subjecting the electrostatically charged mixture to the action of the magnetic field until the diamagnetic particles to be separated have gradually moved out from the mixture into a relatively weak part of the field, and then collecting said particles as heads, substantially as described.

No. 68,578. Trace Support. (Porte-truits.)

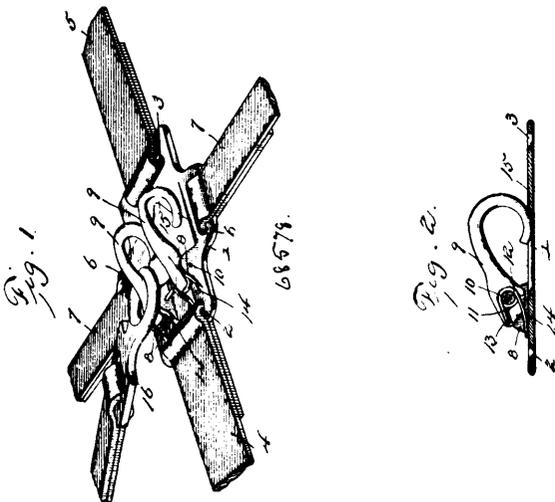


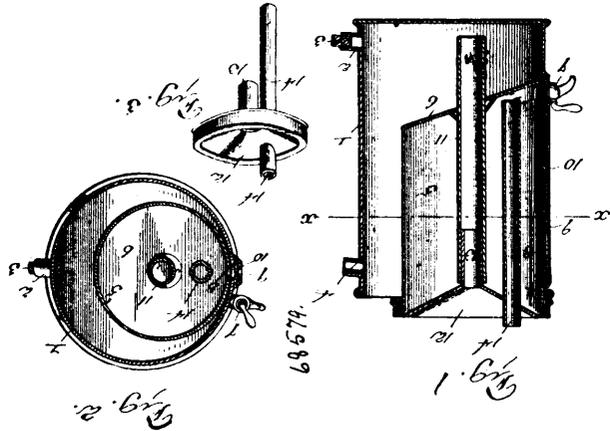
Fig. 1  
68578

Fig. 2

George Schenck, Le Roy, Kansas, U.S.A., 30th August, 1900; 6 years. (Filed 18th August, 1900.)

*Claim.*—1st. A trace support, comprising a frame, having a guide plate, which is inclined inwardly and downwardly, and a spring actuated hook, pivoted to the frame at a point above the plane of the guide plate, the free extremity of the bill of the hook normally resting upon the inclined guide plate. 2nd. A trace support, comprising a frame, having upstanding bearing ears located at the forward end thereof, an inwardly and downwardly inclined guide plate located at the rear of the frame, and spring actuated hooks, having their shanks pivoted to the bearing ears and above the plane of the guide plate, and the free extremities of the bills of the hooks normally resting upon the inclined guide plate.

No. 68,579. Cream Separator (Separateur pour la crème.)



James M. King, Nebraska City, Nebraska, U.S.A., 30th August, 1900; 6 years. (Filed 13th August, 1900.)

*Claim.*—1st. A cream separator, comprising an outer receptacle, an inner receptacle having a tube or passage open at its upper end to receive water, and communicating through the inner receptacle and with the outer receptacle, a milk tube or passage, carried by the inner receptacle, and discharging at or near the lower end thereof, and means for drawing off the liquid contents of the inner receptacle, and located at or near the bottom thereof, substantially as and for the purpose described. 2nd. A cream separator, comprising an outer receptacle, and an inner receptacle having a dish-shaped top or cover, a tube communicating with an opening formed in the top or cover and also opening into the interior of the outer receptacle, a milk inlet tube extending through the top or cover, and means for drawing off the liquid contents of the inner receptacle, substantially as shown and described. 3rd. A cream separator, comprising an outer receptacle, and an inner receptacle having a vertical tube projecting in opposite directions through the bottom thereof, a removable funnel-shaped cover having its spout communicating with the upper end of the tube, and also a vertical tube extending in opposite directions through the cover, and means for drawing off the liquid contents of the inner receptacle, substantially as shown and described. 4th. A cream separator, comprising an outer receptacle, an inner receptacle fixed to one side of the outer receptacle and spaced above the bottom thereof, the contiguous sides of both receptacles being provided with vertically aligned and glass covered slots, a central tube extending in opposite directions through the bottom of the inner receptacle, a removable funnel-shaped cover for the inner receptacle, the spout of the cover communicating with the upper end of the central tube, a vertical tube extending in opposite directions through the cover and terminating at its lower end near the bottom of the inner receptacle, and a valve or spigot located exteriorly of the device, near the lower end of the inner receptacle, and communicating with the interior of the latter, substantially as and for the purposes set forth.

