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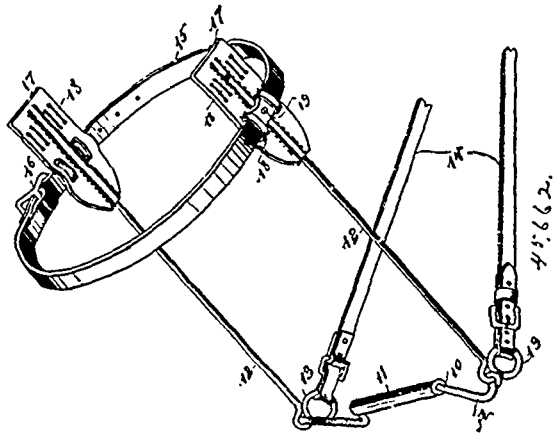
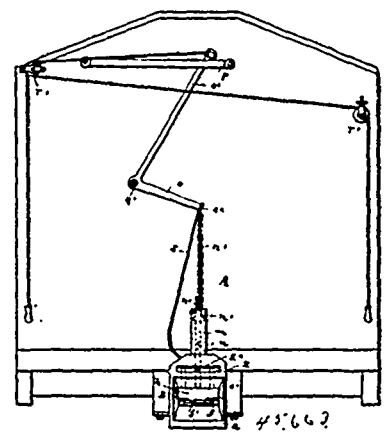
No. 45,662. Over-Draw Check Bit.
(*Mors pour guides d'enrênement*)



Joseph Carter, Blyth, Ontario, Canada, 2nd April, 1894; 6 years.

Claim.—1st. An over-draw check bit, the same consisting of a bit, check sections connected with the bit and adapted for engagement with the over-draw rein, and a nose strap connecting the check sections, substantially as shown and described. 2nd. An over-draw check bit, the same consisting of a bit adapted for independent use, check sections connected with the bit and adapted for connection likewise with the check rein, and a nose piece adjustably connected with the check sections, as and for the purpose specified. 3rd. An over-draw check bit, the same consisting of a bit adapted for independent use, check bars pivotally connected with the ends of the bit and terminating in loops adapted to receive a check rein, a nose strap adjustably connected with the check bars, and means, substantially as shown and described, for maintaining the nose strap in a given position, as and for the purpose set forth. 4th. An over-draw check bit, the same consisting of a bit adapted for independent use, check bars connected with the ends of the bit, being adapted at their lower ends for attachment to the check rein, check pads located upon the upper ends of the check bars, provided with loops and a stud between the loops, and a nose band or strap, adapted to pass through the loops of the check pads and receive the said studs, as and for the purpose specified. 5th. An over-draw check bit, the same consisting of a bit adapted for independent use, having curved extremities and a projecting centre, check bars connected with the ends of the bit and adapted to receive the check rein near said connection, a nose band adjustably connected with and connecting the check bars, and means, substantially as described, for locking the nose strap in a given position, as set forth.

No. 45,663. Car Coupler. (*Attelage de chars.*)



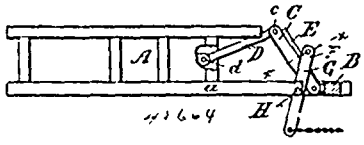
David S. Hutton, Martinsburg, Iowa, U.S.A. 2nd April, 1894; 6 years.

Claim.—1st. In a car coupling, the combination of a two part draw-head, divided longitudinally in a horizontal plane, and provided with a link, a support therefor, and automatic slides for controlling the descent of the coupling-pin, substantially as described. 2nd. In a car coupling, the combination with a draw-head, of a link and spring arms applied to such link and supporting it in normal position for entrance into an adjacent draw-head, and a pin or other fastening for retaining the link within the draw-head independently of the coupling-pin, substantially as described. 3rd. In a car coupling, a draw-head, a link having a cross-bar, a forked spring applied to such link through such cross bar and supporting the link in operative position in the draw-bar, and a pin or other fastening for retaining the link permanently in the draw-head, substantially as described. 4th. In a car coupling, a draw-head, a spring-pressed slide therein, an outer slide movable independently of the inner slide so as to take a position to support the coupling-pin in uncoupled position, and means connecting the inner and outer slides to effect the forward movement of the outer slide to withdraw it from the coupling-pin, and the coupling-pin arranged to descend first upon the inner slide and then through the draw-head in the line of the said slides when released by the successive operations of said slides, substantially as described. 5th. In a car coupling, a draw-head, a coupling-pin therein, an outer slide for supporting the said coupling-pin in uncoupled position, an inner slide for supporting the said pin in position for coupling, and means to actuate said pin and slides for purposes of uncoupling and to present the pin in position for coupling, substantially as described. 6th. In a car coupling, a draw-head, having a link provided with a bevelled outer end and also provided with a cross-bar, combined with a supporting spring

secured to the draw-head and extended through holes in said cross-bar, substantially as described. 7th. In a car coupling, the combination of a draw-head, a slide therein to support the coupling-pin in position for coupling, an outer slide to support the pin wholly outside of the mouth of the draw-head, fingers projecting through the draw-head into the path of movement of the outer slide and adapted to engage said outer slide and move it from beneath the coupling-pin, arranged to descend through the draw-head in line with the said slides, substantially as described.

No. 45,664. Hay Press. (*Presse à foin.*)

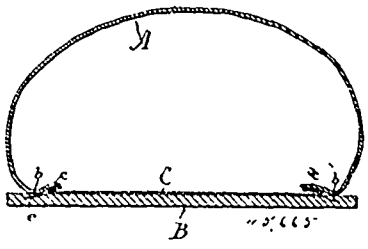
Fig. 1.



Hubert Treffle Chalifoux, St. Hyacinthe, Quebec, Canada, 2nd April, 1894; 6 years.

Claim. The combination, with the box and plunger of a hay press, of the pitman D, pivoted to the said plunger, a link pivoted at one end of the said pitman and at the other end to a cross piece, joining the prolonged sills *a* of the said box, the wedge shape piece E bolted to the said link, the bifurcated double lever G, pivoted between said sills *a*, the roller F, journalled in the upper end of the said lever G, substantially as set forth.

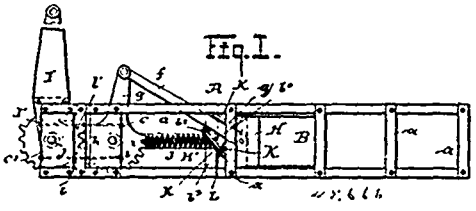
No. 45,665. Shoe. (*Soulier.*)



Edwin L. Goding, Portland, Maine, U. S. A., 2nd April, 1894; 6 years.

Claim.—The herein described turned shoe, having a stay piece extending across the ball of the shoe on the inside of the sole, and stitched or otherwise secured to the inner edges on the upper, the upper being stitched directly to the sole, substantially as described

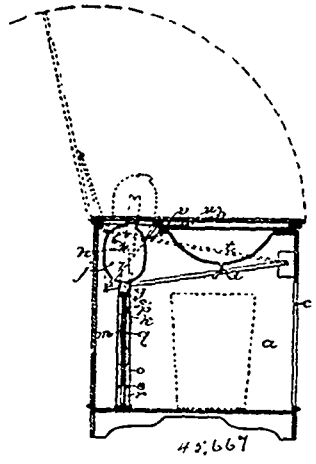
No. 45,666. Hay Press.
(*Presse à foin.*)



Albert G. Wilson, Wolfe City, Texas, U.S.A., 2nd April, 1894; 6 years.

Claim.—1st. In a hay press, the combination with a plunger, and a spring actuated arm connected with the plunger, said arm having a toothed segment thereon, of a draft attachment, having a toothed segment thereon, the teeth of which are divided into segregated sets, whereby a single vibration of the draft attachment will communicate as many vibrations to the spring actuated arm as there are segregated sets of teeth in the segment of the draft attachment, substantially as set for. 2nd. In a hay press, the combination with a plunger, and a toggle lever connected therewith and a toothed segment carried by one arm of said toggle lever, of a tongue, a disc connected ith the tongue and having more than one set of teeth, and a vacant space between said sets of teeth, the teeth of said disc being so constructed and arranged as to prevent the parts of the toggle lever from stopping in alignment with each other, and a spring for returning said plunger, substantially as set forth. 3rd. In a hay press, the combination with a box, plunger and framework of an arm carried by the plunger, a cross-bar carried by the framework and having a notch to receive said arm, plates secured to the cross-bar, and projecting over each arm, a spring secured at one end to said arm in proximity to the plunger and at the other end to the rear end of the framework, and means for operating said plunger to force it forwardly, substantially as set forth 4th. In a hay press, the combination with a framework, a box and a plunger, of a pitman connected to the plunger, a lever pivotally connected to said pitman and carrying a toothed segment at one end, an oscillatory disc having two series of teeth in its periphery and a blank space between said series of teeth, the inner tooth of each series being made shorter than the remaining teeth of the series, and a tongue connected with said toothed disc, and a spring connected at one end with the plunger and at the other end with the framework of the machine, substantially as set forth. 5th. In a hay press, the combination with a box, plunger and pitman, of a brake hinged to the pitman and yielding means for throwing the brake outward in position to strike some rigid part of the machine, substantially as set forth. 6th. In a hay press, the combination with a box, a plunger and an arm or pitman connected with said plunger, of bars hinged to said arm or pitman and projecting toward the plunger, rods or bars secured to the arm or pitman and projecting laterally therefrom and through the hinged bars, and springs encircling said laterally projecting rods or bars and adapted to force the hinged bars against the frame of the box, substantially as set forth. 7th. In a hay press, the combination with a box, a plunger and an arm or pitman connected with said plunger, of bars hinged to said arm or pitman and projecting toward the plunger, rods or bars connected to said arm or pitman and projecting laterally therefrom, and coiled spring encircling said laterally projecting rods or bars and adapted to force the hinged bars outwardly, substantially as and for the purpose set forth. 8th. In a hay press, the combination with a plunger, and framework, of a pitman connected to the plunger, a lever pivotally connected to the pitman, blocks secured to the upper and lower parts of the frame-work, a shaft mounted in said blocks and carrying said lever, a toothed segment at the end of said lever, other blocks secured to the upper and lower parts of the framework, a shaft mounted in said last-mentioned blocks, a toothed disc carried by said shaft and adapted to mesh with said toothed segment, and rods passing through the blocks secured to the upper part of the frame and adapted to brace them and rods passing through the blocks secured to the lower part of the frame and adapted to brace them, substantially as set forth.

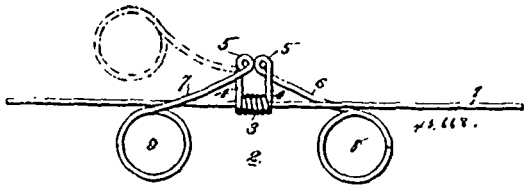
No. 45,667. Wash Stand. (*Lavabo.*)



Henry H. Whitney, of Centreville, Idaho, and William F. Phinney, Standish, Maine, both in the U.S.A., 2nd April, 1894; 6 years.

Claim.—1st. In a wash-stand having a suitable case and a cover hinged to the top thereof, levers pivoted to said case and linked to said cover, a reservoir pivotally mounted on supports attached to said levers, guide plates attached to said levers and having slots therein and lugs attached to said cases and projecting through said slots, as and for the purposes set forth. 2nd. In a wash-stand having a suitable case and a cover hinged to the top thereof, levers pivoted to said case and linked to said cover, a reservoir pivotally mounted on supports attached to said levers, guide plates attached to said levers and having curved slots therein, and lugs attached to said case and projecting through said slots, as and for the purpose set forth. 3rd. In a wash-stand having a suitable case and a cover hinged to the top thereof, levers pivoted to said case and linked to said cover, a reservoir supported on standards attached to said levers, guide plates attached to said levers and having slots therein, and lugs attached to the case and projecting through said slots, a yoke connecting said levers, a hollow tube attached to the bottom of said case, a plunger attached to said yoke and adapted to enter said tube, and the coil spring interposed between the bottom of the case and said yoke, as and for the purposes set forth.

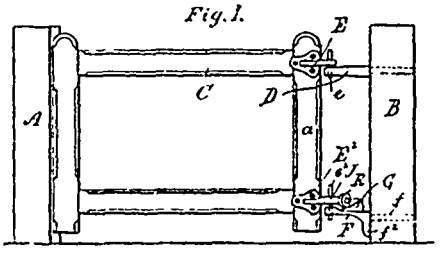
No. 45,668. Clothes Pin. (*Epingle à linge.*)



William C. Popplewell, Eureka Springs, Arkansas, U.S.A., 2nd April, 1894; 6 years.

Claim. 1st. A clothes pin or retainer, formed of a single piece of spring wire, comprising a central sleeve engaging the line, and two opposite spirals engaging a garment and binding it securely upon the line, substantially as described. 2nd. A clothes pin or retainer, formed of a single piece of spring wire, comprising a central sleeve or tube formed by bending the wire spirally, the spring hinges formed also by bending the wire spirally upon itself, and located above the sleeve end at the opposite ends thereof, and spring arms extending longitudinally of the sleeve and outward therefrom, and spirals formed at the ends of each spring arm by convoluting or coiling the ends of the wire, substantially as described. 3rd. A clothes pin or retainer, formed of a single piece of spring wire, comprising a spirally formed tube or sleeve, an arm or brace extending upwardly from each end of said sleeve coils, formed by bending the wire at the upper ends of said arms or braces, longitudinal arms extending divergently downward from said coils, and spirals formed of two or more convolutions or coils, to form longitudinally aligned spaces for the reception of the garment and the line, at the lower and outer ends of the said divergent spring arms, substantially as described.

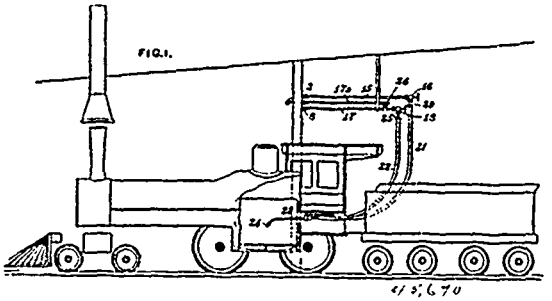
No. 45,669. Gate Hinge. (*Penture de barrière.*)



Joseph Alexis Robillard, St. Andrew, Quebec, Canada, 2nd April, 1894; 6 years.

Claim.—1st. In a gate hinge, the combination with an arm secured to the gate post, carrying at its outer end an eye, and having a semi-circular track formed of two inclined planes meeting at the highest point, of a bracket secured to the style of the gate, having an arm at an obtuse angle to the gate, carrying a pin adapted to engage the said eye, and having a friction pulley on the end of the said arm, adapted to travel on the said track, substantially as set forth. 2nd. In a gate hinge, the combination with the bracket E^2, having a pin e^2, extending both above and below the said bracket, an arm carrying at its end a friction pulley K, of the arm F, having a threaded shank f, and foot f^2, an eye g, adapted to receive the said pin e^2, and the semi-circular track formed of the two inclined planes H and I, substantially as set forth.

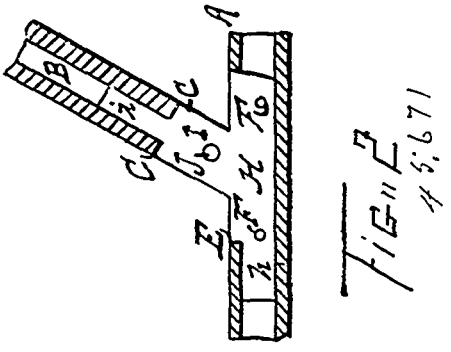
No. 45,670. Locomotive Fire Kindling Apparatus.
(*Allumoir pour locomotives.*)



James McNaughton, Waukeska, Wisconsin, U.S.A., 2nd April, 1894; 6 years.

Claim.—1st. The combination in a fluid distribution apparatus for kindling locomotive engine fires, of a main fuel reservoir, a fuel service pipe leading from said reservoir to a higher level, a delivery pipe leading from the fuel service pipe, a system of piping leading from a source of fluid pressure supply to the main fuel reservoir, and a regulating cock fitted in said system of piping and controlling the application of pressure to fluid fuel in the reservoir for effecting the discharge thereof through the fuel service pipe and delivery pipe, and the release of pressure therefrom for effecting the return of fluid by gravity from the fuel service pipe to the reservoir, substantially as set forth. 2nd. The combination in a fluid distribution apparatus for kindling locomotive engine fires of a main fuel reservoir, a source of fluid pressure supply, a fuel service pipe leading from said fuel reservoir, and provided with delivery pipes at different points in its length, a system of piping connecting the fuel reservoir and source of fluid pressure supply, and a series of regulating cocks controlling said system of piping, whereby the application and release of fluid pressure to and from fluid fuel in the fuel reservoir, for discharge of fluid fuel from a delivery pipe and for return to the reservoir respectively, may be effected at or adjacent to either of the delivery pipes, substantially as set forth. 3rd. The combination in a fluid distribution apparatus for kindling locomotive engine fires, of a main fuel reservoir, a source of fluid pressure supply, a fuel service pipe leading from said fuel reservoir, and provided with delivery pipes at different points in its length, a system of piping connecting the fluid reservoir and source of fluid pressure supply, and provided with a series of fluid pressure delivery pipes at different points in its length, and a series of regulating cocks controlling said system of piping, whereby the application and release of fluid pressure to and from fluid fuel in the fuel reservoir, for discharge from a fuel service delivery pipe and for return to the reservoir respectively, and the coincident institution and stoppage respectively, of a discharge of fluid under pressure from a delivery pipe of the system of connecting piping may be effected at or adjacent to either of the delivery pipes, substantially as set forth. 4th. The combination in a fluid distribution apparatus for kindling locomotive engine fires, of a main fuel reservoir, a source of fluid pressure supply, a connection from the source of fluid pressure supply to the fuel reservoir and to the burner or mixer, and a valve device which controls the passage of fluid under pressure to the reservoir and to the burner or mixer, whereby fluid fuel and fluid from the source of fluid pressure supply are simultaneously delivered to the burner, substantially as set forth. 5th. The combination in a fluid distribution apparatus for kindling locomotive engine fires, of a main fuel reservoir, a fuel service pipe leading therefrom, a supply pressure pipe, a service pressure pipe leading into the main reservoir, a regulating cock controlling communication between the supply pressure pipe and service pressure pipe, and controlling a release port from the service pressure pipe, and a delivery pipe leading from the fuel service pipe, substantially as set forth. 6th. The combination, in a fluid distribution apparatus for kindling locomotive engine fires, of a main fuel reservoir, a fuel service pipe leading therefrom, a supply pressure pipe, a service pressure pipe leading into the main reservoir, a regulating cock controlling communication between the supply pressure pipe and service pressure pipe, and controlling a release port from the service pressure pipe, and delivery pipes leading from the fuel service pipe and service pressure pipe, respectively, substantially as set forth. 7th. The combination, in a fluid distribution apparatus for kindling locomotive engine fires, of a main fuel reservoir, a fuel service pipe leading therefrom, a supply pressure pipe, a service pressure pipe leading into the main reservoir, a series of pipes connecting the supply pressure pipe and service pressure pipe, a series of regulating cocks, each controlling one of said connecting pipes, and controlling a release port from the service pressure pipe, and a series of delivery pipes leading from the fuel service pipe and service pressure pipe respectively, these members being combined for joint operation to admit of the delivery of liquid fuel and fluid under pressure at any desired point of discharge, substantially as set forth.

No. 45,671. Pipe Coupling. (*Joint de tuyaux.*)

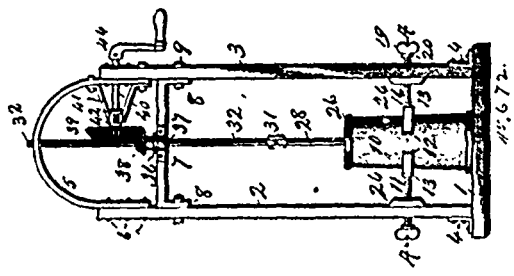


James S. Johnson, Almont, Michigan, U.S.A., 3rd April, 1894; 6 years.

Claim.—1st. A pipe coupling consisting of a pipe slotted through one wall, another pipe slotted at its end, and a sheet metal coupling

adapted to fit in the slots of the two pipes, substantially as shown and described. 2nd. The combination of a pipe A, having a slot E therein, the pipe B having the slot C therein, and the sheet metal coupling H, I, having the extensions *h*, *i*, substantially as shown and described. 3rd. A pipe coupling A, having therein a slot E, pipe B having therein a slot C, and having its ends formed to fit the upper portion of pipe A, and a sheet metal coupling H, I, provided with the extensions *h*, *i*, and with the rivets J, F, substantially as shown and described.

No. 45,672. Churn. (*Baratte.*)



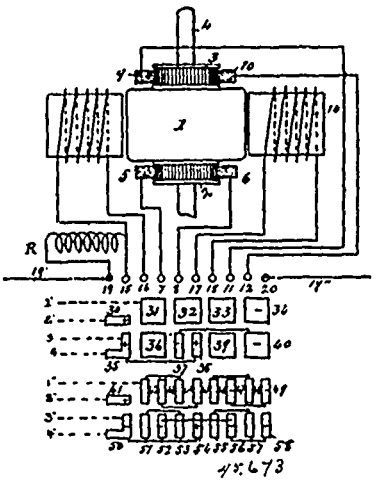
Emmette W. Settle, Cedar City, Missouri, U.S.A., 3rd April, 1894; 6 years.

Claim.—1st. An improved churn, adapted to be mounted upon a base having two upwardly projecting uprights, metallic interiorly screw-threaded bushings located in alignment in said uprights, screw-threaded rods adjustable in said bushings, a V-shaped clamp located upon the inner end of each of said adjusting rods, said rods adjustable independent of any movement of the clamping jaw, and said arms comprising said jaw provided upon their inner sides with projecting teeth made of flexible material, substantially as set forth. 2nd. An improved churn adapted to be held upon a base having two upright standards connected by a curvilinear strip at the upper end, and intermediately by a horizontal cross-piece, said strip and cross-piece providing bearings for a vertically mounted shaft, means for revolving said shaft, the lower end of said shaft squared and provided upon two sides with corrugations, plates having inner corrugated sides secured to the lower end of said shaft, a churn dasher secured to a vertical dasher-rod, the upper end of said rod squared and corrugated and adapted to be held between the corrugate plates secured to the lower end of the driving shaft and held therein by removable thumb screws, substantially as set forth. 3rd. An improved churn adapted to be held upon and removable from a base construction, two upright rectangular standards secured at the ends of said base intermediate of its width, the upper end of said standards connected by a curvilinear strip secured upon the inner sides of said standards, a cross-piece secured to the inner sides of said standards below the curvilinear strip by its downwardly projecting lugs bolted to said standards, bearings provided in said curvilinear strip and cross-piece for a vertical shaft carrying a horizontal pinion, a collar secured upon said shaft adjustable to prevent any downward movement of the shaft and to compensate for its wear and the wear upon the pinion, a vertical horizontally mounted driving-gear adapted to engage said pinion, said gear mounted upon a horizontal shaft secured in bearings provided by a V-shaped bracket secured to the curvilinear strip, and by a metallic bushing projecting through said strip and one of the upright standards, a crank secured upon the projecting end of said shaft, the said upright standards having interiorly screw-threaded metallic bushings located in alignment within same, screw-threaded adjusting rods having mounted on their inner ends V-shaped arms, provided upon their inner sides with projecting teeth made of yielding material, said adjusting rod adjustable in said metallic bushings, and the adjustment of same adapted to hold the churn upon said base, a churn-dasher located in said churn, an upwardly-projecting dasher-rod, said dasher-rod removably secured to the lower end of the vertical driving-shaft, and the revolving of the crank adapted to revolve the churn-dasher, substantially as set forth.

No. 45,673. Electric Motor. (*Moteur électrique.*)

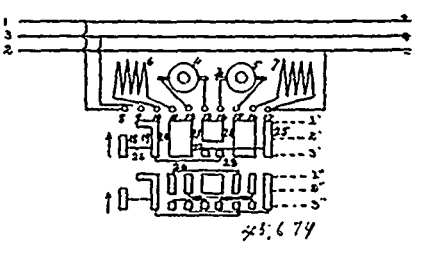
Robert Lundell, Brooklyn, New York, U. S. A., 3rd April, 1894; 6 years.

Claim.—1st. An electric motor having its armature and field magnet each wound with independent sections of coils, in combination with circuit-changing devices for varying the series and multiple-arc relation of the armature-coils, and circuit-changing devices for varying the series and multiple-arc relation of the field-magnet coils, substantially as set forth. 2nd. An electric motor having two or more circuits, each of which circuits includes in series a section of coils on the armature and a section of coils on the field-magnet, in combination with circuit changing devices for varying the series and multiple-arc relation of said circuits, substantially as set forth. 3rd. An electric motor having two or more independent sections of coils on its armature, each connected to a separate commutator, a section of coils on the field-magnet connected in series with each of said armature-sections, and circuit-changing devices for varying the series and multiple-arc relation of the armature and field-sections, substantially as set forth. 4th. The combination, with an electric motor having its armature and its field-magnet each wound with independent sections of coils, of circuit changing devices



connected therewith for simultaneously changing the series and multiple-arc arrangement of the armature-sections and the series and multiple-arc arrangement of the field-magnet coil-sections, substantially as set forth. 5th. The method of regulating the speed of an electric motor, which consists in varying both the series and multiple-arc relation of its armature coils, and the series and multiple-arc relation of its field-magnet coils, substantially as set forth. 6th. An electric motor, having its armature and field-magnet each wound with independent sections of coils, in combination with a resistance in the motor-circuit, circuit changing devices for varying the series and multiple-arc relation of the armature coils, circuit-changing devices for varying the series and multiple-arc relation of the field-magnet coils, and circuit changing devices for cutting said resistance in and out of circuit, substantially as set forth. 7th. The combination of a field-magnet, having several independent coils, an armature having an equal number of coils, a commutator for each armature-coil, and a switch mechanism having contact-plates co-operating with switch-brushes to close the circuit through all the coils in series when in one position and to close the circuit through the coils in multiple arc when in another position, substantially as set forth. 8th. The combination of a field-magnet, having several independent coils, an armature having an equal number of coils, a commutator for each armature-coil, an artificial resistance connected or adapted to be connected to the line-terminals and to a field-terminal, and a switch-mechanism, having contact plates co-operating with switch-brushes to close the circuit through all the coils in series when in one position and to close the circuit through the coils in multiple-arc when in another position, said switch having, also, contacts co-operating with the terminals to which said resistance is connected and arranged to throw the resistance in circuit when the switch is in certain positions and out of circuit when the switch is in other positions, substantially as set forth.

No. 45,674. Electric Motor. (*Moteur électrique.*)

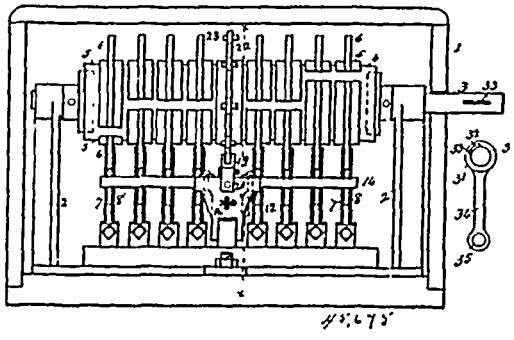


Robert Lundell, Brooklyn, New York, U.S.A., 3rd April, 1894: 6 years.

Claim.—1st. The combination of three or more conductors between different pairs of which different electro motive forces are maintained, a motor having two or more armature-coils, circuit changing devices for connecting said motor at will between different pairs of said conductors, and circuit-changing devices for altering the relation of the armature-coils, substantially as described. 2nd. The combination of three or more conductors between different pairs of which different electro-motive forces are maintained, a motor having two or more armature-coils and an equal number of field-magnet coils, circuit-changing devices for connecting said motor at will

between different pairs of said conductors, and circuit-changing devices for altering the relation of the field magnet and armature-coils, substantially as described. 3rd. The combination, with the positive, negative, and neutral supply-wires, of a motor having one or more field-magnet coils and two or more armature-coils, means for closing the field-magnet circuit at will between two of said wires, and means for connecting the coils in series or in multiple arc, substantially as described. 4th. The combination, with the positive, negative, and neutral supply-wires, of a motor having one or more field-magnet coils and two or more armature-coils, and means for closing the field-magnet circuit at will between the central and outer wires or between the two outer wires, and means for changing the connections of the motor-coils to series or to multiple, substantially as described. 5th. The combination, with the positive, negative, and neutral supply-wires, of a motor having several field-magnet and armature-coils, a switch having contacts which in one position of the switch close circuit between the neutral and an outer wire in series through all the motor-coils, contacts which in a second position of the switch close circuit between the two outer wires through all the coils in series, and contacts which in another position of the switch close circuit between the positive and negative conductors and then throw the motor-coils in multiple arc, substantially as described. 6th. The combination, with the positive, negative, and neutral supply wires, of a motor having several field-magnet and armature coils, a switch having contacts which in one position of the swith close circuit between the neutral and an outer wire in series through all the motor-coils, contacts which in a second position of the switch close circuit between the two outer wires through all the coils in series, and contacts which in another position of the switch close circuit between the positive and negative conductors and then throw the motor-coils in multiple arc, and a similar set of switch-contacts for reversing and governing the motor, substantially as described.

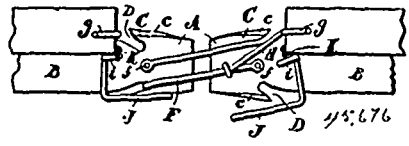
No. 45,675. Switch. (*Commutateur.*)



Robert Lundell, Brooklyn, New York, U.S.A., 3rd April, 1894; 6 years.

Claim.—1st. The combination, in a switch, of a switch member having contacts, a handle for moving it, a spring for throwing said member when the latter has been moved a predetermined distance, a second switch member, and an operating-spring therefor released at or about the same instant that the first mentioned spring throws its switch member, substantially as described. 2nd. The combination, in a snap-switch, of two switch members, one of which is provided with a suitable handle for moving it and with contacts and the other of which has contact devices adapted to make contact therewith, a spring put under tension by movement of the first mentioned switch member and acting on said member to throw it suddenly when the latter has been moved a predetermined distance, a second spring, also put under tension by movement of said first switch member, and means operated by said second spring for throwing the second switch member, whereby the circuit is made and broken by a double spring action, substantially as described. 3rd. The combination, in a switch, of a member in the form of a drum, on the surface of which are contact-plates in two series independent of each other, movable either to the right or to the left at will, co-operating switch-contacts, one or more springs opposing the movement of the movable member, whereby it or they will be put under tension by movement of the switch in either direction, and releasing devices for the springs, substantially as described. 4th. The combination, in a switch, of a body carrying two sets of contact-plates on opposite sides of a median line, respectively, forming one switch member and movable at will either to the right or left, a co-operating switch member having contact devices normally standing on said median line that is between said sets of plates, a spring so connected as to be put under tension by movement of the switch in either direction, an escapement or releasing device for said spring, and means operated by such spring for instantaneously changing the switch connections, substantially as described. 5th. The combination, in a switch, of a body carrying switch contact-plates, pivoted plates or springs adapted to make contact therewith, means for moving the body, a pivoted arm or device having a trip engaging the body, whereby the arm or device is moved by said body, a spring connected to said pivoted arm or device and put under tension by such movement, said trip being made so as to disengage the connection between the body and the said arm or device at a predetermined point, whereby said spring can act, and a strip or bar carried by the pivoted arm and adapted to strike said pivoted contacts, whereby the connection of the switch is instantaneously changed, substantially as described. 6th. The combination, in a switch, of a body, several rows of contact plates thereon, pivoted springs or plates adapted to co-operate therewith, means for moving the body and for putting a spring under tension thereby, and means for releasing said spring, and a striker moved by the spring against the pivoted contact plates or springs, substantially as described. 7th. The combination of a drum or body carrying several contact-plates in the form of curved plates having flanges or webs extending in planes at right angles to the axis of the drum or body and in line with each other, some of said contact-plates being idle, but of the same shape as the other plates, and co-operating pivoted springs adapted to grasp and make contact with the plates, whereby the resistance to motion of the switch-body is the same in all positions, substantially as described.

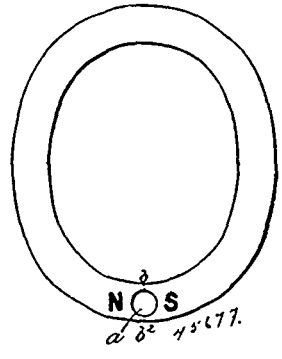
No. 45,676. Car Coupler. (*Attelage de chars.*)



Omer Sevigny and Zacharie Therien, St. Guillaume, Quebec, Canada, 3rd April, 1894; 6 years.

Claim.—1st. A car coupling consisting of the draw-head A, having hooks E formed on its upper and lower surfaces, projections *c* formed on the lip of the said hooks, the bail F pivoted to the said draw head, substantially as set forth. 2nd. In a car coupling device, the combination with a draw head having hooks formed on its upper and lower faces, a bail hinged to the said draw-head, of the rod G journalled on the end of the car having handles *g*, and the arm H engaging one side of the said bail, substantially as set forth. 3rd. In a car coupling device, the combination with a draw-head having hooks formed on its upper and lower faces, a bail pivoted to said draw head, and means for raising and lowering said bail, of the rod I journalled under the end of the car, having a stirrup J, handles *i* at the ends of said rod, and latches K, substantially as set forth.

No. 45,677. Magnet. (*Aimant.*)



The Whitney Electrical Instrument Company of Saco, Maine, assignee of Adrian Hazen Hoyt, Penacook, New Hampshire, U.S.A. 3rd April, 1894; 6 years.

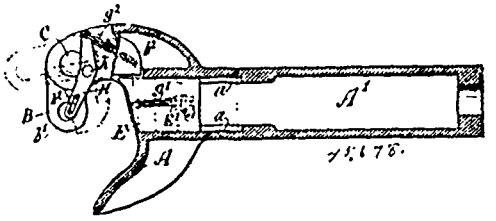
Claim.—A permanent magnet composed of a bar of steel, provided with a substantially circular opening, and having its magnetic poles at opposite sides of and substantially surrounding said opening, substantially as and for the purpose described.

No. 45,678. Car Coupler. (*Attelage de chars.*)

Benjamin M. Whitlock, New York, Richard T. Haines, Frank A. Fox, Augustus Outerbridge and Arthur W. Dodge, assignees of James S. Scott, New York, State of New York, U.S.A., 3rd April, 1894; 6 years.

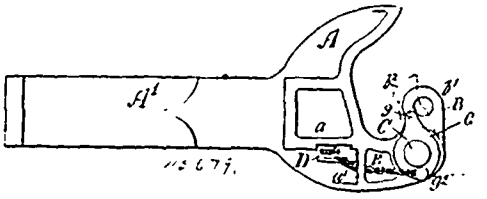
Claim.—1st. The combination with a coupler head, provided with a recess, and a pivoted angular knuckle having a portion capable of swinging into and out of the said recess, of a lock block having its front end pivotally connected to one end of a link, which at the other end is pivotally connected with the coupler-head, substantially as specified. 2nd. The combination with a coupler-head, provided

with a recess and a pivoted angular knuckle having a portion capable of swinging in to and out of the said recess, of a lock block having its front end pivotally connected to one end of a link which



at the other end is pivotally connected to the coupler-head, and inclines for guiding the rear end or heel of the lock block, substantially as specified. 3rd. The combination with a coupler-head, provided with a recess and a knuckle pivotally connected thereto, of a locking device arranged within said recess, a flexible or partly flexible device having two branches directly connected together and independently connected with the lock block and also to the knuckle on one side of its pivot, whereby the lock block may be disengaged from the knuckle and the knuckle opened, substantially as specified. 4th. The combination with a coupler-head, provided with a recess and a knuckle pivotally connected thereto, of a locking device arranged within said recess, a flexible or partly flexible device connected with the lock block, a plate pivoted to the coupler-head on one side of the knuckle pivot, and a connecting part between said plate and the knuckle, whereby the lock block may be disengaged from the knuckle and the knuckle opened, substantially as specified.

No. 45,679. Car Coupler. (*Attelage de chars.*)



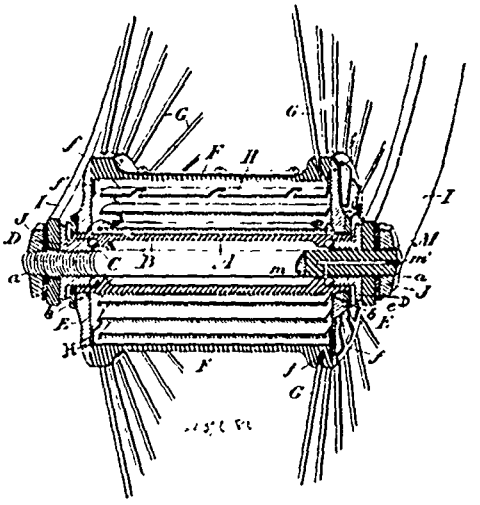
Benjamin M. Whitlock, New York, Richard T. Haines, Frank A. Fox, Augustus Outerbridge, and Arthur W. Dodge, assignees of James S. Scott, New York, State of New York, U.S.A., 3rd April, 1894; 6 years.

Claim. 1st. The combination of a coupler head, a knuckle pivotally connected thereto, and a plate or lever pivotally connected with the coupler-head, and engaged with said knuckle for the purpose of operating the knuckle, substantially as specified. 2nd. The combination with a coupler-head and knuckle pivotally connected thereto, a locking device for said knuckle a plate or lever pivotally connected with the head and connected to the knuckle, and an operating device flexibly connected with the said plate or lever, and with the said locking device, substantially as specified. 3rd. The combination of a coupler head, a knuckle pivotally connected thereto, and a plate or lever secured in place by the pivot of the knuckle and engaged with said knuckle for the purpose of operating the knuckle, substantially as specified.

No. 45,680. Bicycle. (*Bicycle*)

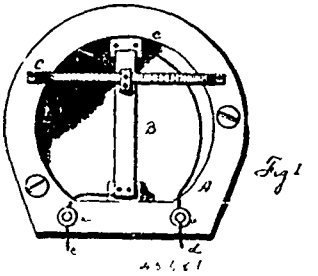
Henry J. Bechtel, George C. Schultz and William D. Schultz, all of Brantford, Ontario, Canada, 3rd April, 1894; 6 years.

Claim.—1st. In a bicycle, the combination with the rim of the wheel, of a flexible cushion capable of diametrical movement extending around the axle between the axle and the rim, as and for the purpose specified. 2nd. In a bicycle, the combination with the rim and axle of the wheel, on which the forks are secured in the usual manner, of a hub rotating on the axle on ball bearings, a cylinder casing situated outside the hub, rotating with it and capable of diametrical movement, and a cushion formed between the hub and the cylindrical casing, as and for the purpose specified. 3rd. In a bicycle, the combination with the rim and axle of the wheel, on which the forks are secured in the usual manner, of a hub rotating on the axle on ball bearings, a cylindrical casing situated outside the hub, rotating with it and capable of diametrical movement and a flat helical spring situated between the hub and the casing and secured to the hub and the casing as shown and for the purpose specified. 4th. In a bicycle, the combination with the rim and axle of the wheel on which the forks are secured in the usual manner, of a hub rotating on the axle on ball bearings, a cylindrical casing situated outside the hub, rotating with it and capable of diametrical movement, a flat helical spring situated between the hub and the casing and secured to the hub and casing, and end discs secured on each end of the hub, as and for the purpose specified. 5th. In a bicycle, the combination with the axle of the wheel on which the forks are secured in the usual manner, of a hub rotating on the axle on ball bearings, a cylindrical casing situated outside the hub, rotating with it and capable of diametrical movement and



the rim formed of wood, having the end of the spokes suitably secured therein, and a band of rubber passed around an annular recess in the rim, as and for the purpose specified.

No. 45,681. Circuit Maker. (*Ferme-circuit électrique.*)



Joseph Weaver, Canandagua, New York, U.S.A., 3rd April, 1894; 6 years.

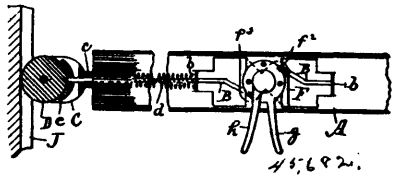
Claim. 1st. A circuit maker comprising a bracket, a conductor secured to one side thereof, circuit wires secured to said bracket, one of which is in contact with the conductor, and means for fusibly holding said conductor out of contact with the opposite wire. 2nd. A circuit maker comprising a bracket, a conductor secured to one side thereof, circuit wires, one of which is in constant contact with said conductor, an arch or arm secured to said bracket, a fusible or combustible fuse secured at one end to the said arch and its opposite end adapted to hold said conductor out of contact with the opposite circuit wire. 3rd. A circuit maker comprising a bracket, provided with binding posts and having means for securing it to the wall, a conductor secured to one side thereof, circuit wires, one of which is in constant contact with said conductor, an arch or arm secured to said bracket, a fusible or combustible fuse secured at one end to said arch, its opposite end secured to the conductor and adapted to hold it out of contact with the opposite circuit wire.

No. 45,682. Curtain Holding Device.
(*Appareil pour tenir les rideaux*)

Edward E. Piper, Portland, Maine, U.S.A., 3rd April, 1894; 6 years.

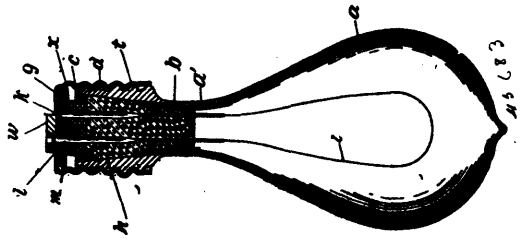
Claim. 1st. In a curtain holding device, the combination of a hollow tube, a spring actuated spindle extending longitudinally through said tube from the end to the centre, a friction tip on the outer end of said spindle, a cam journalled within said tube for retracting said spindle, the journal of said cam being provided at its outer end with a handle lever and a stationary handle opposed to said handle lever and secured to said tube, substantially as described. 2nd. In a curtain holding device, the combination of a hollow tube, a spring actuated spindle extending longitudinally through said tube from each end thereof to the centre, a friction tip on the outer end of each of said spindles, a cam journalled within said tube for retracting said spindles, said cam having two opposite pivoting points to which said spindles are pivoted, the edges of said

cams being cut away adjacent to said points so that they will clear the inner surface of said tube when the cam is rotated to retract



said spindles and two opposite projections on said cams so located as to strike the inside of said tube when the same is rotated in the opposite direction, substantially as described. 3rd. A curtain stick composed of a hollow tube of oblong cross section bent or compressed at the ends to form a bearing for a rod or cylinder, substantially as described.

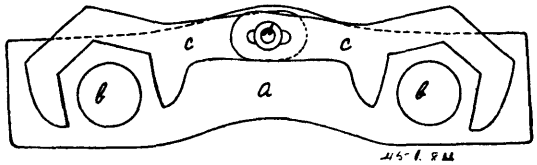
No. 45,683. Incandescent Electric Lamp.
(*Lampe électrique incandescente.*)



Henry Green, Hartford, Connecticut, U.S.A., 3rd April, 1894; 6 years.