No. 68,580. Knife. (Couteau.)

Isaac Hirsch, Chicago, Illinois, U.S.A., 30th August, 1900; 6 years. (Filed 12th July, 1900.)

*Claim.*—1st. The method of forming the handle and bolster portions of an article of cutlery, which consists in stamping two scales, which fitted together form said portions, out of sheet metal, forming the cutlery blade with a flat tang of the width and outline of the inner edges of the scales, fastening the scales against opposite sides of the blade, to house and contact with the edges of the tang, and then securing the parts together and hermetically sealing all the joints between them, with molten metal, substantially as set forth. 2nd. The method of forming the handle and bolster portions of an article of cutlery, which consists in stamping two scales, which fitted together form said portions, out of sheet metal, forming the cutlery blade with a flat tang of the width and outline of the inner edges of the scales, fastening the scales against opposite sides of the blade, to house and contact with the edges of the tang, providing a vent



*Claim.*—1st. In a device of the class described, the combination of a standard provided at its upper end with an annular groove and having bearing recesses at the inner and outer walls thereof, a series of anti-friction rolls arranged in said groove and provided at their inner and outer ends with journals fitting in the bearing recesses, the journal of one of the rolls being extended at the outer end thereof, a gear wheel mounted on the extended journal, a vertically adjustable screw, a nut engaging the screw and resting upon the anti-friction rolls, said nut being provided with teeth meshing with the gear wheel and means for rotating the latter, substantially as described. 2nd. In a device of the class described, the combination of a standard provided at its upper end with an annular groove and having bearing recesses at the inner and outer

walls thereof, a series of anti-friction rolls arranged in said groove and provided at their inner and outer ends with journals fitting in the bearing recesses, a vertically adjustable screw, a rotary nut arranged on the anti-friction rolls and engaging the screw, said nut being provided with an exterior annular groove, means for rotating the nut, and a catch constructed of resilient material mounted on the standard and provided at its top with an inwardly extending arm engaging the groove of the nut, said catch being adapted to hold the nut and the screw against outward movement when the device is carried in a horizontal position, and capable of being drawn outward to disengage its arm from the groove of the nut substantially as and for the purpose described.

## TRADE-MARKS

Registered during the month of August, 1900, at the Department of Agriculture—  
Copyright and Trade-Mark Branch.

7428. NOBELS' EXPLOSIVES COMPANY, LIMITED, 195 West George Street, Glasgow, Scotland. Ammunition, 1st August, 1900.
7429. CANADIAN KODAK COMPANY, LIMITED, Toronto, Ontario. Cameras, 1st August, 1900.
7430. }  
7431. } GENERAL ARISTO COMPANY, Rochester, N.Y., U.S.A. Photo-  
7432. } graphic Papers, Instruments, Specialties and Supplies, 1st  
7433. } August, 1900.  
7434. }
7435. }  
7436. } BORDEN'S CONDENSED MILK COMPANY, New York, N.Y., U.S.A.  
Milk, Condensed Milk, Cream, Evaporated Cream, Butter and  
Cheese, 3rd August, 1900.
7437. CHARLES WILLIAM FARRAN GORRELL, Ottawa, Ont. A Chemical Compound designed for the purpose of Washing, Scrubbing and Cleaning, 4th August, 1900.
7438. W. A. ROSS & SONS, LIMITED, William Street, South, Belfast, Ireland. Beverages, Syrups and Cordials, 7th August, 1900.
7439. DENT HARRISON, Westmount, County of Hochelaga, Que. Bakers' Wares and Confectionery, 9th August, 1900.
7440. THE PORTLAND FLOURING MILLS COMPANY, Portland, Oregon, U.S.A. Wheat Flour, 9th August, 1900.
7441. ALBERT S. BLACK, Truro, N.S. Tea, 9th August, 1900.
7442. VERITY PLOW COMPANY, Brantford, Ont. Plows, Scufflers, Land Rollers, Turnip Sowers, Wheelbarrows, Bag Trucks and parts of same, 10th August, 1900.
7443. THE BRITISH CHEMISTS COMPANY, Toronto, Ont. Teething Syrup, 10th August, 1900.
7444. THOMAS ANDERSON TRENHOLME, Montreal, Que. Milk, Cream and Butter, 10th August, 1900.
7445. THE N. K. FAIRBANK COMPANY, Chicago, Illinois, U.S.A. Food Oils and unctious food substances, 11th August, 1900.
7446. CANADIAN KODAK COMPANY, LIMITED, Toronto, Ont., Photographic Papers, Instruments, Specialties and Supplies, 13th August, 1900.
7447. THE CANADA PAINT COMPANY, LIMITED, Montreal, Que. Paints and Oils, 13th August, 1900.
7448. }  
7449. } J. I. FALK AND COMPANY, LIMITED, Sydney, New South Wales.  
Canned Salmon and Salmon Cutlets, 14th August, 1900.
7450. }  
7451. } J. I. FALK AND COMPANY, LIMITED, Sydney, New South Wales.  
Canned Salmon and Salmon Steak, 14th August, 1900.
7452. }  
7453. } ICHTHYOL-GESELLSCHAFT CORDES, HERMANNI AND COM-  
PANY, Hamburg, German Empire. General Trade Marks,  
16th August, 1900.
7454. HENRY G. BAULD, Halifax, N. S. Tea, 20th August, 1900.
7455. VIROL LIMITED, 152-166 Old Street, London, England. General Trade Mark, 23rd August, 1900.
7456. }  
7457. } THE CANADIAN PORTLAND CEMENT COMPANY, LIMITED,  
Toronto, Ont. Cement, 27th August, 1900.
7458. DICK, RIDOUT AND COMPANY, Toronto, Ont. Collar Canvas, 27th August, 1900.
7459. J. I. FALK AND COMPANY, Sydney, New South Wales. Canned Salmon, 27th August, 1900.
7460. ANDREAS LOCHER, Stuttgart, Germany. Pharmaceutical Preparations, 31st August, 1900.