Claim.—1st. The herein described incandescent electric lamp, consisting in the combination with a bulb having a stopper-bearing within the neck thereof, of a filament-carrying stopper fitting said bearing within the neck, a constantly-operative stopper-driver substantially as described, and means for forcibly holding the stopper-driver in working position against the stopper, substantially as described and for the purpose specified. 2nd. In a stoppered incandescent lamp, the use of a stopper seated upon a tapered bearing in the neck of the bulb, in combination with a mechanically-active stopper-driving apparatus held in position to bear with a pressure against the stopper, substantially as described and for the purpose set forth. 3rd. In an incandescent lamp of the class specified, the combination with the bulb having the externally-threaded neck and the internally-tapered bearing for a stopper, of the filament-carrying stopper seated on said tapered bearing within the neck of the bulb, a cap engaging said external thread, and a stopper-driver device, substantially as described, intermediate to said cap and the stopper, substantially as and for the purpose herein described.

No. 45,684. Nut Lock. (*Arrête-écrou.*)



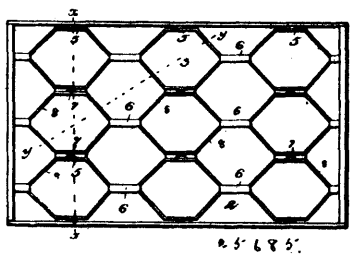
Stephen McLaughlin, Debert Station, and J. Lewis & Sons, Truro, Nova Scotia, Canada, 3rd April, 1894; 6 years.

Claim.—A nut lock comprising washer plate A, locks *c c*, having slots *d*, at one end through which a rivet passes to hold the plate and locks together, and at the other end locks so formed as to set over and hold the nut from turning, all formed, arranged and combined as for the purpose hereinbefore set forth.

No. 45,685. Egg Carrier. (*Boîte à œufs.*)

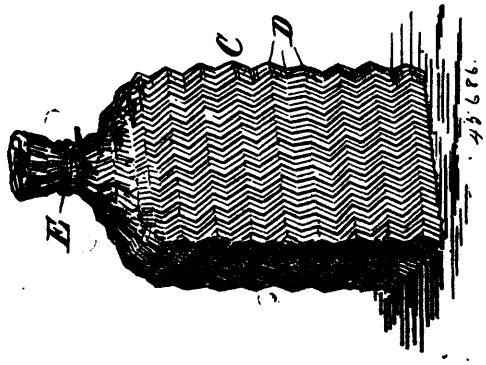
Emery J. Vance and James M. Leaver, Bay City, Michigan, U.S.A., 3rd April, 1894; 6 years.

Claim.—1st. An egg carrier or holder constructed of a single sheet of material and provided with parallel series of cuts arranged at intervals and leaving unsevered portions forming hinges, said sheet being corrugated at right angles to the lines of the cuts and folded at the uncut portions or hinges, whereby oppositely bowed portions are formed to provide cells for the reception of eggs, substantially as described. 2nd. An egg carrier or holder constructed of a single sheet of corrugated material and provided at right angles to the line of corrugations with parallel series of cuts or slits, arranged at intervals and dividing the sheet into strips and leaving uncut portions connecting the strips, said strips being folded at the uncut connecting portions, whereby oppositely bowed portions are brought opposite one another to form cells, substantially as described. 3rd. An egg



carrier or holder constructed of a single sheet of corrugated material and provided with parallel series of slits, arranged transversely of the line of corrugations and dividing the sheets into strips and leaving uncut portions connecting the strips, the cuts or slits of one series being arranged opposite the intervals between the cuts or slits of the adjacent series, and the strips being folded at the uncut portions into vertical positions to form cells, substantially as described. 4th. An egg cell or carrier consisting of a series of corrugated strips, connected at intervals alternately at the top and bottom and having the corrugations arranged opposite one another to form cells, substantially as described. 5th. An egg carrier or holder comprising series of corrugated strips, constructed of a single sheet of material and connected at intervals alternately at the top and bottom and provided at their upper and lower edges with recesses adapted to form ventilator openings, substantially as described. 6th. An egg carrier or holder provided with a series of cells and provided at the upper and lower edges of the sides of the cells with recesses, adapted to form ventilator openings when the carriers or holders are arranged in tiers, substantially as described. 7th. An egg carrier or holder comprising a series of corrugated strips, having oppositely disposed corrugations forming cells and provided at the contiguous portions of the strips with outwardly extending contacting protuberances, forming cushions and separating the strips, substantially as described. 8th. An egg carrier or holder comprising a series of corrugated strips, constructed from a single sheet of material and arranged vertically and connected alternately at the top and bottom by uncut portions and provided at their upper and lower edges with recesses and provided at their adjacent portions with contacting outwardly extending protuberances, separating the strips and forming cushions, substantially as described. 9th. An egg carrier or holder comprising a series of strips, cut from a single sheet of material and connected alternately at the top and bottom by uncut portions, said strips being arranged vertically and being polygonally corrugated and having oppositely disposed bowed or corrugated portions forming cells, substantially as described. 10th. An egg carrier or holder consisting of a series of strips oppositely-bowed to form egg-cells and alternately connected at the top and bottom, substantially as described. 11th. An egg carrier or holder having a series of egg cells and composed of a series of corrugated strips and at its sides with cushioning strips corrugated the reverse of the adjacent strips, whereby when they are folded they will be arranged parallel with the adjacent strips, substantially as and for the purpose described.

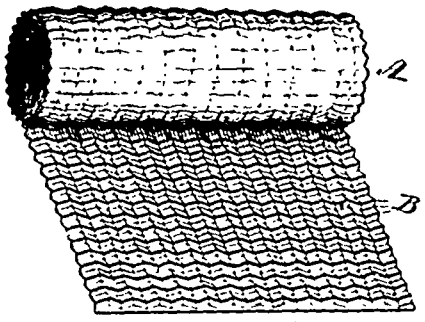
No. 45,686. Crimped Paper Bag.
(*Sac de papier gaufré.*)



The E. B. Eddy Company, assignee of George H. Millen, all of Hull, Quebec, Canada, 3rd April, 1894; 6 years.

Claim.—A paper bag having parallel zig-zag indentations, undulations, corrugations or crimps D, throughout the entire length or portion thereof, said corrugations or crimps U-shaped or V-shaped in crossed section, the depressions on one side forming corresponding ridges on the opposite side of the paper, to permit the bag to elongate and widen, for the purpose set forth.

No. 45,687. Paper for Carpet Linings, Wrappers, &c. (*Papier pour doublure de tapis, enveloppe, etc.*

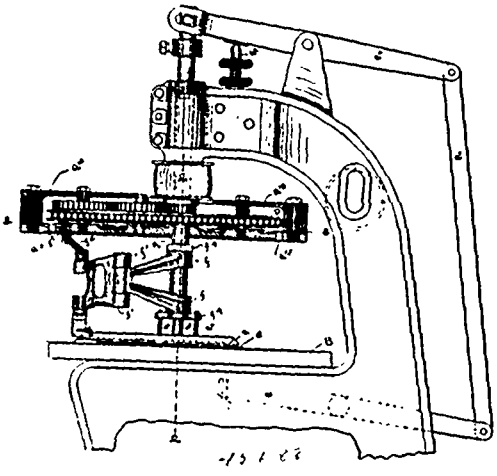


The E. B. Eddy Company, assignee of George H. Millen, all of Hull, Quebec, Canada, 3rd April, 1894; 6 years.

Claim.—A roll or web of paper having a surface indented with parallel zig-zag corrugation or crimps B, U-shaped or V shaped in cross section, the depressions on one side of the paper forming ridges on the opposite side, as set forth, for the purpose described.

No. 45,688. Machine for Cutting Soles, &c.

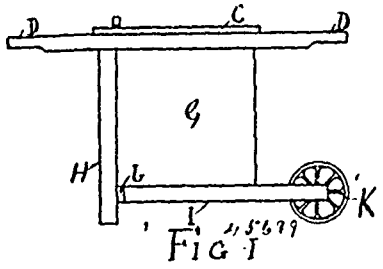
(*Machine pour tailler les semelles, etc.*)



The Canadian Rubber Company, Montreal, Quebec, Canada, assignee of The Wellman Sole Cutting Machine Company, Boston, assignee of Allison Morris Stickney, Medford, both in Massachusetts, U.S.A., 4th April, 1894; 6 years.

Claim.—1st. In a machine for cutting soles and the like, a knife carrier made up of four arms, and a guide piece between the third and fourth arms, the inner arm f movable about an axis, the second arm f^1 hinged to the first arm f, the third arm f^2 hinged to second arm f^1, the fourth arm f^3 hinged to the driving chain, and the arms f^2 and f^3 hinged to the guide piece, all combined and operating, substantially as set forth. 2nd. In a machine for cutting soles and the like, the combination of a permanent form a^{12}, having a path arranged to suit all the sizes and styles of soles for which the machine is adapted, a second form a, having a path nearly approaching the outline of one particular size and style, and a third form a^{11}, whose outline corresponds accurately with the outline of the particular size and style, the second and third forms being detachably connected with the machine, substantially as shown, to be changed at pleasure, all substantially as and for the purpose specified. 3rd. In a machine for cutting soles and the like, the improved form above described consisting of main form a, with inner and outer guiding surfaces and supplemental form a^{11} of thin sheet metal, making a form with three guiding surfaces, two in the main form and the third the edge of the thin sheet metal form, all substantially as and for the purpose specified. 4th. In a machine for cutting soles and the like, knife block K, made in two parts in combination with knife holder k^1, attached by an arm to the upper part of knife block K, a spring between the upper and lower parts of knife block K, and an arm carrying a pattern roller and attached to the lower part of knife block K, all substantially as specified.

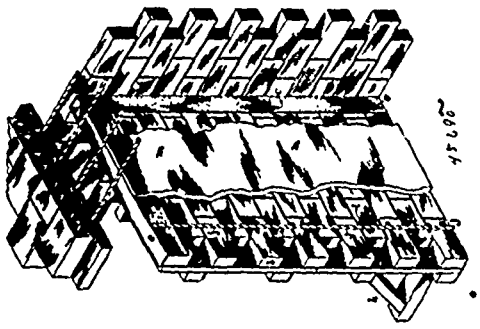
No. 45,689. Ash-Sifter. (*Crible à cendre.*)



Hugh Elias McColl, Toronto, Ontario, Canada, 4th April, 1894; 6 years.

Claim. An ash-sifter and garbage box, comprised of frame and body G, lid C, handles D, wheel K, and sifter I, sliding on strips N, all arranged and combined, as shown and described.

No. 45,690. Partition, &c. (*Partition, etc.*)



Thomas A. Lee, New York, State of New York, U.S.A., 4th April, 1894; 6 years.

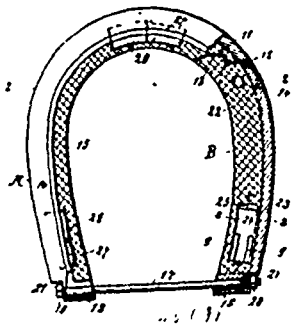
Claim.—1st. A partition or other wall having an interior of tiling or the like, and layers of mortar or other cement with tension rods embeded therein for reinforcing the said morter or cement, whereby the cement and tension rods form, tension and compression members of the structure separated but rigidly united by the said tiling, substantially as and for the purposes set forth. 2nd. A partition or other wall having an interior of tiling or the like with tension rods secured thereto, substantially as and for the purposes set forth. 3rd. A partition or other wall having tension rod secured thereto, substantially as and for the purpose set forth. 4th. A partition or other wall having an interior portion and twisted tension rod and plastering surrounding the said rods and covering the said interior portion, substantially as and for the purposes set forth. 5th. A partition or like wall of tiling or the like provided with channels secured to the ceiling and adjacent walls and embracing the said tiling, and rods secured to the said tiling upon each face of the said wall, substantially as and for the purposes set forth. 6th. A partition or like wall of tiling or the like, a coat of plastering upon each face thereof, tension rods embedded in the said plastering and channels at the junction of the said wall with ceiling, adjacent walls, or doors and other frames embracing the said tiling and embedded in the said plastering, substantially as and for the purposes set forth. 7th. A partition or other wall consisting of an interior portion of tiling and coats of mortar or other cement laid upon each face thereof, and channels secured to the adjacent walls or ceiling and embracing the said interior portion and covered by the said mortar or cement, whereby, the interior portion may be supported in the process of formation by the said channels, and whereby the said coats of mortar or cement form tension and compression members of the structure separated, but rigidly united by a web of tiling and secured to the adjacent wall or ceiling by the said channels, substantially as and for the purposes set forth. 8th. A partition or other wall of tiling or the like provided with channels secured to the ceiling or adjacent walls and embracing the said tiling, and plastering secured to the said wall and covering the said channels, substantially as and for the purposes set forth. 9th. In a wall construction, a frame for doors, windows or other wall openings, consisting of a shell of thin metal provided with flanges fitting the interior portion of the wall, for securing it to the said frame, whereby the said shell may be set up with the interior portion of the wall, and filled in, and the finishing coats of plaster thereafter applied over the said flanges, substantially as and for the purposes set forth.

No. 45,691. Horse-shoe. (*Fer à cheval.*)

Arthur E. Ogden, Ashley, North Dakota, U.S.A., 4th April, 1894; 6 years.

Claim.—1st. A horse-shoe comprising two sections of unequal length and pivoted together, each section being provided with an inwardly and upwardly extending flange, the longer section being

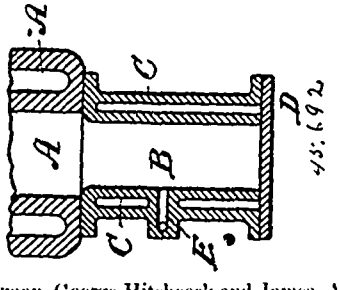
provided with a recess at its pivoted end and the shorter section with a latch head entering said recess, and a rod passing through



apertures in the ends of the said sections, substantially as described. 2nd. A horse-shoe comprising two flanged sections of unequal length and pivoted together, the longer section being provided with a recess, and the shorter section with a latch head entering said recess, detachable toe and heel calks, and a rod passing through sockets in the ends of the sections, substantially as herein shown and described. 3rd. The combination with a horse-shoe provided with an opening extending through the same, from the upper to the tread surface, one end of the opening being dove-tailed in cross section, of a calk having a dove-tailed rib fitting in the dove-tail portion of the said opening, and a tie block fitting in and filling the portion of the opening not occupied by the rib of the calk, said tie block being inserted from the hoof contacting face of the shoe, thereby locking the calking in place, substantially as and for the purposes described. 4th. The combination with a horse-shoe provided with an opening extending through the same from the upper to the tread surface, one end of the opening being dove-tailed in cross-section, and the end of the other portion of the opening being bevelled from the hoof contacting surface of the shoe downwardly, of a calk provided with a dove-tailed rib fitting the dove-tailed portion of the opening, and a rectangular tie block having one end bevelled and fitting in the portion of the opening not occupied by the rib of the calk and locking the same in place, substantially as herein shown and described.

No. 45,692. Oil or Hydro-Carbon Motor.

(*Moteur à huile ou hydrocarbure.*)

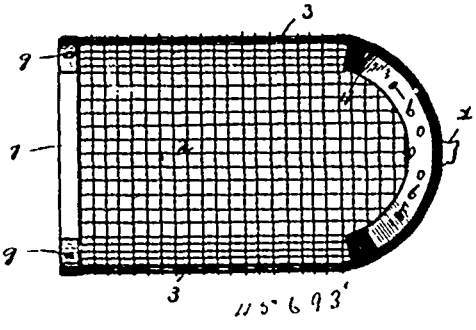


James E. Weyman, George Hitchcock and James A. Drake, all of Guildford, England, 4th April, 1894; 6 years.

Claim.—1st. In an oil or hydro-carbon motor, the combination with the vaporizer of a hot or igniting pipe or tube passing through it. 2nd. In an oil or hydro-carbon motor, the combination with the explosion chamber, of a vaporizing chamber surrounding it, substantially as set forth. 3rd. In an oil or hydro-carbon motor, the combination with the explosion chamber, and a vaporizing chamber surrounding it, of a hot or igniting pipe or tube extending through or across the vaporizing chamber, and connecting with the explosion chamber, substantially as set forth. 4th. In an oil or hydro-carbon motor, the combination with the explosion chamber and a vaporizing chamber surrounding it, of a second vaporizing chamber at the end of the explosion chamber and connected with the first vaporizing chamber and explosion chamber, substantially as set forth. 5th. In an oil or hydro-carbon motor, the combination with the explosion chamber, and a vaporizing chamber surrounding part of it, of another vaporizing chamber connected with it and surrounding the remainder of the explosion chamber, substantially as set forth. 6th. In an oil or hydro-carbon motor, the combination with the explosion chamber and two connected vaporizing chambers of a hot or igniting pipe or tube extending through or across one of the vaporizing chambers and connecting with the explosion chamber substantially as set forth. 7th. In an oil or hydro-carbon motor, the combination with the explosion chamber and two connected vaporizing chambers surrounding different parts of it, of another vaporizing chamber at the end of the explosion chamber, substantially as set forth. 8th. In an oil or hydro-carbon motor, the combination with the explosion chamber of two or more vaporizing chambers, one or more of which may be arranged around or in the cylindrical wall of the explosion chamber, substantially as set forth. 9th. In an oil or hydro-carbon motor, the combination with the explosion chamber and a vaporizing chamber at its end, of a hot or igniting pipe or tube extending through or across the vaporizing chamber, substantially as set forth. 10th. In an oil or hydro-carbon motor, the combination with the explosion chamber and a vaporizing chamber surrounding it, of a non-return admission valve, substantially as set forth. 11th. In an oil or hydro carbon motor, the combination with the explosion chamber and a vaporizing chamber, partly surrounding it, of a non-return admission valve, substantially as set forth. 12th. In an oil or hydro carbon motor, the combination with the explosion chamber and a vaporizing chamber at its end, of a non-return admission valve, substantially as set forth. 13th. In an oil or hydro-carbon motor, the combination with the explosion chamber and a vaporizing chamber surrounding it of a detachable cover closing the ends of the explosion and vaporizing chambers, substantially as set forth. 14th. In an oil or hydro-carbon motor the combination with the explosion chamber a vaporizing chamber surrounding it and another vaporizing chamber at its end of a detachable cover closing both the vaporizing chambers, substantially as set forth. 15th. In an oil or hydro carbon motor the combination with the explosion chamber and two vaporizing chambers surrounding different parts of its cylindrical wall of a cover for closing the ends of the explosion and vaporizing chambers, substantially as set forth. 16th. In an oil or hydro-carbon motor the combination with the explosion chamber and more than two vaporizing chambers surrounding different parts of its cylindrical wall of a cover for closing the ends of the explosion and vaporizing chambers, substantially as set forth.

No. 45,693. Combined Shovel and Sifter.

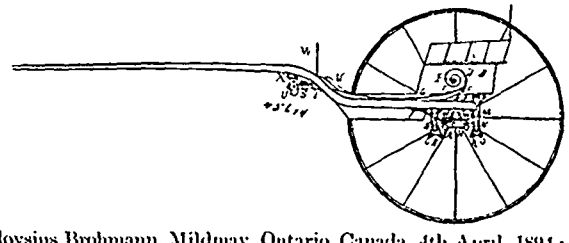
(*Pelle et tamis combinés*)



Charles Tanner, Staunton, Virginia, U.S.A., 4th April, 1894; 6 years.

Claim.- 1st. The combination with a reticulated body part, composing the bottom and side and rear walls, of a shovel, of a rib around the upper edge of the side and rear wals, and plates upon opposite sides of the rear wall enveloping it and the rib, of a false bottom having side walls and everted flanges adapted to overlap the top and front edges of the side walls, and the front edge of the bottom to retain the false bottom in place within the shovel, substantially as specified. 2nd. In a shovel, the combination with a reticulated body, composing the bottom and side and rear walls, of a pair of plates upon the opposite sides of the rear wall, a stiffening rib around the top of the side and rear walls, an edge guard on the front edge of the body part, a handle secured to the rear plates, a false bottom provided with everted flanges adapted to be retained within the shovel and to entirely cover the reticulated part of said shovel, the whole co-operating, when the false bottom is in place, to present an entirely solid interior surface to the shovel, substantially as specified.

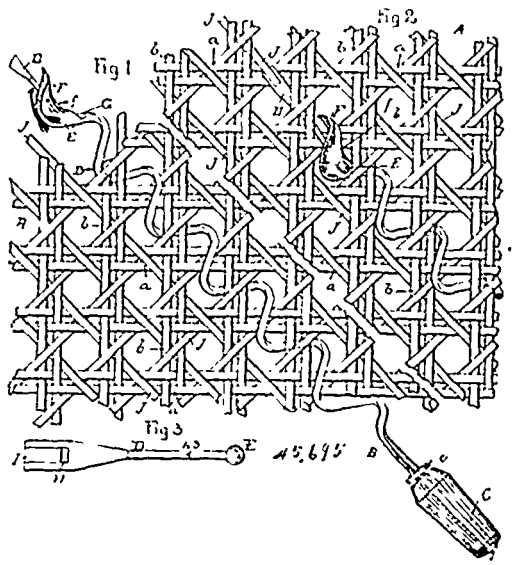
No. 45,694. Road Cart. (*Désobligeante.*)



Aloysius Brohmann, Mildmay, Ontario, Canada, 4th April, 1894; 6 years.

Claim.—1st. The combination of the iron bar H swinging in the two clevises K, K, and the two hooks M, M, in which the two clevises K K hang, substantially as and for the purposes set forth. 2nd. The combination of side bar G, and coiled springs D, substantially as and for the purposes hereinbefore set forth.

No. 45,695. Apparatus for Weaving Strands into Seat Fabrics. (*Appareil pour tisser les fonds de chaises.*)



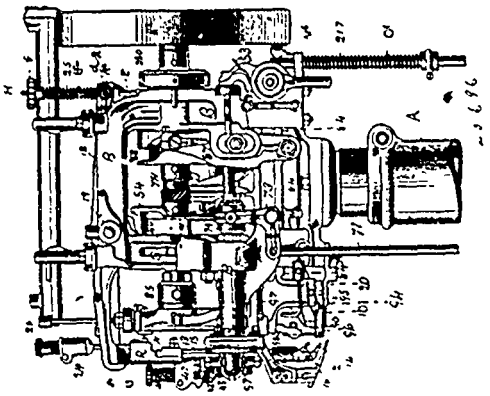
Dwight E. Warfield, Worcester, Massachusetts, U.S.A., 4th April, 1894; 6 years.