## INDUSTRIAL DESIGNS.

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1689. NORMAN E. WILMOTT, Toronto, Ont. Paper Weight, 3rd August, 1900.
1690. HARRY LENNARD, Dundas, Ont. Shirt Gussets, 3rd August, 1900.
1691. ALBERT B. CAIL, Winnipeg, Man. Souvenir Medal *re* Scott Memorial Orange Hall, Corner Stone laid July 12th, 1900, 3rd August, 1900.
1692. THE BURROW, STEWART AND MILNE COMPANY, LIMITED, Hamilton, Ont. Household Scale, 15th August, 1900.
1693. AMBROSE KENT AND SONS, LIMITED, Toronto, Ont. Pin, Button or Charm, 18th August, 1900.
1694. MACDONALD MANUFACTURING COMPANY, Toronto, Ont. Ornamentation of Tinware *re* Shields and Arms of the Dominion, 22nd August, 1900.
1695. DAVID GILMOUR, Trenton, Ont. Floor Plans for Patent Lumber Mills, 24th August, 1900.
1696. GEORGE CHILLAS, Montreal, Que. Spoons, Forks or similar articles, 24th August, 1900.
1697. RICHARD HEMSLEY, Montreal, Que. Metal Badge or Insignia *re* Children of the Empire, 25th August, 1900.
1698. CAJITAN FOURNIER, Toronto, Ont. Chair, 29th August, 1900.
1699. LAWRENCE CARLYLE REYNOLDS, Toronto, Ont. Curving Edges of a Book, 30th August, 1900.