Claim. 1st. A spiral needle having an eye and a directing surface, said eye and directing surface being side by side, combined with a strand-carrier loosely held in said eye to operate, substantially as described. 2nd. A spiral needle, combined with a stand carrier loosely connected therewith, whereby the needle may rotate while the strand-carrier with a strand is being passed through the meshes or checks of the fabric, substantially as described. 3rd. A spiral needle, having an eye or opening combined with a strand carrier loosely connected therewith, and having a strand-receiving slot or eye, and grooved or recessed to receive a portion of the strand and act to keep the same in line with the carrier, substantially as described. 4th. A holder or carriage adapted to be reciprocated, and a spiral needle rotatable freely in or with relation to said holder or carriage in one and then in an opposite direction during the introduction and withdrawal of the needle, combined with a strand-carrier loosely connected to said spiral needle, the latter revolving about the longitudinal centre of the strand-carrier, substantially as described. 5th. The combination of a spiral needle having an inwardly curved point and eye or opening back of said point, with a strand-carrier having a ball-like or spherical head and connected loosely with said eye, substantially as described. 6th. A spiral needle having an inwardly curved point and an eye or opening back of said point, and a holder or carriage to receive loosely the shank of said needle to thus enable the needle, while being moved in the direction of the row of meshes or checks to be provided with a strand, to be rotated by pressure against the strands then in place, the point of the needle passing alternately over and under the strands then in place, combined with a loosely connected strand-carrier having a ball-like or spherical head, of flexible body, and a portion provided with a slot or eye for the reception of the strand to be put into the fabric, said needle in operation revolving about said carrier, substantially as described.

No. 45,696. Lasting Machine. (*Machine à enformer.*)

Sherman W. Ladd, Somerville, Massachusetts, U.S.A., 4th April, 1894; 6 years.

Claim.- 1st. In a lasting machine, a one-part lever, as 18, a pincers mechanism jointed to and supported by the lever on one side of the pivotal point, and a yielding connection between the lever on the opposite side of the pivotal point of the lever operating mechanism, through which the lever operating mechanism acts to lift the pincers, substantially as described. 2nd. In a lasting machine, a one-part pivoted lever, as 18, a pincers mechanism jointed to and supported by the lever on one side of the pivotal point, and a spring applied to the lever on the opposite side of the pivotal point, combined with an operating mechanism arranged to engage positively with the lever for moving the same to carry the pincers toward the last and to operate upon the lever through the said spring for moving the pincers mechanism away from the last to stretch the leather, substantially as described. 3rd. In a lasting machine, a pivoted lever, as 18, a pincers mechanism jointed to and supported by the lever on one side of the pivotal point, combined with a spring contracted to a degree of normal tension, as described, and arranged to have engagement with the lever on the opposite side of the pivotal point, and operating mechanism for lifting and depressing the lever, substantially as described. 4th. In a lasting machine, the pivoted lever and pincers mechanism jointed to the lever at one side of its fulcrum, and spring connection applied to the lever on the side of its fulcrum opposite to that to which the pincers



mechanism is applied, an operating mechanism for moving the lever, and adjusting devices situated between the said operating mechanism and the said spring connection, substantially as described. 5th. In a lasting machine, a pivoted lever, a pincers mechanism jointed to and supported by the lever on one side of the pivotal point, a cam and intermediate connections consisting of bar E, spindle H, and spring 25 for lifting and depressing the lever, substantially as described. 6th. In a lasting machine, in combination, the pincers shank 13, and its jaw 14, the pincers shank 13, and its jaws 10, and the collar R secured to the shank 15, substantially as described. 7th. In a lasting machine, the combination of the tilting lever 18, which supports the pincers mechanism, mechanism for tilting such lever to move the pincers as a whole, a driver connected with the movable jaw of the pincers, and a cam for positively moving the said driver independently of the lever 18, substantially as described. 8th. In a lasting machine, the combination of the tilting lever 18, which supports the pincers mechanism, mechanism for tilting such lever to move the pincers as a whole, a driver connected with the movable jaw of the pincers, and a cam for positively moving the said jaw to move it toward the fixed jaw, and a spring interposed between the driver and movable jaw, substantially as described. 9th. In a lasting machine, the combination of a tilting lever 18, which supports the pincers mechanism, mechanism for tilting such lever to move the pincers as a whole, a driver connected with the movable jaw of the pincers, a cam which positively moves the said driver to carry the movable jaw towards the fixed jaw, a spring interposed between the driver and the movable jaw and a spring adapted to open or separate the jaws, substantially as described. 10th. In a lasting machine, the combination of the tilting lever from which the pincers mechanism is supported, the driver for moving the movable jaw of the pincers, the rock-shaft 22, supported to one side of and in bearings projected from the lever 18, and connected with the movable jaw-driver and means for rocking the shaft 22, substantially as described. 11th. In a lasting machine, the combination of the tilting pincers supporting lever 18, the pincers mechanism jointed to and supported on said lever, the reciprocating head 24, connected with the movable pincers jaw, the shaft 22, supported to permit tilting movements in unison with the lever 18, and means for rocking said shaft, substantially as described. 12th. In a lasting machine, in combination with the movable jaw of the lasting pincers, the driver 24, a cam for moving the driver in one direction to close the pincers and a spring for moving the driver in the other direction to open the pincers, substantially as described. 13th. In a lasting machine, the combination of the pincers shank 15, the collar R, the bevelled clip 6, and clamp nuts, substantially as described. 14th. In a lasting machine, the combination with the pincers of a pivoted edge-guide-support, a plurality of edge-guides of different shape or construction carried by the said support and adapted to be brought into operative position, one at a time, and means for holding the support fixed in position with any one of the edge-guides in operative position, substantially as described. 15th. In a lasting machine, the combination with the pincers and the last-rest, of a movable edge-guide support, and a plurality of edge-guides carried thereby and adapted to be brought into operative positions, one at a time, by a movement of the support, the said edge-guides being differently formed or constructed, and a lock for holding the edge-guide support in position with any one of the edge-guides in operative position and the other guides out of operative position, substantially as described. 16th. In a lasting machine, the combination with the pincers of the movable edge-guide support, and a plurality of edge-guides carried thereby, and adapted to be brought into operative positions, one at a time, by a movement of the support, the said edge guides being differently formed or constructed, and a yielding lock or clutch for holding the edge-guide support in position with any one of the edge-guides in operative position and the other guides out of operative or working position and against which the support is moved, substantially as described. 17th. The combination of the pincer mechanism, actuating mechanism for imparting thereto lateral movements in order to plait the upper and a single spring device, interposed

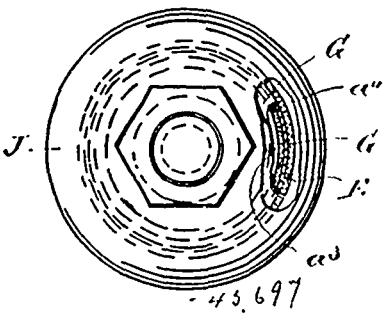
between the said pincer mechanism and its actuating mechanism and constituting a spring-bearing for the actuating mechanism in either direction from the central position, substantially as described. 18th. In a lasting machine, the combination of the pincers, the actuating mechanism for imparting thereto lateral movements for causing the upper to be plaited and a single spring device arranged between the pincers and the said actuating mechanism, and including a rocking connection between the spring member of the device and the said actuating mechanism, arranged to transmit the movements of the actuating mechanism in either direction to the said spring member, substantially as described. 19th. In a lasting machine, the combination of the pincers supported to permit movements in opposite directions for plaiting the upper, the reciprocating, actuating mechanism therefor, a single yielding device interposed between the actuating mechanism and the pincers, including a spring which is put under tension by the said mechanism as it operates to move the pincers in either direction and means for varying the tension of the spring, substantially as set forth. 20th. In a lasting machine, the combination of the pincers, the carrier in which the pincers are mounted, a driver, supported movably in the carrier and arranged to impart lateral movement to the pincers in order to plait the upper, a spring carried by the pincers, and power transmitting mechanism interposed between the spring and the driver and arranged to bear equally upon the said spring, whether the driver be moved in one direction or the other, substantially as set forth. 21st. In a lasting machine, the combination with the pincers, of the reciprocating rod 51, adapted to impart lateral movement thereto, the rocking lever 55, to which the rod is connected and having the arms of equal length, the single spring connected with the pincers, and the bearing carried by the said spring and with which the arms of the said rocking lever are made to bear in whichever direction the rod 51 is moved, substantially as set forth. 22nd. In a lasting machine, the combination of a pincers mechanism and a pivotally connected supporting carrier therefor, a rod 51 supported movably in the carrier, and a yielding power-transmitting mechanism interposed between the rod and carrier, composed of spring 49, levers 43, 45, and supporting studs 41, 42 and 46, substantially as described. 23rd. The combination of the tack hopper shaft, 206, upon which the tack hopper is mounted and recessed or grooved in the direction of its length, whereby it is adapted to be engaged by the shaft, provided with a worm wheel which drives the shaft, 206, the frame work supporting the said shaft and covering the connecting gearing between them and operating mechanism for driving the shaft, substantially as described. 24th. The combination of the tack-hopper 100, the shaft 206 upon which the hopper is mounted, the shaft provided with a worm-wheel which drives the shaft 206, the shaft *h* parallel with the shaft *t*, the connecting gearing between the shafts, the driving shaft 204, connected by gearing with the shaft *h*, the frame-work supporting the said shafts and covering their connecting gearing and the distributing devices for the tacks, substantially as described. 25th. In a machine for conveying tacks, the combination of the tack-hopper, 100, for holding the mass of tacks, the tilting pan, having converging edges, into which the tacks are conveyed from the hopper, the tack chute, into which the pan delivers the tacks, a support for the pan, upon which it is adjustable, and means for securing the pan to support, in the various positions to which it may be adjusted, the said parts being arranged as described, whereby the inclination of the pan to the tack chute may be varied, substantially as described. 26th. The combination of the tack-hopper 100, the pan 209, into which the tacks are slowly conveyed from the hopper, the tack chute, into which the pan delivers the tacks, and means substantially as described for adjusting the position of the pan, relatively to the tack chute, substantially as described. 27th. The combination of the hopper 100, into which a mass of tacks are placed, the chute into which the tacks are conveyed from the hopper, the detachable bridge-block, arranged above the tack chute and having a groove in its side, the screw 305, engageable with the said groove to hold the removable bridge-block in place above the tack-chute, substantially as described. 28th. The combination with the hopper, 100, in which is placed a mass of tacks, the tack chute, into which the tacks are delivered from the hopper, the detachable lid 180, for the tack chute and the lock or holding device for securing the said detachable lid upon the chute, consisting of a stud 181, acted upon by the spring 184, and provided with a pin 183, adapted to engage with the recess in the said lid, substantially as described. 29th. In combination, the revoluble tack distributor 81, the rotating driver-shaft and a yielding clutch interposed between the shaft and distributor, against which the latter is revolved, substantially as described. 30th. In combination, the revoluble tack distributor, its rotation driver shaft, the spring-actuated clutch pin, supported to turn with the distributor and yieldingly engage in a recess of the driver-shaft, against which the distributor is revolved, and means by which the distributor is held against rotation of the driver-shaft, substantially as described.

No. 45,697. Gas Governor.

(*Régulateur de pression pour le gaz.*)

Frank Peterson, Montreal, Quebec, Canada, 4th April, 1894; 6 years.

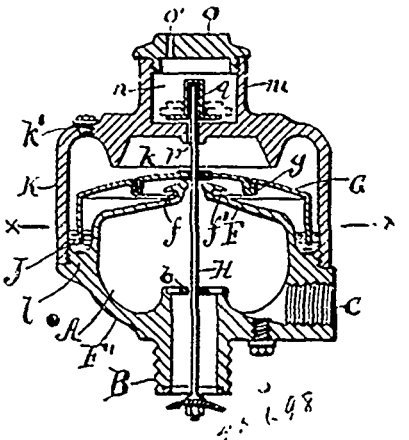
Claim. 1st. The improved gas governor consisting of an integral body part or casing having an inlet in its bottom and an outlet on its side, and provided with an annular trough at its upper end, a centrally perforated and depressed diaphragm extending over the casing and formed integral with the side walls of the same, sealing fluid partially filling the annular trough, an inverted cup-shaped



float arranged above the diaphragm and having its edge playing in said fluid, a valve stem secured to the float and extending downward therefrom through the diaphragm, and into the inlet passage, a valve secured to the lower end of the said stem and adapted to close the lower end of the inlet and a cap secured to the upper end of the casing and provided on its inner side with a depending annular flange of about the same diameter as the diaphragm. 2nd. The improved gas governor consisting of an integral body part or casing having an inlet in its bottom and an outlet on its side, and provided with an annular trough at its upper end, a centrally perforated and depressed diaphragm extending over the casing and formed integral with the side walls of the same, sealing fluid partially filling the annular trough, an inverted cup-shaped float arranged above the diaphragm, having an intermediate downwardly projecting flange or wall and having its edge playing in said fluid, a valve stem secured to the float and extending downward therefrom through the diaphragm, and into the inlet passage, a valve secured to the lower end of the said stem and adapted to close the lower end of the inlet and a cap secured to the upper end of the casing and provided on its inner side with a depending annular flange of about the same diameter as the diaphragm. 3rd. In a gas governor, a float having a central connection with the valve operating stem, an outer downwardly projecting edge playing in the sealing fluid and an intermediate downwardly projecting flange or wall, for the purpose set forth.

No. 45,698. Gas Governor.

(*Régulateur de pression pour le gaz.*

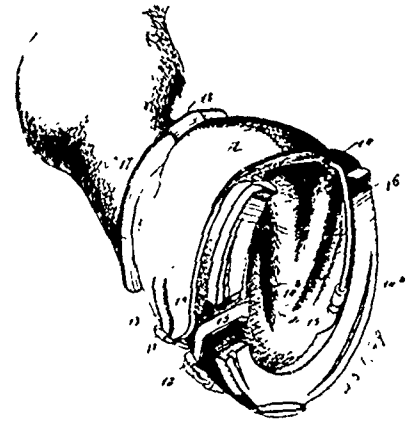


F. Peterson, Montreal, Quebec, Canada, 4th April, 1894; 6 years.

Claim. 1st. The improved gas governor consisting of an integral body part or casing having an inlet in its bottom, an outlet in its side and a top or diaphragm portion, a part of which forms the inner wall of the trough for the sealing fluid, and also having an annular shoulder or projection in the exterior forming the bottom of said trough, a cover provided on its inner side with a depending annular flange, and having a vertical wall portion forming the external wall of said trough and being secured to said shoulder, sealing fluid in the trough so formed, an inverted cup-shaped float arranged above the diaphragm portion of the body and having its edge playing in said fluid, a valve stem secured to the float and extending downward therefrom through said diaphragm portion and into the inlet passage, and a valve secured to the lower end of said stem and adapted to close the inlet. 2nd. The improved gas governor, consisting of a body part or casing having an inlet in its bottom, an outlet on its side and a top or diaphragm portion, the central part of which is perforated and has an external annular recess guarded by a lateral flange, a cover provided on its inner side with a depend-

ing annular flange and secured to the body, an annular trough between said body and cover, sealing fluid in said trough, an inverted cup shaped float arranged above the diaphragm portion of the body and having its edge playing in said fluid, a valve stem secured to the float and extending downward therefrom through the central perforation in said diaphragm portion and into the inlet passage, and a valve secured to the lower end of said stem and adapted to close the inlet. 3rd. The improved gas governor consisting of a body part of casing having a central inlet in its bottom, an outlet in its side and a top or diaphragm portion centrally perforated, a cover centrally perforated and secured to the body or casing, an annular trough between said body and cover, sealing fluid in said trough, an inverted cup shaped float arranged above said diaphragm portion of the body and having its edges playing in said fluid, a valve stem secured to the float and extending through the perforations in the cover and diaphragm portion and downward into the inlet passage, and a valve secured to the lower end of said stem and adapted to close the inlet. 4th. The improved gas governor consisting of a body part or casing forming the gas chamber and having a central inlet in its bottom, an outlet in its side and a top or diaphragm portion centrally perforated, a centralizing guide within said chamber, a cover centrally perforated and secured to the body or casing, an annular trough between said body and cover, sealing fluid in said trough, an inverted cup shaped float arranged above said diaphragm portion of the body, and having its edge playing in said fluid, a valve stem secured to the float and extending through the perforations in the cover and diaphragm portion, and downward through said centralizing guide into the inlet passage, and a valve secured to the lower end of said stem and adapted to close the inlet. 5th. The improved gas governor consisting of an integral body part or casing, having an inlet in its bottom, an outlet in its side, and a top or diaphragm portion, said diaphragm portion having a part which forms the inner wall of the trough for the sealing fluid, and which also has an annular shoulder or projection on its exterior forming the bottom of said trough, and the central part of which diaphragm portion is perforated and has an external annular recess guarded by a lateral flange, a cover provided on its inner side with a depending annular flange, and having a vertical wall portion forming the external wall of said trough and being secured to said shoulder of the diaphragm portion, sealing fluid in the trough so formed, an inverted cup-shaped float arranged above the diaphragm portion of the body and having its edge playing in said fluid, a valve stem secured to the float and extending downward therefrom through the central perforation in said diaphragm portion and into the inlet passage, and a valve secured to the lower end of said stem and adapted to close the inlet. 6th. The improved gas governor consisting of an integral body, part or casing having a central inlet in its bottom, an outlet in its side, and a top or diaphragm portion centrally perforated and having an external annular recess guarded by a lateral flange, a cover centrally perforated and secured to the body or casing an annular trough between said body and cover, sealing fluid in said trough, an inverted cup-shaped float arranged above said diaphragm portion of the body and having its edge playing in said fluid, a valve stem secured to the float and extending through the perforations in the cover and diaphragm portion and downward into the inlet passage and a valve secured to the lower end of said stem and adapted to close the inlet. 7th. The improved gas governor consisting of a body part or casing forming the gas chamber and having a central inlet in its bottom, an outlet in its side, and a top or diaphragm portion centrally perforated and having an external annular recess guarded by a lateral flange, a centralizing guide within said chamber, a cover centrally perforated and secured to the body or casing, an annular trough between said body and cover, sealing fluid in said trough, an inverted cup shaped float arranged above said diaphragm portion of the body and having its edge playing in said fluid, a valve stem secured to the float and extending through the perforations in the cover and diaphragm portion and downward through said centralizing guide into the inlet passage, and a valve secured to the lower end of said stem and adapted to close the inlet. 8th. The improved gas governor consisting of a body part or casing forming the gas chamber and having a central inlet in its bottom, an outlet in its side and a top or diaphragm portion centrally perforated, a centralizing guide within said chamber, a cover secured to said body, an annular trough between said body and cover, sealing fluid in said trough, an inverted cup-shaped float arranged above the diaphragm portion of the body and having its edge playing in said fluid, a valve stem secured to the float and extending downward through the perforations in the diaphram portion and said centralizing guide into the inlet passage, and a valve secured to the lower end of said stem and adapted to close the inlet passage. 9th. The improved gas governor consisting of an integral body part or casing having a central inlet in its bottom, an outlet in its side and a top or diaphragm portion centrally perforated, a cover centrally perforated, provided on its inner side with a depending annular flange, and on its outside with a wall or flange forming an enclosure or weight chamber and secured to the body, an annular trough between said body and cover, sealing fluid in said trough, an inverted cup shaped float arranged above the diaphragm portion of the body and having its edge playing in said fluid, a valve stem secured to the float and extending through the perforations in the cover and diaphragm and downward into the inlet passage, a weight carrier supported on the upper end of said stem within the weight chamber, and a valve secured to the lower end of said stem and adapted to close the inlet passage.

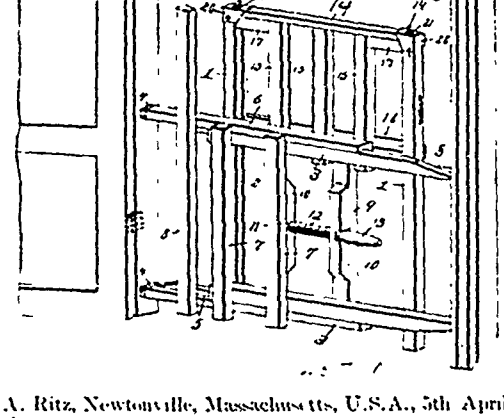
No. 45,699. Quarter Boot. (*Botte de cheval.*)



Joseph Carter, Blyth, Ontario, Canada, 4th April, 1894; 6 years.

Claim.—1st. A quarter boot provided with projections from the lower rear portion thereof, horizontally located and adapted to extend beneath the hoof, and fastening devices adapted to connect the said projections with the body of the boot, as and for the purpose set forth. 2nd. A quarter boot provided with stay rods at the back, whereby the boot is maintained in predetermined shape, and tie rods projected from the back in a forwardly direction beneath the lower portion of the boot, and fastening devices carried by the tie rods and adapted for connection with the body of the boot, as and for the purpose specified. 3rd. A quarter boot provided with a roll or cushion connected with its upper edge, the said roll or cushion being expansible, and tie rods projected from the rear lower portion of the boot in a forwardly direction and adapted to extend beneath the bottom of the hoof, and means, substantially as described, for connecting the outer portions of the said rods with the body of the boot, as and for the purpose set forth. 4th. A quarter boot provided with a tie strap at its front ends and stay rods located at the central portion of the back, stiffening it and preserving the shape at the said point, tie rods projected from the lower back portion of the boot in a forwardly direction, and straps carried by the tie rod, adapted for locking engagement with the front tie strap of the boot, as set forth. 5th. A quarter boot provided with membered stay rod at the central portion of the back, tie rods projected from the lower portion of the back in a forwardly direction, straps connecting the front of the boot, straps connecting the front straps of the boot with the free ends of the tie rods, and an expansible cushion having yielding connection with the upper portion of the boot, as and for the purpose specified.

No. 45,700. Door Fender. (*Défense pour portes.*)

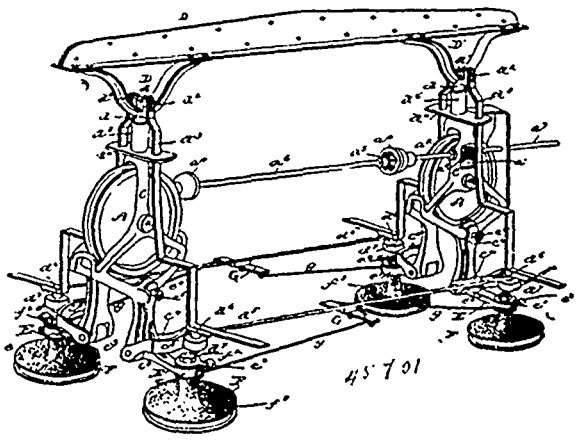


Ira A. Ritz, Newtonville, Massachusetts, U.S.A., 5th April, 1894; 6 years.

Claim.—1st. In a door fender, the combination with a lower stationary section adapted to be inserted in a doorway, and provided with opposite vertical guides, of a vertically movable section arranged in the guides, and means for locking the same in an elevated position, substantially as specified. 2nd. The combination with the opposite vertical guides 1, having their inner sides grooved and their upper ends provided with catches, and the transverse grooved extension-bars 3, having two of their ends projecting beyond one of the guide-bars, of the sliding extension-bars 6, arranged in the grooved bars 3, vertical bars connecting the same, threaded perforations formed in one of the vertical bars that connects the bars 6, and one of those that connects the bars 3, an adjusting screw passing through the perforations, and a sliding

section arranged in the guides and adapted to be engaged by the catches, substantially as specified. 3rd. In a door fender, the combination with the vertical longitudinally grooved guide-bars 1, and means for securing the same in a doorway, of the transverse bars 14 and 16, the intermediate vertical bars 15, and the tenoned blocks 17, arranged at the ends of the bars 14 and 16, and engaging the grooves of the bars 1, and the shouldered spring catches arranged in the upper ends of the grooves and adapted to engage under the tenons of the blocks, substantially as specified. 4th. The combination with the opposite vertical guides 1, and the transverse grooved extension-bars 3, having two of their ends projecting beyond one of the guide-bars, of the sliding extension-bars 6, arranged in the grooved bars 3, vertical bars connecting the same, threaded perforations formed in one of the vertical bars that connects the bars 6, and one of those that connects the bars 3, and an adjusting screw passing through the perforations, substantially as specified.

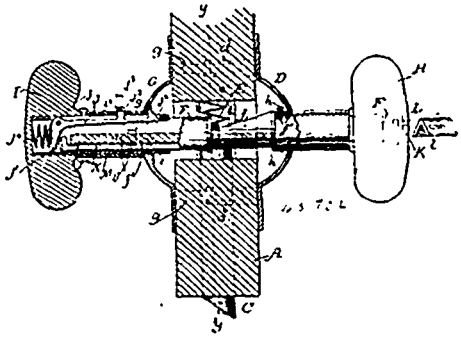
No. 45,701. Railway Car. (*Char de chemin de fer*)



Henry S. Pruyn, Hoosick Falls, New York, U.S.A., 5th April, 1894; 6 years.

Claim.—1st. In a railway car, the combination with a truss or frame carrying depending bars for supporting the floor and seats, of a frame or truck at each end of said truss and having a swivel connection therewith and each carrying a traction wheel, substantially as described. 2nd. In a railway car, the combination with a truss or frame carrying means for supporting the car body, of a swivelled truck at each end of the truss and having a traction wheel, and a spring cushion interposed between the truck and truss, substantially as described. 3rd. In a railway car, the combination with a truss or frame and two trucks swivelled to it, and each carrying a traction wheel, of gears on the axles of said wheels, worm shafts meshing with the gears and an intermediate shaft having flexible joint connections with the worm shafts. 4th. In a railway car, the combination with a truss or frame and depending bars therefrom on each side for supporting the car body, of swivelled trucks between said bars carrying traction wheels, substantially as described. 5th. In a railway car, a truss or frame having two bifurcated trucks swivelled to it carrying traction wheels in in bearings between the arms of said trucks, substantially as described. 6th. In a railway car, the combination with a truss or frame having two bifurcated trucks swivelled to it and carrying traction wheels, of lateral guide wheels also carried by said trucks, as and for the purpose set forth. 7th. In a railway car, the combination with a truss or frame having two bifurcated trucks swivelled to it and carrying traction wheels, of lateral guide wheels mounted in vertical bearings yieldingly connected to said trucks. 8th. In a railway car, the combination with a truss or frame having two bifurcated trucks swivelled to it and carrying traction wheels on bearings between the arms of said trucks, of bearings pivotally connected to said arms, guide wheels mounted in said bearings and springs forcing said bearings in one direction, substantially as described. 9th. In a railway car, the combination with the traction wheels and frame thereof, of guide wheels mounted in substantially vertical bearings, and having their upper surfaces provided with an insulating covering, substantially as described. 10th. In a railway car, the combination with two traction wheel trucks pivotally connected to a uniting frame or truss of lateral guide wheels carried by said trucks, a lever with lateral arms extending from said trucks. 11th. In a railway car, the combination with two traction wheel trucks pivotally connected to a uniting frame or truss, and having outwardly projecting face plates, of a body frame depending from the truss on each side of the trucks and having stops to rest against said face plates. 12th. In a railway car, the combination with two traction wheel trucks pivotally connected to a uniting frame or truss and having outwardly projecting curved face plates, of a body frame depending from the truss on each side of the trucks and having rollers engaging said face plates, substantially as described. 13th. In a railway car, the combination with two traction wheel trucks pivotally connected to a uniting frame or truss, of gears on the axles of the traction wheels, shaft sections a^2, having worms a^3, the gears and worms being on opposite sides of the traction, two traction wheels, an intermediate shaft section, and universal joint connections between it and the end sections a^2. 14th. The combination with the pivoted trucks C, having traction wheels and gears A, a^1, of the worm shafts having internally toothed pinions a^4, and the shafts a^5, having pinions a^6, entering and engaging pinions a^4, substantially as described. 15th. The combination with the truss D, having brackets D^1, provided with bosses d, and bearings d^1, of the trucks C, having pintles c fitting said bearings, and coiled springs c^1 surrounding said pintles below the bosses, substantially as described. 16th. The combination with the truss D, having brackets D^1, provided with bosses d, bearings d^1, shoulder d^2, and step bars d^3, of the cross braces d^4, having sleeves d^5, receiving the bosses d, the trucks C, having pintles c, and stop pins c^1, and springs c^2, enclosed within sleeves d^5, substantially as described. 17th. The combination, with the bifurcated trucks C, having wheels and jaws c^5, of elbow arms E pivoted on pins c in said jaws, and carrying wheels F at their lower ends, and springs c^6, between their upper ends and the sides of the trucks, substantially as described. 18th. The combination, with the arms E having insulating bearings, of the wheels F provided with axles fitted to said bearings and having metallic clips e^3, substantially as described. 19th. The combination, with the car frame carrying guide wheels F, of the oil drip cups H secured to their lower surfaces, and having annular oil receptacles h^1, substantially as described. 20th. In a railway car, a truck provided with an upper vertical wheel and a lower horizontal wheel, the two wheels adapted to run respectively on upper and lower rails and the lower wheels provided with horizontal flanges embracing the rail, in combination with the car body pivoted to said truck by a joint located above the upper wheel and constructed to permit movement of the parts in a vertical plane and in the direction of the rails or road bed. 21st. In a vehicle, the combination with two independently pivoted trucks, of a system of levers connecting them, whereby the wheels connected with the respective trucks on the same side of the vehicle will act upon each other to cause a movement toward or away from each other, substantially as described.

No. 45,702. Latch and Lock. (*Loquet et serrure.*)

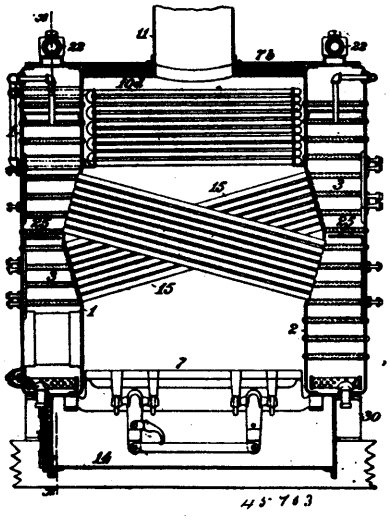


John Edward Armstrong, Santa Cruz, California, U.S.A., 5th April, 1894; 6 years.

Claim.—1st. In a latch, the combination of the latch having a shank with a slot, the knob spindle having a cam, and the swinging lever pivotally hung at one end and engaged near its centre by the cam, and having its free end engaging the slot of the latch shank, said lever being adjustable in or out to suit different thicknesses of doors, substantially as herein described. 2nd. In a latch, the combination of the latch having a shank with a slot, the knob spindle having a cam, and the swinging lever actuated by the cam and engaging the slot of the latch shank, said lever having a screw adjustment at its suspended to suit different thicknesses of doors, and knobs secured to and adjustable in or out upon the spindle, substantially as herein described. 3rd. In a latch, the combination of a latch, a lever suspended from one end, the outer rose plate having the posts fitted to the door and upon one of which posts the lever is hung, the inner rose plate having the screws seated in the posts of the outer rose plate, a knob spindle and connections between said spindle and the latch to operate said latch, substantially as herein described. 4th. In a latch, the combination of the latch having a shank with a slot, the rose plate having a post fitted to the door, a lever pivoted at one end on said post, and having its opposite free end engaging the slot of the latch shank, and a knob spindle having a cam actuating said lever, substantially as herein described. 5th. In a latch, the combination of a latch having a shank with a slot, the rose plate having a post fitted to the door and externally threaded, a lever screwed upon said post and adjustable thereon, said lever engaging the slot of the latch shank, and a knob spindle having a cam actuating said lever, substantially as herein described. 6th. In a latch and lock, the combination of a latch, a knob spindle for actuating said latch, a knob within a sleeve fitted upon and secured to the spindle, a swinging spring-controlled locking arm mounted in the knob sleeve and having a hook pawl playing through said sleeve, a rose plate having notches with

which said hook pawl engages to lock the spindle, and a finger lug on the locking arm projecting through the knob sleeve whereby the hook pawl may be disengaged from the rose-plate, substantially as herein described. 7th. In a latch and lock, the combination of a latch, a knob spindle for actuating said latch, a knob with a sleeve fitted upon and secured to the spindle, a swinging-spring controlled locking-arm mounted in the knob sleeve and having a hook pawl playing through said sleeve, a rose-plate having notches with which said hook-pawl engages to lock the spindle, a finger lug on the locking-arm projecting through the knob sleeve whereby the hook pawl may be disengaged from the rose-plate, and a turnable band on the sleeve adapted to press down the finger lug, substantially as herein described. 8th. In a latch and lock, the combination of a latch, a knob spindle for actuating said latch, a knob with a sleeve secured to the spindle, a swinging-spring controlled locking-arm mounted in the knob sleeve, and having a hook pawl playing through said sleeve, a rose-plate having notches with which the hook-pawl engages, and a finger lug on the locking-arm playing through the knob sleeve and having a hole to receive a pin whereby the locking-arm may be held from moving, substantially as herein described. 9th. In a latch and lock, the combination of a latch, a knob spindle for actuating said latch, an inner knob with a sleeve fitted upon and secured to the spindle, a swinging-spring controlled locking-arm mounted in the knob sleeve and having a hook-pawl playing through said sleeve, a rose-plate having notches with which said hook-pawl engages and a slidable push-rod seated in the knob spindle and having its inner end adapted to engage the locking-arm and to move it to effect the disengagement of its hook-pawl from the rose-plate, substantially as herein described. 10th. In a latch and lock, the combination of a latch, a knob spindle for actuating said latch, an inner knob with a sleeve fitted upon and secured to the spindle, a swinging-spring controlled locking-arm mounted in the knob sleeve and having a hook-pawl playing through said sleeve, a rose-plate having notches with which said hook-pawl engages, a slidable push-rod seated in the knob spindle and having its inner end adapted to engage the locking-arm and to move it to effect the disengagement of its hook-pawl from the rose-plate, and an outer knob, having a key-hole whereby a key may be inserted to engage the outer end of the push-rod and operate it, substantially as herein described.

No. 45,703. Steam Boiler. (*Chaudière à vapeur.*)



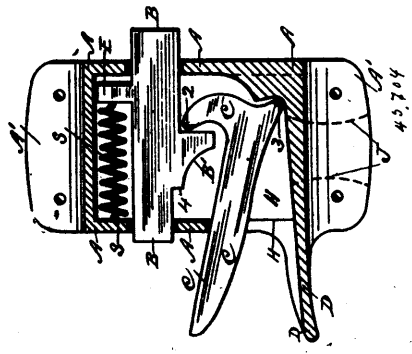
Henry A. Laughlin, Pittsburgh, Pennsylvania, U.S.A., 5th April, 1894; 6 years.

Claim.—1st. The combination, in a steam boiler, of two cylindrical heads, having substantially horizontal axes, inclined water tubes connecting said heads, a fire chamber intermediate between the heads and a lower grate in said fire chamber, substantially as set forth.

No. 45,704. Sash Lock. (*Arrête-croisée.*)

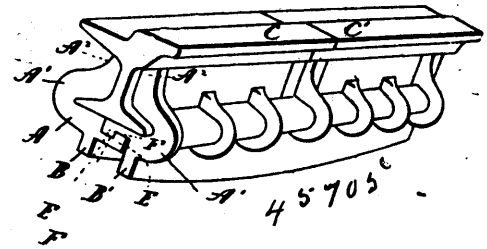
Willoughby Moffat, Hamilton, Ontario, Canada, 5th April, 1894; 6 years.

Claim.—1st. The casing A., having upper and lower eliptical flanges A^1, and finger projection D., and recessed out with side openings for lever C, and the bolt B, which is formed with an upper projection and stop E, and lower projection B^1, to act as stop 4, and surface for the engagement of the rounded point 2, of the lever, said lever having a rounded lateral end 3, with casing to conform to same shape as fulcrum therefor, in combination with tension spring S, the ends of which are centrally located to engage with the said stop E, and upper inner side of said casing, the hind flush plate 4, and the dust channel J, substantially as described and set forth. 2nd. The combination with the recessed casing, having side projection D, and openings, and provided with bolt, having upper stop E, and lower stop B, the lever C, arranged to engage with said lower bolt stop at 2, and the tension spring S, the ends of which are



centrally located, substantially as described and set forth. 3rd. The combination of the casing A, having flanges A^1, and dust channel J, with the bolt, having upper and lower stops, the tension spring and the flush hind plate H, substantially as described and set forth. 4th. The combination of the casing A, having flanges A^1, and projection D, the bolt, having upper and lower stops, the tension spring S, and the lever C, arranged to engage with said lower stop, substantially as described and set forth. 5th. In a lock casing, a dust escape channel located in the lower part of said casing, substantially as described and set forth.

No. 45,705. Rail Joint. (*Joint pour rails.*)



Clarence Leroy Wheeler, Marion, Indiana, U.S.A., 5th April, 1894; 6 years.

Claim.—1st. A rail-joint composed of two longitudinal members adapted to be coupled together on the draw principle below the bearing of the rail-ends, and each having a depending truss extending throughout its length below the said bearing and below the line on which they are coupled together, substantially as described. 2nd. A rail-joint composed of two longitudinal members adapted to be coupled together on the draw principle at a point below the bearing for the rail-ends, and each having a depending truss extending throughout its length below said bearing and below the line on which they are coupled together, and each having also inwardly extending upwardly projecting fingers adapted to impinge against the webs of the rail ends, substantially as described. 3rd. A rail-joint composed of two longitudinal members adapted to be secured together on the draw principle below the bearing of the bases of the rail-ends, and each having a depending truss extending throughout its length at a point below the said bearing and the line on which they are united, and each having also transverse reinforcing ribs located above the said trusses, substantially as described. 4th. A rail-joint composed of two longitudinal members coupled together on the draw principle at a point below the bearing for the bases of the rail-ends, and each having a longitudinal truss extending throughout its length and located below the said bearing and below the said joint on which the two members are united, and each member being adapted also to impinge against the respective faces of the webs of the rail-ends and the upper faces of the bases thereof, substantially as set forth.

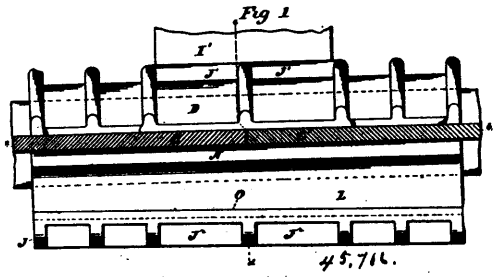
No. 45,706. Rail Joint. (*Joint pour rails.*)

Clarence Leroy Wheeler, Marion, Indiana, U.S.A., 5th April, 1894; 6 years.

Claim.—1st. A cable-road rail-joint having a chair provided with a solid or jointless seat for the rail-ends to rest upon, and constructed with an opening intersecting the said seat from below to receive the end of a yoke or girder, in combination with a draw-clamp adapted to be applied to the upper face of the chair, substantially as described. 2nd. A cable-road rail-joint, having a chair provided with a longitudinal seat intersected from below by an opening adapted to receive an end of a yoke or girder, and constructed with a flange overhanging the said seat on one side thereof, in combination with a draw-clamp adapted to be applied to the opposite side of the chair, and constructed to be positively drawn inward and downward, substantially as described. 3rd. A cable-road rail-joint, having a chair provided with a solid or jointless seat intersected from below by an

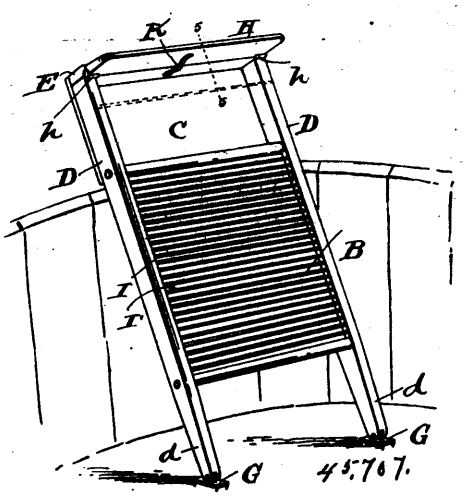
opening to receive one end of a yoke or girder, and provided with a flange overhanging the seat from one side thereof, and constructed

Fig 1



with transverse and longitudinal ribs for reinforcing it, in combination with a draw-clamp adapted to be applied to the chair on the opposite side of its seat, substantially as described.

No. 45,707. Wash-Board. (*Planche à laver.*)



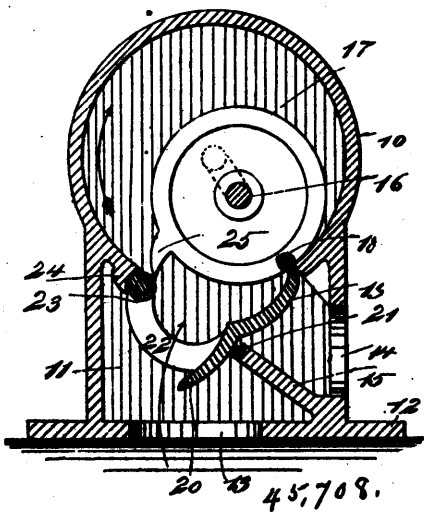
Charles Thomas Brandon, Akron, Ohio, U.S.A., 5th April, 1894; 6 years.

Claim.—1st. A wash-board having its rubbing surface composed of metallic bars suitably secured to the back-board of the device, substantially as set forth. 2nd. A wash-board, having its rubbing surface formed by metallic bars suitably secured to the back-board of the device, said bars being arranged at suitable intervals and widthwise of the back-board, substantially as set forth. 3rd. A wash-board having its rubbing-surface formed of metallic bars suitably arranged upon and dove-tailed into the back-board of the device, substantially as set forth. 4th. A wash-board, having its rubbing-surface formed of metallic bars arranged at suitable intervals upon and suitably secured to the back-board, said bars having notches at suitable intervals lengthwise thereof, and the bars being notched in such a manner that the notches in one bar shall be located intermediate of the notches in the adjacent bars, substantially as set forth. 5th. A wash-board, having legs provided with feet that are pivotally secured to the legs and provided with teeth on their under side, substantially as set forth. 6th. A wash-board, having the protecting apron or guard at the head of the device hinged thereto, and capable of folding or closing against the side-pieces of the device, substantially as set forth. 7th. In a wash-board, the combination, with the protecting apron or guard H hinged to the head-piece of the device, as at *h*, of the spring I, pivoted as at I^1 to the head piece of the device, substantially as shown and described. 8th. In a wash-board, the combination, with the side-pieces D, D, and the head-piece E recessed, as at *e*, of the protecting apron or guard H rounded at its inner longitudinal edge, as at H^1, and suitably hinged to the aforesaid head-piece, said apron or guard adjacent its rounded longitudinal edge, having a shoulder adapted to engage the upper longitudinal edge of the head-piece, and the arrangement of parts being substantially as shown, for the purpose specified.

No. 45,708. Pump. (*Pompe.*)

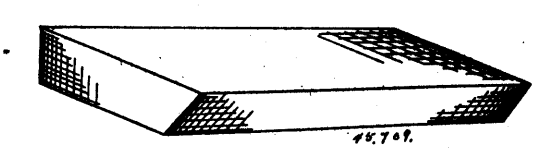
Charles Rumley, Helena, Montana, U.S.A., 5th April, 1894; 6 years.