## COPYRIGHTS

Entered during the month of August, 1900, at the Department of Agriculture—  
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11564. BABY'S OWN NURSERY RHYMES. Barclay, Clark & Co., Toronto, Ont., 1st August, 1900.
11565. O SWALLOW, SWALLOW. From "The Princess." Words by Alfred Tennyson. Music by Arthur Sullivan. The John Church Co., Cincinnati, Ohio, U.S.A., 1st August, 1900.
11566. TEARS, IDLE TEARS. From "The Princess." Words by Alfred Tennyson. Music by Arthur Sullivan. The John Church Co., Cincinnati, Ohio, U.S.A., 1st August, 1900.
11567. THOMSON'S IMPROVED BILL BOOK. The Thomson Stationery Co. (Ltd.), Vancouver, B.C., 2nd August, 1900.
11568. THE CANADIAN MAGAZINE, AUGUST, 1900. The Ontario Publishing Co. (Ltd.), Toronto, Ont., 2nd August, 1900.
11569. MON PREMIER LIVRE. Manuel des Commencants. Par C. J. Magan et J. Ahern. L'honorable J. E. Robidoux, Secrétaire de la Province de Québec, Québec, Qué., 2 août, 1900.
11570. YOU NEEDN'T SAY THE KISSES CAME FROM ME. Words and music by Stanley Carter. The Loomis Music Co., New York, N.Y., U.S.A., 3rd August, 1900.
11571. THE PILOT'S LAST TURN AT THE WHEEL. Words and music by Stanley Carter. The Loomis Music Co., New York, N.Y., U.S.A., 3rd August, 1900.
11572. JUST MY LITTLE YALLER BOY AND ME. Words and music by Stanley Carter. The Loomis Music Co., New York, N.Y., U.S.A., 3rd August, 1900.
11573. WHEN I AM WITH YOU. Words and music by Stanley Carter. The Loomis Music Co., New York, N.Y., U.S.A., 3rd August, 1900.
11574. LOVELL'S MONTREAL DIRECTORY, 1900-1901. John Lovell and Son, Montreal, Que., 3rd August, 1900.
11575. NUGGETS OF GOLD. For Temperance Campaigns. Enlarged Edition. By John M. Whyte. John Marchant Whyte, Toronto, Ont., 3rd August, 1900.
11576. GÉOGRAPHIE. Cours Elémentaire. Nouvelle Édition. Sœurs de la Congrégation de Notre-Dame de Montréal, Montréal, Qué., 3 août 1900.
11577. DEVOIRS DE GÉOGRAPHIE. Cours Moyen et Supérieur. Sœurs de la Congrégation de Notre-Dame de Montréal, Montréal, Qué., 7 août 1900.
11578. RECORD OF SALE OF LANDS FOR ARREARS OF TAXES. The Municipal World, St. Thomas, Ont., 7th August, 1900.
11579. BRITISH GENERALS IN SOUTH AFRICA. (Lithograph.) The Globe Printing Co., Toronto, Ont., 7th August, 1900.
11580. FOR LOVE OR CROWN. By Arthur W. Marchmont. Published in the *Gazette*, Montreal. (Temporary Copyright.) National Press Agency, London, England, 8th August, 1900.
11581. TSIMPSIAN TRIBE. (Photo.) Edwards Brothers, Vancouver, B.C., 9th August, 1900.
11582. WHEN JOHNNY CANUCK COMES HOME. March and Two-Step. By H. H. Godfrey. Whaley, Royce and Co., Toronto, Ont., 9th August, 1900.
11583. A SEMI-DETACHED HOUSE. And Other Stories. By J. Try-Davies. Illustrated by Robert Harris. J. Try-Davies, Montreal, Que., 9th August, 1900.
11584. THE LIFE AGENT'S MANUAL. Richard Wilson-Smith, Montreal, Que., 9th August, 1900.
11585. KITTY CARNELL. Words and Music by Verner J. Cavers. The Bryson-Cavers Co., Toronto, Ont., 10th August, 1900.
11586. ON THE PLAINS OF ARIZONA. Words and Music by Verner J. Cavers. The Bryson-Cavers Co., Toronto, Ont., 10th August, 1900.
11587. CHRISTENTINA BROWN. Words and Music by Verner J. Cavers. The Bryson-Cavers Co., Toronto, Ont., 10th August, 1900.