Claim.—1st. A rotary pump comprising a cylinder having inlet and discharge ports, an oscillating valve fulcrumed on the cylinder and adapted to swing opposite the inlet and discharge ports, the said valve being composed of an imperforate upper portion and an apertured or ported lower portion, and a revoluble piston held to turn eccentrically in the cylinder, the piston being pivoted to one end of the valve, substantially as described. 2nd. A rotary pump comprising a cylinder having suitable inlet and discharge ports, an oscillating valve fulcrumed in the cylinder between the ports so as to swing opposite the same, the valve having a port which is oppo-



site and open to the inlet port, and a revoluble piston at one end of the valve adapted to follow the wall of the cylinder and fit against the inner face of the valve, substantially as described. 3rd. A pump comprising a cylinder having an inlet and discharge port separated by a partition, a rotating piston held in the cylinder, and a valve pivoted to the piston and to the cylinder at the edge of one of the ports, the valve having a slide thereon to move the partition and openings therein near the end which is pivoted to the cylinder, substantially as described. 4th. A pump comprising a cylinder having an inlet and discharge port therein, a rotary piston held to travel around within the cylinder, and a valve pivoted to the piston and to the cylinder at the edge of one of the ports, the valve having an imperforate end opposite one port and a ported or open end opposite the other port, substantially as described. 5th. The combination with the pump cylinder having the inlet and discharge ports therein, of a rotating piston, the valve pivoted to the piston and to the cylinder so as to oscillate opposite the parts, and the cut-off on the piston adapted to move opposite one end of the valve, substantially as described. 6th. A pump comprising a cylinder mounted on a hollow base and opening into the same, inlet and discharge ports separated by partitions in the base, a rotating piston in the cylinder, a valve pivoted to the cylinder at the edge of one port and connected to the piston at its other end, the valve being solid at one end and comprising a series of arms on the other end, and a cut-off on the piston adapted to move opposite the arm and cover the joint of the valve, substantially as described. 7th. The herein described pump and blower, comprising a cylindrical case having suitable inlet and discharge ports, a piston arranged to turn within the case, and a valve extending longitudinally through the case between the inlet and discharge ports, the valve having one end pivoted to the piston and the other end to the case, substantially as described. 8th. The combination, with the case having suitable inlet and discharge ports and an off-set on one side of the piston held to turn within the case, and a valve arranged between the inlet and discharge ports and extending longitudinally through the case, the valve having one end pivoted to the piston and the other in the off-set of the case, substantially as described. 9th. The herein described pump and blower, comprising a cylindrical case having suitable inlet and discharge ports and an off-set on one side, a crank shaft journalled in the case, a piston carried by the crank shaft and arranged to revolve in the case, and a curved valve arranged between the inlet and discharge ports and extending longitudinally through the case, the valve having one end pivoted to the piston and the other end in the off-set of the case, substantially as described.

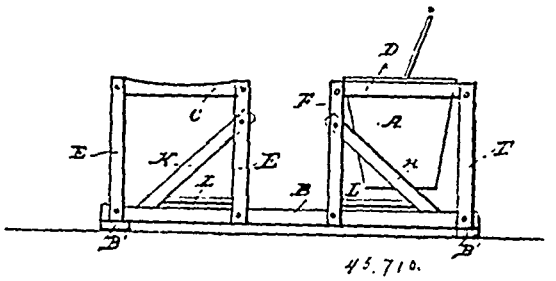
No. 45,709. Fire Lighter. (*Allumoir.*)



John D. LeBel, London, Ontario, Canada, 15th April, 1894; 6 years.

Claim.—The herein described composition of matter to be used for kindling or lighting fires, consisting of fuel oil, flour, common salt, rosin, coal dust and saw dust in the proportions specified.

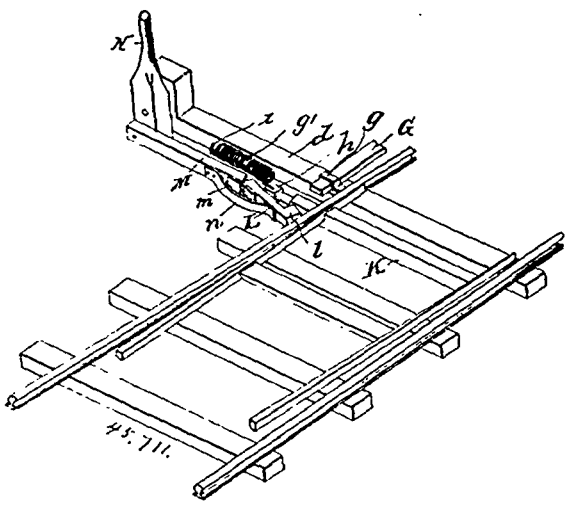
No. 45,710. Milking Stool. (*Banc pour traire les vaches.*)



Timothy McMonagh, Port Huron, Michigan, U. S. A., 5th April, 1894; 6 years.

Claim.—1st. A milking stool having an elongated base board, and a series of standards, pivoted in sets on opposite sides of said base board, near one end thereof, and adapted to support a milk pail, and a similar series of standards at the other end of said board, pivoted to it in a similar way, and a seat mounted on the top ends of such second series of standards, both series of standards being adapted to be folded down into said board, so as to lie one set on the other for convenience in carrying. 2nd. A milking stool having an elongated base board, and two series of standards pivoted to its opposite sides one set near each end, and one set adapted to bear a milking pail, and the other bearing a seat, and both sets being adapted to stand erect in use, and to fold down one onto the other when not in use, and having oblique braces pivoted to one or more of each set of standards, and set in slots in the base board and adapted to hold the standards upright in use and to slide in the slots to let them fold down, substantially as set forth.

No. 45,711. Railway Switch. (*Aiguille de chemin de fer.*)

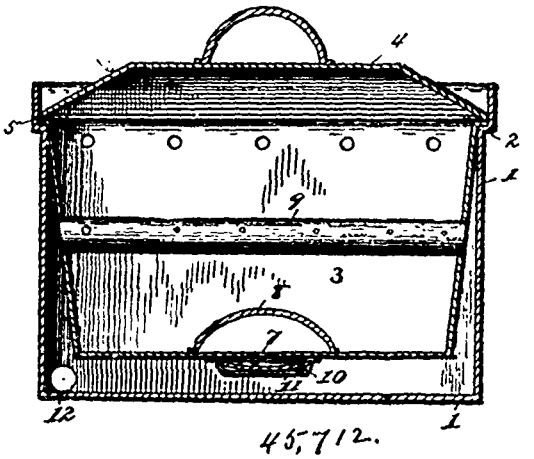


William Halliday and Thomas F. Rawls, both of Barnett, Mississippi, U.S.A., 5th April, 1894; 6 years.

Claim.—1st. The combination with a railway switch, of the spring actuated tie bar having a notch, the lever having a lug, engaging the notch when the switch is open, the slotted upright, the trigger arm, one end of which is movably secured in the slot of the said upright and the other end adapted to engage the said lug, and push it out of the said notch to close the switch, substantially as and for the purpose set forth. 2nd. In a switch closer operated from a locomotive, the combination of the slotted upright pivoted adjacent to the switch, the switch tie-bar, the lever having a lug, the trigger-arm movably secured to one end in the slot of the upright and the other end left free to slide horizontally, to engage the lug of the said lever, and push it out of the notch to close the switch, substantially as and for the purpose set forth. 3rd. In a railway switch, the combination of the tie-bar to which the movable end of the switch rails are secured, said bar extending out from one side of the track, such extention having a notch, the spiral spring secured to the extension and to one of the track sleepers, the slotted upright, the trigger-arm secured in the upright, the plate spring bearing against the head of the trigger-arm, the pivoted lever having a dove-tail lug adapted to engage the said notch and to be pushed out by the said trigger arm, substantially as shown and described. 4th. In a railway switch, the combination of the tie bar to which the movable ends of the switch rails are secured, the said bar extending out from the track and having a dove tail notch, the spiral spring secured to the extention and to one of the track sleepers, the slotted upright, the trigger arm having a slotted head pivoted in the upright, the plate spring having its free end bearing upon the head of the trigger-arm, the pivoted hinged lever having a dove-tail lug adapted to engage the notch and be pushed out of it by the said trigger-arm, and the spring secured to the said lever across its hinge, substantially as and for the purpose set forth. 5th. The combination with a railway switch, of the spring actuated tie-bar, the lever engaging the tie-bar when the switch is open, and the trigger-arm, one end of which is movably secured at the side of the track, and the other end adapted to engage the said lever and cause it to disengage the said tie-bar to close the switch, as set forth.

No. 45,712. Wash Boiler.

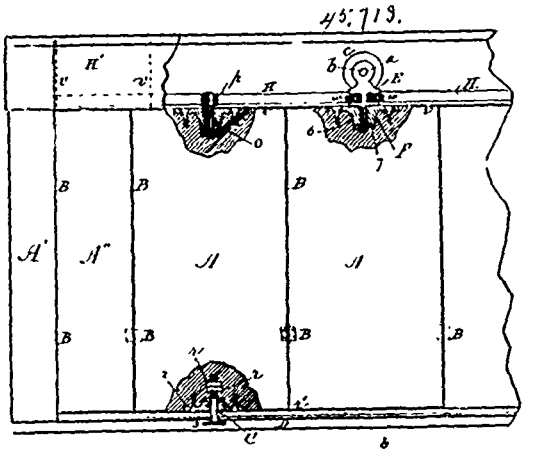
(*Chaudière de buanderie.*)



Washington P. Burke, Quitman, Georgia, U.S.A., 6th April, 1894; 6 years.

Claim.—In a wash boiler, the combination of a body provided at its upper edge with a supporting flange, an inner boiler having a flange to rest upon that of the body and provided at its bottom with a valve, and at its top with perforations and forming a space between it and the body, a horizontal tube arranged at the middle of the boiler, and having its ends secured to the same, and communicating with the space outside the boiler and provided with perforations, and a cover, substantially as described.

No. 45,713. Folding Door. (*Porte pliante.*)



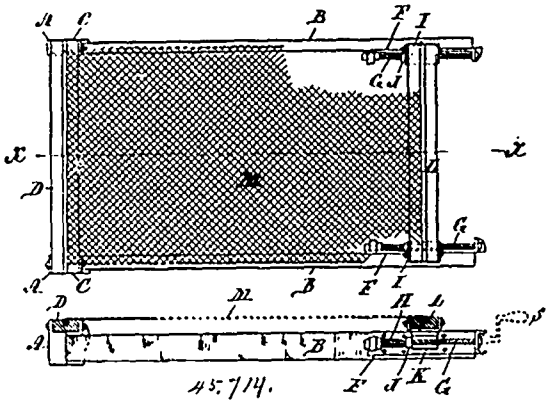
Oliver T. Springer, Burlington, Ontario, Canada, 6th April, 1894; 6 year.

Claim.—1st. A series of doors, of any material, hinged together at opposite edges, one or more of the doors provided with an adjustable pin C at the bottom, made to run in a groove in the floor or between a track, and a swivel pin at the top of any desired number of the doors, carrying one or more rollers to run on a track above the doors, to enable the doors to fold or be placed in a line, substantially as and for the purpose specified. 2nd. The combination of the hinged doors A, pins C, track H, swivel pins E, rollers c, substantially as and for the purpose specified. 3rd. The combination of the hinged doors A, bottom pins E, with a single track and single rollers, or a double track and double roller, substantially as and for the purpose specified. 4th. In combination with the doors A, the rollers c, swivel pins E, top track H, grooves D, *m*, in the bottom track D^1, pin C, operating therein, substantially as and for the purpose specified. 5th. In combination with the doors A, the swivel pins

E, provided with anti friction rollers *w w*, substantially as and for the purpose specified. 6th. In combination with the doors A, and track H, of the movable portion H^1 of the track, to allow the doors to be moved to one side of the frame, substantially as specified. 7th. In combination A A, of the first door A^{11}, next the frame A^1, made about one-half the size of the others, substantially as and for the purpose specified. 8th. In combination with the doors A, and upper track H, of the pin *o*, and roller *p*, at the top of all the doors not having the rollers *c c*, and swivel pins E attached, substantially as and for the purpose specified. 9th. In combination with the doors A and rollers *c c*, and swivel pins E, of the sound proof strip r^1 of elastic material at the top and bottom of each door, for the purpose specified.

No. 45,714. Woven Wire Mattress.

(*Sommier en fil de fer tissé.*)



Edward C. Granville, Ottawa, Ontario, Canada, 6th April, 1894; 6 years.

Claim.—1st. A mattress frame having a removable end rail and an adjustable stretcher bar near the other end and connected by an attached woven wire fabric, said end rail connected to side rails by corner irons A, A, and the stretcher bar connected to the side rails by brackets F and K, the brackets K, having a screw shaft G, and follower J to push the brackets K, to tighten the wire fabric, as set forth. 2nd. A mattress frame having the side rails at one end connected to the end rail D, by detachable corner irons A, A, and near the opposite ends connected by detachable stretcher bar L, secured to brackets F, travelling in brackets F, secured to the side rails, said brackets F having a screw-threaded shaft G provided with a nut J, as and for the purpose set forth. 3rd. The combination with the side rails B, B, of brackets F, F, secured thereto near one end and carrying a screw-threaded shaft G, provided with a follower or nut J, the brackets K, K, supported by brackets F, to travel thereon, a stretcher bar L carried by said brackets K, and a woven wire fabric M, secured to said stretcher bar and end rail, as set forth. 4th. A mattress having the side rails at one end connected by a rail D, and detachable corner irons A, A, a woven wire fabric M attached to said end rail and to a stretcher bar L, carried upon brackets K, K, travelling along brackets F, F, secured to said side rails, said brackets F having a screw shaft G, and a nut J, as set forth.

No. 45,715. Non Heat Conducting Cement for Boilers, Steam Pipes, etc. (*Ciment non-conducteur de chaleur pour chaudières, tuyaux à vapeur, etc.*)

J. E. Turgeon, Sherbrooke, Quebec, Canada, 6th April, 1894; 6 years.

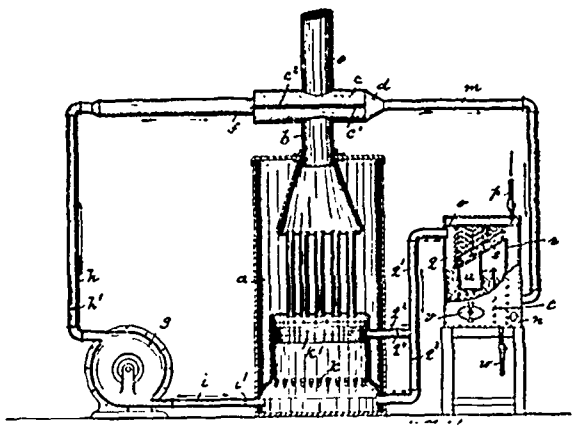
Claim.—A cement composed of the following ingredients, fire clay, wool, cocanut fibre, pulverized charcoal, wheat flour, raw asbestos, crude oil and water, mixed together in the proportions specified.

No. 45,716. Smoke Consumer and Blower.

(*Foyer fumivore et soufflet.*)

Garrett Wallace Poole, Newark, New Jersey, U.S.A., 6th April, 1894; 6 years.

Claim.—1st. In a smoke consuming apparatus, the combination of the furnace and its smoke pipe, of an intermediate chamber or pipe arranged between the smoke pipe and the smoke stack, a blower, a pipe leading from said blower into said intermediate chamber or pipe, a purifying chamber, and a series of pipes connecting said purifying chamber with said intermediate chamber or pipe, and with the fire chamber of the furnace, substantially as described. 2nd. In a smoke consuming apparatus, a chamber or pipe interposed between the smoke pipe of a furnace and the smoke-stack, an air supply pipe entering said chamber, and dampers dividing the space between said air supply pipe and its surrounding chamber or pipe into two compartments, substantially as described. 3rd. In a smoke consuming apparatus, a purifying



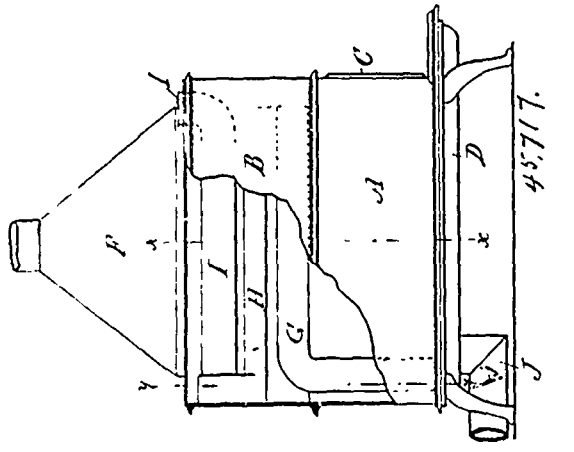
chamber, consisting of an upper and lower compartment separated by a perforated partition plate, a trap arranged in the lower compartment and a water supply pipe entering said upper compartment, all said parts substantially as and for the purpose described. 4th. The method of consuming smoke, consisting in first combining said smoke with fresh air, then in subjecting said combined air and smoke to a spray of water, and finally in forcing said purified smoke and air combined into the fire chamber of a furnace and above or below the grate bar, substantially as described. 5th. In a smoke consuming apparatus, a blower consisting of stationary casing provided with approximately central openings, with a drum adapted to be revolved in said casing and consisting of side plates provided with central openings registering with the central openings of the casing, and a series of curved uniform-shaped channels formed between said plates by curved partition plates, and extending from the central opening of the drum to the outer periphery thereof, the outlet end of each curved channel being approximately normal to the periphery of the next proceeding curved channel, substantially as described. 6th. In a smoke consuming apparatus, a casing for a blower, having upper and lower tangential outlets, being the continuation of channels, conical in cross section and surrounding the periphery of the revolving drum, placed in the casing, substantially as described. 7th. The combination in a blower, for a smoke consuming apparatus, of a casing having upper and lower tangential outlets being the continuation of channels, conical in cross section, and surrounding the periphery of a drum adapted to be revolved in said casing, with said drum consisting of a series of curved channels extending from the central opening of the drum to the outer periphery thereof, substantially as described. 8th. In a blower for a smoke consuming apparatus, the combination of the revolving drums, with a stationary chamber arranged concentrically around said drum and provided with an outlet, said casing being also provided with an outlet, said casing being also provided at or about the mouth of said outlet with an inwardly extending projection, substantially as described. 9th. In a blower for a smoke-consuming apparatus, the combination of the shell provided with centrally located openings and with an outlet, with a drum adapted to be revolved in said casing, and of a series of partition plates forming chambers or channels, the inner portions of said partition plates are arranged radially to the centre of the drum, while the outer portions are curved in such a way that the outlet openings of the chambers or channels are in line with the radially arranged portions of the partition plates, substantially as described.

No. 45,717. Heating Stove. (*Poêle de chauffage.*)

William W. Towne, Danville, Quebec, Canada, 6th April, 1894; 6 years.

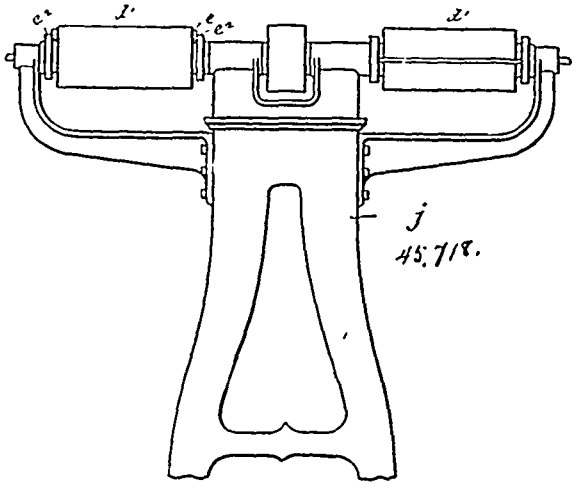
Claim.—1st. The combination with a stove having a chamber formed by means of a false bottom and a narrow smoke exit running centrally the whole length of the top, of an air supply pipe communicating with the outside air and the said chamber, vertical tubes communicating with the said chamber, passing up in the interior of the stove, thence passing horizontally the whole length of the stove, and communicating with a chamber at the front end of the stove, tubes communicating with the said chamber at the rear and passing horizontally to the front then out through the top of the stove, substantially as set forth. 2nd. The combination with a stove having a chamber formed in its bottom adapted to receive air from the outside of a series of tubes, communicating with the said chamber, passing up above the fuel chamber and communicating with a heating chamber formed in the upper portion of the said stoves, tubes communicating with the said heating chamber and making their exit through the top of the stove, substantially as set forth. 3rd.

The combination with a box stove, of a smoke exit, consisting of a narrow opening extending centrally the whole length of the top of



the said stove and adapted to receive a pipe resembling a flattened inverted funnel, substantially as set forth.

No. 45,718. Buffing Roll. (*Lissoir de cordonnerie.*)



George Henry Peck Flagg, Boston, assignee of Harold Arthur Webster, Haverhill, both of Massachusetts, U.S.A., 6th April, 1894; 6 years.

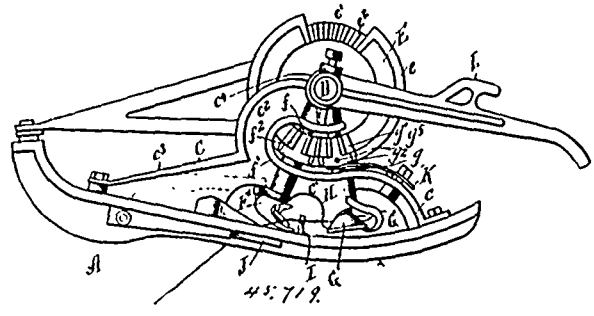
Claim.—1st. A buffing roll, comprising a rotary shaft, having an air passage, heads or collars affixed to said shaft, and a yielding or flexible cylindrical covering affixed to said heads and provided with an abrasive coating, said heads and flexible covering enclosing an air space communicating with an air passage in the shaft, combined with means whereby air under pressure may be admitted into said passage to press outwardly and yieldingly support the flexible covering, as set forth. 2nd. A buffing roll comprising a rotary shaft having an air passage, heads or collars affixed to said shaft, a yielding cylindrical covering affixed to said heads, said covering and heads constituting an air chamber communicating with the passage in the shaft, and one or more yielding supports affixed to the shaft within said chamber, as set forth. 3rd. A buffing roll comprising a rotary shaft having an air passage, heads or collars affixed to said shaft, an inner flexible covering permanently attached to said heads and means for detachably securing an abrasive covering to said inner covering, as set forth. 4th. A buffing roll comprising a rotary shaft, heads or collars affixed thereto and provided with notches, a flexible covering affixed to said heads and entering said notches, a wedge-shaped bar formed to enter said notches as a means for detachably securing an abrasive covering, and rotatable cams engaged with the ends of said bar, as set forth.

No. 45,719. Knotter for Grain Binders.

(*Appareil à nouer pour lieuses à grain.*)

Benjamin Franklin Stewart and the Plano Manufacturing Company, all of Chicago, Illinois, U.S.A., 6th April, 1894; 6 years.

Claim. 1st. In a grain binder, a slotted breast-plate, in combination with a knotter frame, substantialy of S-form, having its foot secured to the lower end of the breast-plate outside the slot therein, and its central section extending backward therefrom over the breast-plate, and a knotter-hook and revoluble cord-holder mounted in said frame and both arranged inside of the foot thereof, substantially as described. 2nd. In a grain-binder, a breast-plate, in combination with a knotter-frame, mainly of S-form, having its foot

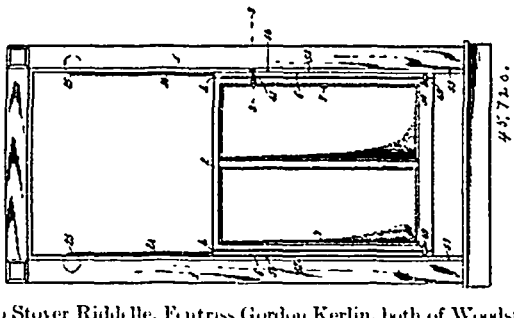


secured to the lower end of the breast-plate and provided with an elongated central section extending backward therefrom, and a tail piece, or arm, rigid with the S-frame and extending backward to the upper portion of the breast-plate to which it is secured, substantially as described. 3rd. In a grain-binder, a knotter-frame, in combination with a knotting-hook and revoluble corn-holder, the shafts of which are both mounted in said frame, and a cam and gear wheel on the binding-shaft provided with a single gear segment adapted to engage with pinions on both the knotter-shaft and the cord-holder shaft, whereby the two latter are both rotated by a single gear segment, substantially as described. 4th. In a grain-binder, a breast-plate, in combination with a knotter-frame mounted thereon, a revoluble knotting-hook and a revoluble corn-holder disc, the shafts of which are both mounted in said frame in the same vertical plane and with the knotting-hook arranged in front of the cord-holder, a gear wheel provided with a single gear segment adapted to engage with pinions on said respective shafts and to engage first with the knotting-hook pinion, whereby the latter is given a partial rotation before the gear segment engages with and begins to rotate the cord-holder pinion, substantially as described. 5th. In a grain-binder, a knotter-frame, in combination with a knotting-hook and cord-holder, the shafts of which are both mounted in said frame, pinions attached to the said shafts respectively and provided with delay surfaces, and a gear-wheel provided with a single gear segment and a single delay surface, whereby the knotting-hook and cord-holder are rotated one full revolution each by a single gear segment and held in a state of rest by a single delay surface, both on a single wheel, substantially as described. 6th. In a grain-binder, a breast-plate, in combination with a knotter-frame, S-shaped and mounted by its foot at the lower or front end of the breast-plate and having its middle section extending over the latter, and a tail-piece, or arm, rigid with the S-frame extending back therefrom to the breast-plate and secured thereto, whereby a long free space is provided between the S-frame and breast plate and extending from the front to the rear support of the former, and a revoluble knotting hook arranged in said free space and having its shaft mounted in said S-frame substantially as described. 7th. In a grain binder, a breast plate, in combination with a knotter frame, S-shaped and mounted by its foot at the lower or front end of the breast plate and having its middle section extending over the latter, and a tail piece or arm rigid with the S frame extending back therefrom to the breast plate and secured thereto, whereby a long free space is provided between the S-frame and breast plate and extending from the front to the rear support of the former, and a cord holder arranged in said space between the breast plate and knotter frame and having a revoluble member, the shaft of which is mounted in said S-frame, substantially as described. 8th. In a grain binder, a breast plate, in combination with a knotter frame, S-shaped and mounted by its foot at the lower or front end of the breast plate, and having its middle section extending over the latter, and a tail piece or arm rigid with the S frame extending back therefrom to the breast plate and secured thereto, whereby a long free space is provided between the S-frame and the breast plate and extending from the front to the rear support of the former, and a knotting hook and cord-holder, both arranged in said free space between the breast plate and knotter-frame and between the front and rear supports of the latter, substantially as described. 9th. In a grain binder, a cord holder consisting of a revoluble cone shaped disc, in combination with a stationary segmental hood reaching over said disc and conforming thereto, and a movable guide adapted to sweep the cord in between the two members of the cord holder, substantially as described. 10th. In a grain-binder, a cord holder consisting of a revoluble cone-shaped disc, in combination with a fixed segmental hood extending over the same and adapted to clamp the cord between the two, constructed and arranged to reverse the end of the cord by the rotation of the disc and to take up sufficient cord in the said extended end to supply the quantity required in tying the knot by drawing the said extended end through the cord holder, substantially as described. 11th. In a grain binder, a revoluble knotting hook, in combination with a cord holder composed of a revoluble disc and stationary

hood over the same, a knife arranged between the knotting-hook and cord-holder, and an arm fixed on said disc and curving forward and upward therefrom, whereby the said arm carried along by the disc will pass over the strands of cord, press them inward and downward against the knife, and at the same time sweep the main strand in between the disc and its hood, substantially as described. 12th. In a grain-binder, a revoluble knotting-hook, in combination with the conical revoluble cord-holder disc G, and stationary-hood H, extending over the said disc and provided with notches h^1, h^2, to stop and guide the cord, substantially as described. 13th. In a grain-binder, a revoluble knotting-hook, in combination with a revoluble cord-holder disc G, a stationary-hood H, extending over said disc, a knife I, standing across the breast-plate between the knotter and the cord-holder, and an arm G^1, rigid with said disc and curving forward and upward from its point of junction therewith, substantially as described. 14th. In a grain-binder, a revoluble knotting-hook, in combination with a cord-holder, and a cord-cutter I, arranged across the breast-plate at a slight angle thereto and having its cutting edge inclined upward from front to rear, substantially as described. 15th. In a grain-binder, a knotter-frame provided with a bearing e^4, for the binding-shaft, in combination with the knotting-hook shaft f, and cord holder disc shaft g, both mounted in the knotter-frame and having bearings for their upper ends opening into said bearing e^4, substantially as described. 16th. In a grain-binder, the breast-plate A, provided with a short slot a^1, at its lower end and a bridge a^2, across the same, in combination with a cutter I, adapted to set in said slot and detachably fastened to the bridge, a knotting-hook and a cord-holder, substantially as described. 17th. In a grain-binder, a cord-holder consisting of a revoluble conical disc, in combination with a stationary-hood arranged above and extending over the convex surface of said disc, and devices for rotating the latter, substantially as described. 18th. In a grain binder, a revoluble conical cord holding disc, in combination with a stationary-hood fitted to and extending over the convex surface of said disc, and an arm, or finger, rigid with said disc and projecting forward and upward therefrom in the direction of its movement, substantially as described.

No. 45,720. Revolving Window-Sash.

(*Cadre de châssis tournant.*)

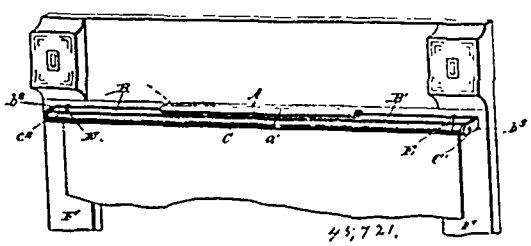


Philip Stover Riddelle, Fentriss Gordon Kerlin, both of Woodstock Virginia, and Benjamin Franklin Dyre, Melrose, Massachusetts, all in the U.S.A., 6th April, 1894; 6 years.

Claim.—1st. The combination of slide-bars carrying spring-yielding anti-friction rollers, spring drums having suspension bands connected with the slides, means for varying the pressure of the rollers against parts of the window frame, a rotatable sash journalled to the slide-bars, a lock for engaging and locking one of the slide-bars, and a lock for locking the sashes to one of the slide-bars, substantially as described. 2nd. The combination of slide-bars carrying spring-yielding anti-friction rollers, means for varying the pressure of the rollers against parts of the window-frame, a rotatable sash journalled to one of the slide-bars, a lock for engaging and locking one of the slide-bars, and a latch mounted on one of the slide-bars for engaging the sash frame and having a finger piece provided with a projection 56, adapted to enter a recess or notch 53, in a part of the window-frame whereby the sash-frame cannot be revolved until the projection enters the recess or notch, substantially as described. 3rd. The combination with slide-bars, and a sash-frame carried thereby, of levers pivoted to one of the slide-bars and carrying an anti-friction roller, a leaf spring acting on the roller-carrying lever, a slide movable more or less over the leaf-spring to vary the power exerted thereby on the roller carrying lever, and means for moving the slide longitudinally on the slide-bar, substantially as described. 4th. The combination with the slide-bars, and a sash-frame carried thereby, of levers pivoted to the slide-bars, carrying anti-friction rollers and having tail-pieces, leaf-spring acting on the tail-pieces of the levers, and slides movable in opposite directions and engaging the leaf-springs to vary the power exerted thereby on the roller-carrying levers, and means for moving the slides in opposite directions, substantially as described. 5th. The combination, with longitudinally channelled slide-bars, and a sash-frame carried thereby, of levers pivoted in the channels of the slide bars and carrying anti friction rollers, leaf springs acting on the roller-carrying levers, and slides arranged in the channels of the slide-bars and movable in opposite directions to more or less engage the leaf-springs, and means for moving the slides in opposite directions, substantially as described. 6th. The combination, with slide bars, and a sash frame carried thereby, of levers pivoted to the slide bars and carrying anti-friction rollers, leaf springs acting on the levers and oppositely movable slides provided with toothed portions and bearing against the leaf-springs, and a device for engaging the toothed portions of the slides to move them in opposite directions, substantially as described. 7th. The combination, with slide bars, and a sash frame journalled thereto, of a rock shaft mounted on one of the slide-bars and having a latch 45 to engage a part of the sash frame, and a finger piece 49, having a projection 50, adapted to enter a recess or notch in a part of the window frame whereby the sash frame cannot be released and revolved until said projection enters said recess or notch, substantially as described. 8th. The combination, with a slide-bar, having a longitudinal notched portion, and a revolving sash journalled to said slide bar, of a bolt 27 adapted to engage the notches of the slide-bar, a pivoted lever arm 31 engaging a part of the bolt, a bell crank-lever 38 having one arm engaging a part of said pivoted lever arm, and a finger piece 41 pivoted to the other arm of said bell-crank-lever, substantially as described. 9th The combination, with a channelled slide-bar, having a series of locking notches 26, and containing pivoted levers 18 carrying anti friction rollers 20, leaf springs 15, and slides 8 movable more or less into engagement with said springs, of a bolt 27 adapted to engage the locking notches of the slide bar, a pivoted lever arm 31 bearing against a part of the bolt, a bell crank lever 38 having one arm engaging a part of the lever-arm and a finger piece 41 pivoted to the other arm of the bell-crank lever, substantially as described.

No. 45,721. Window Shade Hanger.

(*Porte-rideau de fenêtre.*)



Ryerson W. Hilliker, Kansas City, Kansas, U.S.A., 6th April, 1894; 6 years.

Claim.—1st. A curtain supporting strip, comprising a middle guide strip and adjustable bracket end strips having outwardly projecting ends upon which the curtain roller pins are supported, substantially as described. 2nd. A curtain strip, comprising the middle guide strip having marginal flanges, and adjustable bracket end strips fitted to slide endwise between and beneath said flanges, and outwardly projecting ends to receive and support the ends of the curtain roller, substantially as described. 3rd. In a curtain strip, the combination of a guide strip having marginal flanges and indentations a^3 upon its back, with longitudinally adjustable bracket end strips held in place between said flanges by the said indentations, substantially as described. 4th. A curtain strip, comprising the middle guide strip, having marginal flanges, the longitudinally adjustable bracket end strips held beneath and between said flanges, and having outwardly bowed, or bent, inner ends to bear against the said flanges and hold the bracket strips in place, substantially as described. 5th. A curtain strip, comprising the guide strip having marginal flanges, the longitudinally sliding bracket end pieces, the projecting sleeve upon the ends of the guide strip, and a hook to embrace the said sleeve and fasten into the window casing, substantially as described.

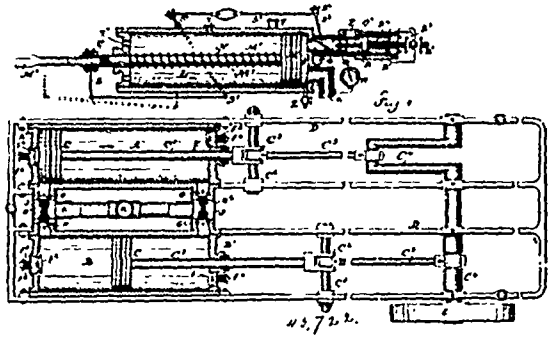
No. 45,722. Governor for Machinery.

(*Gouverneur pour machines.*)

Edward Thunderbolt, Carlton, Victoria, Australia, 6th April, 1894; 6 years.

Claim.—1st. In governors for controlling the speed of machinery, one or more pumps as A and B for supplying compressed air or other fluid into a governing cylinder as L, said governing cylinder being provided with a piston as M for controlling, actuating and regulating the speed of, or the supply of steam or other source of power to a motor or other machine, substantially as and for the purposes described. 2nd. In governors for controlling the speed of machinery, air pumps as A and B having inlet and outlet valves, which latter open into a passage as K leading to a governing cylinder as L, such cylinder having a piston and rod connected with a throttle valve in the steam pipe, substantially as and for the purposes described. 3rd. In governors for controlling the speed of machinery, a cylinder as L having piston as M and piston rod as M^1 encircled by a spring as N, such cylinder being provided with inlet pipe as K, and outlet passage as O, and port as P, which said port is regulated by an adjustable valve as Q, as and for the purposes described. 4th. In governors for controlling the speed of machinery, the combination with a cylinder as L, having an outlet passage as O

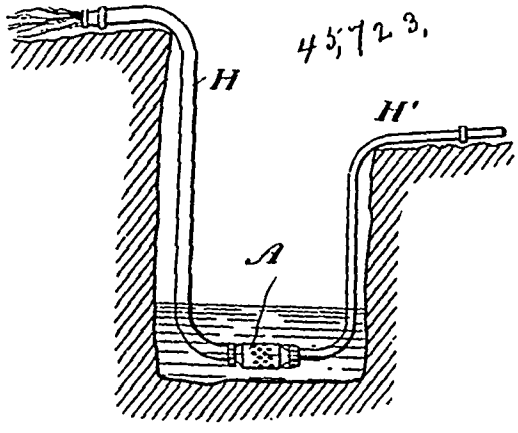
and port as P, with a slide valve as Q, provided with openings as Q^1, and valve rod as Q^2, secured to piston as R, piston having rod



as R^2, encircled by a spring and terminating in a screw-thread adjustment, as and for the purposes described. 5th. In governors for controlling the speed of machinery, the combination of a throttle valve as T, operated by an arrangement of adjustable rods as S to S^3, which are controlled by the movements of a piston rod as M^1, with a cylinder as L, substantially as and for the purposes described. 6th. In governors for controlling the speed of machinery, the mechanical construction, combination and arrangement of the whole of the parts illustrated on the accompanying drawings, as and for the purposes described.

No. 45,723. Water Elevator.

(*Elévateur d'eau.*)

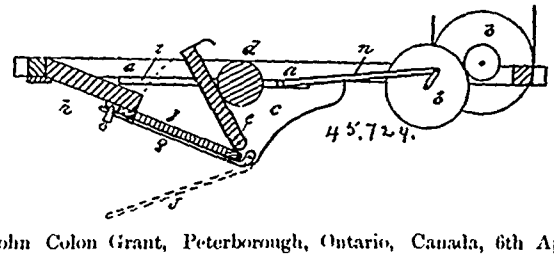


Hubbert Gonthier and Louis Gendreau, all of Parish St. George, Quebec, Canada, 6th April, 1894; 6 years.

Claim.—A water elevator consisting of a perforated shell forming a chamber, a neck with a throat at one end of said chamber provided with means of attaching delivery pipe or hose, a nozzle projecting into said chamber from the other end opposite said throat and concentric therewith and of smaller bore, and a tubular neck of which said nozzle forms part provided with means of attaching pipe or hose, substantially as set forth.

No. 45,724. Curd Cutting Machine.

(*Machine à couper le lait caillé.*)

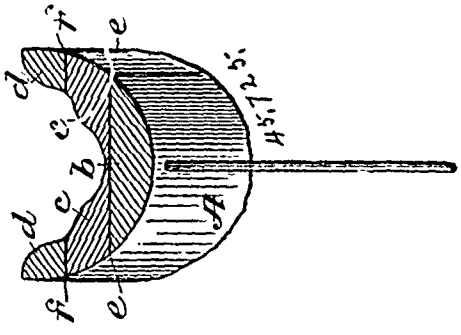


John Colon Grant, Peterborough, Ontario, Canada, 6th April, 1894; 6 years.

Claim.—1st. The combination in a curd cutting machine having a frame A^1, A, A, A, castings C, C, roller D, revolving in the blocks P, P, worked by means of the crank and shaft N, and working in connection with the flaps E, substantially as and for the purpose hereinbefore set forth. 2nd. A curd cutting machine having the metal rack G, and screw clamps M, M, substantially as and for the purpose hereinbefore set forth.

No. 45,725. Wooden Bicycle Rim.

(*Jante en bois pour bicycles.*)

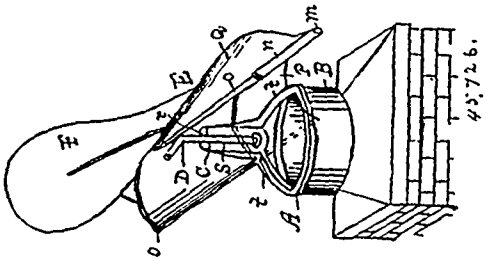


The Toronto Cycle Company, assignee of Albert Penhallow Jones, all of Toronto, Ontario, 6th April, 1894; 6 years.

Claim.—1st. The canvass, cotton rubber wire, felt silk or other like material *e* and *f*, between the strips *b*, *c*, *d*, composing the rim. 2nd. The canvass cotton rubber wire felt silk or other like material upon the top or bottom of the said rim or when made in one piece of wood, substantially as and for the purpose hereinbefore set forth.

No. 45,726. Revolving Chimney Top.

(*Capuchon mobile de cheminée.*)

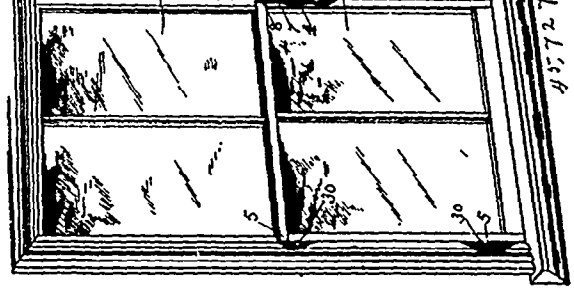


Henry Iwan, assignee of Louis Iwan, and William Reifereheid, all of Streator, Illinois, U.S.A., 6th April, 1894; 6 years.

Claim.—1st. In a revolving chimney top, the combination of the bent plate Q, plate *p*, extending from a point below the deflecting portion of the plate *q*, part way up the same, a vane surmounting the cowl, and means for supporting the cowl revolubly upon a chimney, substantially as described. 2nd. In a revolving chimney top, the cowl E, comprising the bent plate *q*, having the upturned margin *o*, and holding extensions *m*, and curved plate *p*, having its margin *n*, bent into sheaths for the upturned margin *o*, in combination with a vane surmounting the cowl, and means for supporting the cowl revolubly upon a chimney, substantially as described.

No. 45,727. Sash Lock Lift, etc.

(*Arrête-croisée, etc.*)



Wilhelm A. Zuetzke and Will F. Davis, both of Bozeman, Montana, U.S.A., 6th April, 1894; 6 years.

Claim.—1st. The combination of a rack-bar secured to the side rail of a sash, a pinion meshing with said rack-bar, a longitudinally-

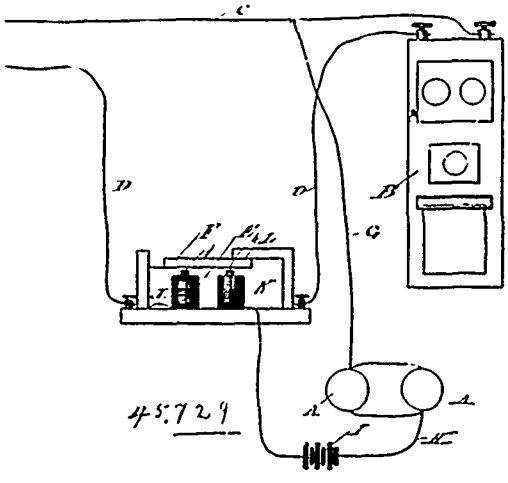
extensible spindle carrying said pinion and provided with a suitable handle or key, a ratchet fixed to the spindle and arranged in a suitable shell or casing, a spring-pressed pawl slidably fitted in said shell or casing and provided with a spur to engage the teeth of the ratchet, and an operating lever pivoted to the shell or casing and provided with a slot engaging a stud upon the sliding pawl, whereby the pinion and hence the sash are locked against movement except when the ratchet is released by the elevation of the free exposed end of the operating lever, substantially as specified.