11588. CANADIAN HEROES. A Patriotic Song. Words and Music by Mrs. J. J. Baker, Sparta, Ont., 10th August, 1900.
11589. THE IMPERIAL IDEA. (Book.) Colin McArthur and Co., Montreal, Que., 14th August, 1900.
11590. MERCHANTS' BOOK OF DISCOUNT STAMPS. The Merchants Discount Stamp Co., Toronto, Ont., 14th August, 1900.
11591. PLAN OF SYDNEY, CAPE BRETON. Albert Almon, Sydney, C.B., N.S., 15th August, 1900.
11592. CANADIAN WILD LIFE. Calendar for 1901. The Publishers Syndicate (Ltd.), Toronto, Ont., 15th August, 1900.
11593. PLAN SHOWING APPROXIMATE POSITION OF MINERAL CLAIMS ON BRITANNIA MOUNTAIN AND SOUTH VALLEY, HOWE SOUND, BRITISH COLUMBIA. Francis Joseph Cleary and George C. L. Miller, Vancouver, B. C., 16th August, 1900.
11594. TWO NOCTURNES. For Piano. By Nathanael Spady, Waterloo, Ont., 17th August, 1900.
11595. PATRIOTIC AND OTHER POEMS. (Book.) By George Munn, Toronto, Ont., 17th August, 1900.
11596. THE SPORT OF RAJAHS. By Lieut.-General R. S. S. Baden-Powell, F.R.G.S. (Book.) George N. Morang & Co., Ltd., Toronto, Ont., 21st August, 1900.
11597. THE MEMBERS OF THE LEGISLATURE OF BRITISH COLUMBIA. (Photo marked A.) John Wallace Jones, Esquimalt Road, B. C., 21st August, 1900.
11598. THE MEMBERS OF THE LEGISLATURE OF BRITISH COLUMBIA. (Photo marked B.) John Wallace Jones, Esquimalt Road, B. C., 21st August, 1900.
11599. LATIN READER. By J. Henderson, M.A., and J. Fletcher, M.A., LL.D. The Copp, Clark Co., Ltd., Toronto, Ont., 21st August, 1900.
11600. WELL DONE. (Illustrated Envelope.) J. C. Wilson & Co., Montreal, Que., 23rd August, 1900.
11601. SOLDIERS OF THE QUEEN. (Illustrated Envelope.) J. C. Wilson & Co., Montreal, Que., 23rd August, 1900.
11602. MAPLE LEAF. (Illustrated Envelope.) J. C. Wilson & Co., Montreal, Que., 23rd August, 1900.
11603. GOD SAVE THE QUEEN. (Illustrated Envelope.) J. C. Wilson & Co., Montreal, Que., 23rd August, 1900.
11604. FALL AND WINTER CATALOGUE, No. 45, 1900-1901. The T. Eaton Co., Ltd., Toronto, Ont., 24th August, 1900.
11605. A MAIDEN FAIR. Waltz. By A. W. Hughes. W. H. Hodgins, Toronto, Ont., 24th August, 1900.
11606. THE PULPIT MEMORANDA. Robert Burns, Harriston, Ont., 25th August, 1900.
11607. HURRAH FOR BRITISH SOLDIERS. Words and Music by J. F. Davis. John F. Davis, Toronto, Ont., 25th August, 1900.
11608. MISS WALKER YOU'RE A CORKER. Popular Song and Chorus. By Morris Manley. The R. S. Williams and Sons Co. (Ltd.), Toronto, Ont., 25th August, 1900.
11609. SOUVENIR BRITISH-BOER WAR: THE EMPIRE'S COMMANDERS. (Album.) Charles Joseph Mitchell, Charlottetown, P. E. I., 25th August, 1900.
11610. THE DEERING ALBUM OF WORLD'S GREATEST GENERALS. The London Printing and Lithographing Co. (Ltd.), London, Ont., 25th August, 1900.
11611. SWEETHEART, SIGH NO MORE! Song with Violin (or Cello) *ad lib.* Words by Thomas Bailey Aldrich. Music by Frederic Field Bullard. The John Church Co., Cincinnati, Ohio, U.S.A., 28th August, 1900.
11612. THE MONK OF THE MOUNTAIN. Words by Arthur Macy. Music by Frederic Field Bullard. The John Church Co., Cincinnati, Ohio, U.S.A., 28th August, 1900.
11613. YOU REMIND ME, SWEETING. Serenade. Words by Richard Hovey. Music by Frederic Field Bullard. The John Church Co., Cincinnati, Ohio, U.S.A., 28th August, 1900.
11614. THE MASTER CHRISTIAN. A Question of the Time. By Marie Corelli. William Briggs, Toronto, Ont., 29th August, 1900.

11615. THE NEW PRIMARY LATIN BOOK. For Elementary and Advanced Classes in High Schools, containing Introductory Lessons, Authors and Prose Composition. By Adam Carruthers, M.A., and J. C. Robertson, B.A. William Briggs, Toronto, Ont., 29th August, 1900.
11616. THE NEW PRIMARY LATIN BOOK. Second Part. Containing Authors and Prose Composition. By Adam Carruthers, M.A., and J. C. Robertson, B.A. William Briggs, Toronto, Ont., 29th August, 1900.
11617. THAT MOST PERSISTENT BEGGAR. By a Commercial Traveller. The Packard Electric Co. (Ltd.), St. Catharines, Ont., 29th August, 1900.
11618. HURRAH FOR THE BOYS IN KHAKI. Words by Fred. W. Adams. Music by Chas. E. Andrews. The R. S. Williams and Sons Co. (Ltd.), Toronto, Ont., 30th August, 1900.
11619. THE ROYAL CANADIANS. March. By Arthur W. Hughes. Whaley Royce and Co., Toronto, Ont., 31st August, 1900.
11620. THE LAW RELATING TO EXECUTORS AND ADMINISTRATORS IN THE PROVINCE OF ONTARIO. By R. E. Kingsford, M.A., LL.B. The Carswell Co. (Ltd.), Toronto, Ont., 31st August, 1900.