No. 45,728. Nut Lock. (*Arrête-écrou*)

John Horace O'Brien, East St. Kilda, Victoria, Australia, 6th April 1894; 6 years.

Claim.—1st. In lock-nuts and bolts, a nut provided with a continuous collar as C to encircle the thread of a bolt, as and for the purposes described. 2nd. In lock-nuts an annular groove E, cut in the nut so as to form a continuous collar thereon as and for the purposes described. 3rd. In lock-nuts and bolts, the combination of a nut provided with a continuous collar as C, with a bolt having a groove as A, as and for the purposes described.

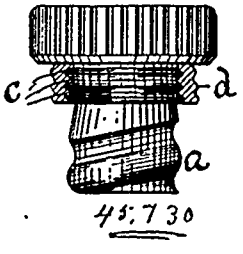
No. 45,729. Electric Fire Alarm System.
(*Système d'avertisseur d'incendie électrique.*)



Gustave A. Drolet, and Francis Hurtubise, both of Montreal, Quebec, Canada, 6th April, 1894; 6 years.

Claim.—In an electric automatic fire alarm system, the combination of an ordinary telephone set B, and its wires C and D with the automatic contacts or alarms A, A, wires G and H, battery I, and ordinary sounder E, substantially as described and for the purposes set forth.

No. 45,730. Bottle Stopper. (*Bouchon de bouteilles.*)



John James Varley, London, England, 6th April, 1894; 6 years.

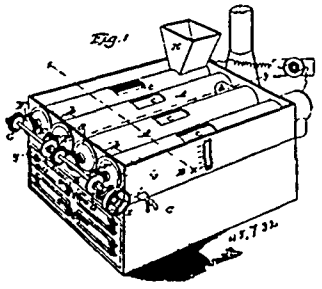
Claim.—1st. A screw stopper for bottles, jars and the like having a number of grooves upon that part of the stem on which the seating is placed, as and for the purpose hereinbefore described. 2nd. A screw stopper having grooves *c*, *c*, on the stem thereon adapted to receive and an elastic seating such as *d*, substantially as and for the purpose hereinbefore described and illustrated in the several figures of the accompanying drawing.

No. 45,731. Explosive. (*Explosif.*)

Theron Rudd Gue, Halifax, Nova Scotia, and Solomon Turck, New York, State of New York, U.S.A., 7th April, 1894; 6 years.

Claim.—1st. An explosive having aluminum potassium sulphate mixed therewith for maintaining the temperature of the gases evolved by combustion or explosion at a point below ignition whereby the explosive is rendered flameless. 2nd. A nitro-explosive having aluminum potassium sulphate mixed therewith to render it flameless. 3rd. An explosive comprising explosive nitrates or nitrated matter, and aluminum potassium sulphate as a temperature reducing agent. 4th. An explosive consisting in a mixture of nitrate of ammonia, carbonate of magnesia, kieselghur (silicious earth), nitro-glycerine and aluminum potassium sulphate in about the proportions specified.

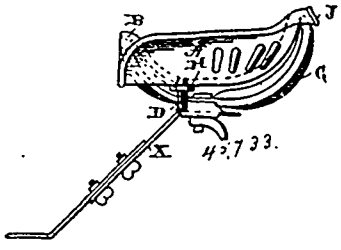
No. 45,732. Amalgamator. (*Moulin à amalgamer.*)



Hugh Calhoun, Hot Springs, and Aron M. Beam, Bear, both in Arkansas, U.S.A., 7th April, 1894; 6 years.

Claim.—1st. In combination with an amalgamating vessel, an electric generator connected therewith and adapted to deliver an interrupted current of constant direction, substantially as shown and described. 2nd. The herein described amalgamating apparatus, consisting of connected cylinders A, provided with spirally bladed axial shafts, tanks B, furnace C, electric generator L, all combined and operating substantially as set forth. 3rd. The method of amalgamation herein set forth, which consists in mingling with the pulp a proper quantity of mercury and stirring the mass in a suitable receptacle subject to the heat of a water bath, and to the action of an interrupted current of electricity of constant direction, substantially as set forth.

No. 45,733. Seat for Agricultural Machines and Vehicles. (*Siège pour machines agricoles et voitures.*)



George Banks, Greenville, Michigan, U.S.A., 6th April, 1894; 6 years.

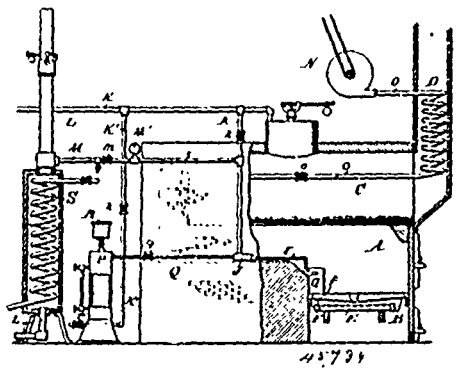
Claim.—In a seat of the character described and combination with a seat portion having a socket at each end forming a bearing, of a substantially U-shaped support having its ends turned outward to enter the said sockets, substantially as described.

No. 45,734. Furnace. (*Fournaise.*)

William Luther Teter, Philadelphia, Pennsylvania, and Henry L. Webster, Seneca Falls, New York, both in the U.S.A., 7th April, 1894; 18 years.

Claim.—1st. The furnace substantially as hereinbefore described consisting of a fuel supporting grate, a generator above the grate and at the rear thereof so as to be subjected to the products of combustion of the fuel on the grate, means to supply oil and steam or air to the generator, a supply pipe or pipes located under the grate, and a connecting pipe between the generator and supply pipe or pipes under the grate. 2nd. The generator for the purpose described consisting of the coil of pipes G having the jackets G^3 cast upon them. 3rd. The combination with a furnace grate and generator located above it and at the rear, of the series of perforated pipes E under the grate, the main F connecting with the pipes E, and a connecting pipe between the generator and main F. 4th. The com-

bination of a furnace and boiler, a superheating chamber located in the combustion chamber of the furnace, a furnace grate, a burner



located below the grate and connected with the burner, an injector, a pipe leading therefrom to the superheating chamber, an oil reservoir, a pipe leading from the oil reservoir to the injector, a steam pipe leading to the injector, and a hot air pipe connecting, to the steam pipe before it reaches the injector, whereby a mixture of hot air and steam enters the injector and draws the oil from the reservoir, and a mixture of hot air, oil and steam passes from the injector through the pipe leading therefrom into the superheating chamber within the combustion chamber of the furnace.

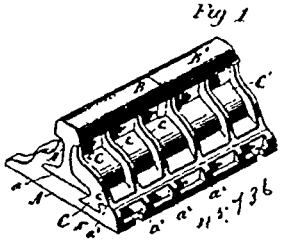
No. 45,735. Process of Making Building Composition. (*Procédé de composition pour construction.*)

William Pinkerton, assignee of Joseph Barrett, both of Toronto, Ontario, Canada, 7th April, 1894; 6 years.

Claim.—1st. A process of making a building or constructing composition from shale or stone containing oxide of iron and silica with or without other ingredients, consisting of first breaking the limestone to about the size of egg coal then putting the same into the blast furnace in that state, then throwing about the same amount of shale or stone containing the oxide of iron or silica in on top of the limestone, then melting them at a white heat in the furnace, then running the fluid material into hot metal or hot fire clay molds to obtain the required shape, substantially as described. 2nd. A building or constructing composition consisting of about equal parts of limestone and stone or shale containing oxide of iron and silica melted and moulded into a homogeneous mass, substantially as described.

No. 45,736. Rail Joint. (*Joint de rail.*)

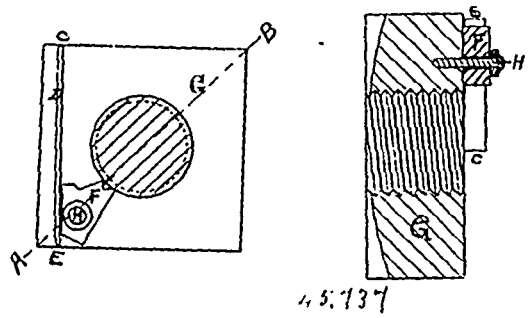
Fig 1



Clarence Leroy Wheeler, Marion, Indiana, U.S.A., 7th April, 1894; 6 years.

Claim.—1st. In a rail-joint, a chair having a solid or jointless seat corresponding in width to the full width of the bases of the rail ends which rest upon it and constructed in its upper face with a longitudinal groove, the inner wall whereof is under-cut to extend under the said seat, in combination with a draw-clamp having upon its lower face a rib shaped to extend into the said under-cut portion of the groove, the said chair and clamp being constructed to impose inward pressure upon the webs of the rail-ends and downward pressure upon the bases thereof, substantially as set forth, and whereby the rail ends are rigidly held in place. 2nd. In a rail-joint, a chair having a solid or jointless seat corresponding in width to the full width of the bases of the rail-ends which rests upon it, and constructed in its upper face with a longitudinal groove, the inner wall whereof is under cut to extend under the said seat, in combination with a draw-clamp having upon its lower face a rib shaped to extend into the said under-cut portion of the groove, substantially as set forth., and whereby the clamp takes a bearing under the said seat, and hence under the bases of the rail-ends, but not directly against the same. 3rd. In a rail joint, a chair having a solid or jointless seat corresponding in width to the full width of the bases of the rail-ends which rest upon it, a longitudinal flange extending over the said seat from one side thereof, and constructed to impinge against the webs of the rail-ends, and a longitudinal groove located on the opposite side of the seat from the said flange, and under cut to extend under the said seat, in combination with a draw-clamp, having a flange adapted to impinge against the adjacent faces of the webs of the rail-ends, and a rib shaped to enter the said groove and to extend into the under-cut portion thereof, substantially as set forth, and whereby the clamp takes a bearing under the said seat, and hence under the bases of the rail-ends, but not directly against the same. 4th. In a rail-joint, the combination with a chair provided with a longitudinal flange adapted to take a bearing against the adjacent faces of the webs of the rail-ends, and furnished with two inwardly projecting pins to take into holes formed in the rail-ends for preventing the rails from creeping, of a clamp applied to the upper face of the chair on the opposite side thereof from the said flange, for binding the rail-ends in place, and furnished with a flange to impinge against the adjacent faces of the webs of the same, substantially as described. 5th. In a rail-joint, a chair having a solid or jointless seat corresponding in width to the full width of the bases of the rail ends which rest upon it, and a longitudinal flange over-hanging one side of the said seat, adapted to take a bearing against the adjacent faces of the webs of the rail-ends, constructed upon its inner face to positively engage the same to prevent the rails from creeping, and having its outer face reinforced by transverse ribs, and the said chair being also constructed with a longitudinal groove located on the opposite side of the seat from the said flange, and under-cut to extend under the said seat, in combination with a draw-clamp adapted to be applied to the upper face of the chair, upon the opposite side of the seat from the flange thereof, constructed with a flange adapted to impringe against the adjacent faces of the webs of the rail-ends, reinforced by transverse ribs, and provided with a rib-shaped to enter and occupy the said groove, substantially as set forth, and whereby the clamp takes a bearing under the said seat, and hence under the bases of the rail-ends, but not directly against the same.

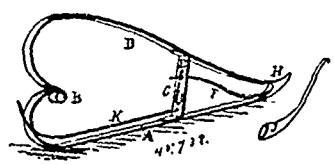
No. 45,737. Nut-Lock. (*Arrête-écrou.*)



Joseph Lachace, St. François, de la Beauce, Quebec, Canada, 7 Avril, 1894; 6 ans.

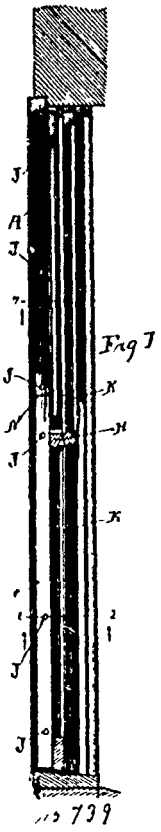
Resumé.—Un arrête écrou composé d'un ressort C, E, fixé à l'écrou, G un cliquet barbelé F, monté sur un pivot H, de manière à ce que ces barbes engagent les filets du boulon, tel que décrit et montré sur les dessins.

No. 45,738. Divider for Pea Harvester. (*Diviseur pour moissonneuses.*)



John Richmond, Morris, Ontario, Canada, 7th April, 1894; 6 years.

Claim.—1st. The combination of the adjustable point J, with the point H so as to form a complete divider for a pea harvester, both for short and long straw. 2nd. The hinge joint B, by means of which the divider may be attached to the machine upon which it is to be operated and giving play upwards and downwards as upon a hinge of the said divider together with spring F through slot E, and dividing rod K, substantially as and for the purpose hereinbefore set forth.

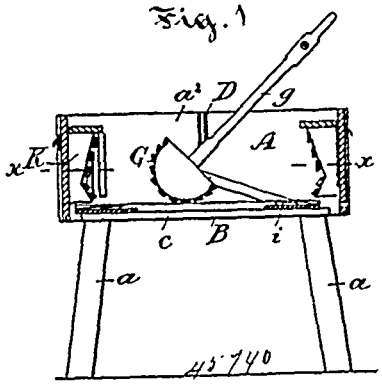


No. 45,739. Window Bead Fastener. (*Appareil pour assujétir les bourrelets de fenêtre.*)

Alonzo P. Read, Kenosha, Wisconsin, U.S.A., 7th April, 1894; 6 years.

Claim.—1st. In a window bead fastener, the combination of the window frame having sockets fitting therein, and each consisting of a rim, and the face plate E provided with a slot having a straight portion formed on both its under edges with serrations *c*, the enlarged portion *f* extending to the edge of said rim, and having rounded corners f^2 where it joins the straight portions of said slot, and the under edges of said enlarged portion *f* being bevelled from the said straight portion to the edge of the said rim, the bead and the set bolt passing through said bead and the slot, and having a head provided with teeth on its outer side adapted to engage with said serrations, substantially as set forth.

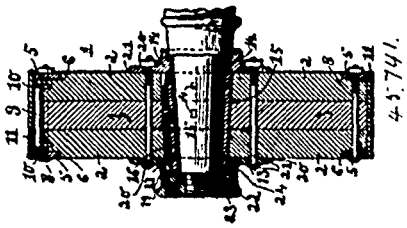
No. 45,740. Washing Machine. (*Machine à laver.*)



J. L. Knoll, Lebanon, Pennsylvania, U.S.A., 7th April, 1894; 6 years.

Claim.—1st. In a washing machine, the combination with a scrubber pivoted in a suds-box, and adapted to be reciprocated by means of suitable handles, of a floating bottom attached by means of links to the said handles, and carrying inwardly projecting teeth at both ends, substantially as set forth. 2nd. In a washing machine, the combination with a cylindrical scrubber, pivoted in a suds box and adapted to be reciprocated by means of a suitable handle, of the adjustable end racks K, substantially as set forth. 3rd. In a washing machine, the combination with the arms carrying the scrubber of a washer, of the elliptical studs secured thereon, the lined grooves D, and chambers *d* adapted to receive the said studs, substantially as set forth. 4th. In a washing machine, the combination with a suds box having a cylindrical scrubber pivoted therein, of the end racks K adjustably secured in grooves or otherwise in the end of the said suds box, the floating bottom J secured by the links I to the arms of the said scrubber, the inwardly projecting teeth or shoulders *i* on the said floating bottom J, substantially as set forth.

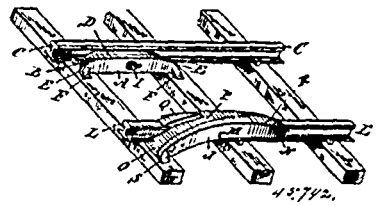
No. 45,741. Vehicle Wheel. (*Roue de voiture.*)



C. W. Robinson, Florence, Alabama, U.S.A., 7th April, 1894; 6 years,

Claim.—1st. A wheel consisting of a plurality of layers, the grain of the alternate layers being at right angles to each other and the intermediate layer consisting of a plurality of sectors cut lengthwise of the grain. 2nd. A wheel consisting of a plurality of layers, the grain of the alternate layers being at right angles to each other and the intermediate layer consisting of a plurality of sectors cut lengthwise the grain, the said alternate layers being held together by irons entering the periphery thereof, substantially as described. 3rd. The combination of a wheel consisting of a plurality of layers, the grain of the alternate layers being at right angles to each other and the intermediate layer consisting of a plurality of sectors cut lengthwise of the grain, perforated ring bearing upon the outer surfaces of the said alternate layers, and bolts passing through the said rings and through the thickness of the wheel, substantially as described. 4th. The combination of a wheel consisting of a plurality of layers, the grain of the alternate layers being at right angles to each other and the intermediate layers consisting of a plurality of sectors cut lengthwise of the grain, a box having an annular flange on one end thereof projecting through the wheel thus formed and having wings extending longitudinally along its outer surface, a collar mounted on the said box and having the recesses therein to receive the said wings, and bolts passing through the said collar and flange, and through the thickness of the wheel, whereby the former may be drawn tightly upon the latter, substantially as described.

No. 45,742. Car Replacer and Derailer. (*Rail de raccordement et appareil pour remettre sur la voie les chars de chemin de fer.*)



Daniel Donovan Green, Scofield, Utah, U. S. A., 9th April, 1894; 6 years.

Claim.—1st. In a car replacer a reversable replacing frog adapted to be used adjacent to either rail, and having a longitudinal groove B in its upper face, and provided with a spheroidical surface D, and guide lugs E, substantially as and for the purpose hereinbefore set forth. 2nd. In a car replacer, the combination of a car replacing and derailing frog adapted to be used on either rail, and having a rail receiving groove in its lower face, and inclining from its middle to its ends, and provided with a longitudinal groove F in its upper face, and a guard point Q, and guide rail R, substantially as and for the purpose hereinbefore set forth.

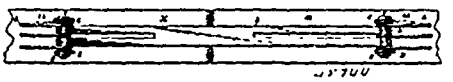
No. 45,743. Process of Manufacturing Pseudojonone. (*Procédé pour la fabrication de pseudo-onone.*)

Johann Carl Wilhelm Ferdinand Tiemann, Berlin, Germany, 9th April, 1894; 6 years.

Claim.—1st. As a new product a fragrant ketone corresponding to the formula $C_{13}H_{20}O$, called ionone, boiling point 128° C, at a pressure of 12 *m*, *m*, specific gravity 0, 935 and index of refraction 1,507 2nd. The herein described method of producing a fragrant ketone, which consists in treating citral, (a component of lemon oil of the formula $C_{10}H_{16}O$,) and acetone in equal parts with an alkaline agent and dissolving the product in ether, subjecting the residue of evaporation to fractional distillation under a reduced pressure, collecting the part, distilling over at a pressure of about 12 *m*, *m*, and at a temperature of from 138° to 155° C, separating the still present citral acetone, &c., by a current of steam, purifying the ketone thus obtained termed pseudo-ionone by fractional distillation in vacuo at a pressure of 12 *m*, *m*, and at a temperature of from 143° to 145°, and finally converting the same into a fragrant isomeric ketone

(ionone) by the action of dilute acids, and by fractional distillation. 3rd. The herein described method of producing a ketone of the formula $C_{13}H_{20}O$, from citral and acetone, called pseudo-ionone, consisting in treating the mixture with alkaline agents dissolving the product in aether and purifying the formed pseudo-ionone, by fractional distillation. 4th. The herein described method of producing a fragrant ketone of the formula $C_{13}H_{20}O$, (ionone), consisting in subjecting an isomeric ketone pseudo ionone or its products of condensation with phenyl-hydrazin or equivalent ammoniacal derivatives to the action of dilute acids and to fractional distillation.

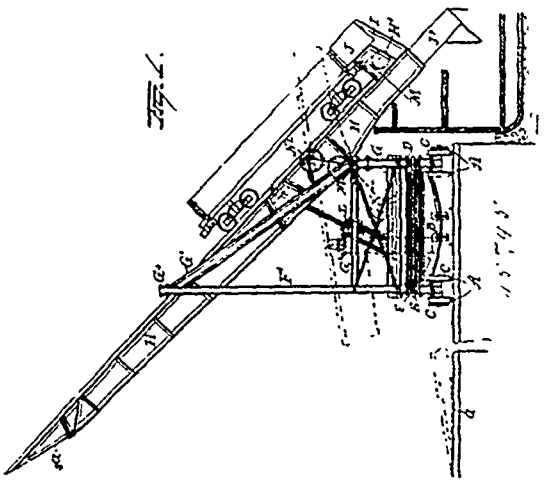
No. 45,744. Belt Tightener. (*Tendeur de courroie.*)



James Wright, Jackson, Tennessee, U.S.A., 9th April, 1894; 6 years.

Claim.—1st. A belt tightener consisting of two similar metallic drums and attachments, each drum having loosely journalled on it a set of grippers, the hooked ends of which are adapted to catch in perforations in the belt to be tightened, said drums being connected by a suitable belt, one end of each drum being provided with a ratchet and one gripper on each drum being provided with a pawl said pawl being adapted to engage the said ratchet, substantially as shown and described. 2nd. In a belt tightener, substantially as shown and described, a drum having journalled thereon suitable grippers, said drum being also provided with a suitable ratchet and pawl, the slot passing through said drum and having converging sides and a wedge shaped section located in said slot, said slot and section being adapted to hold the end of a belt, substantially as shown and described.

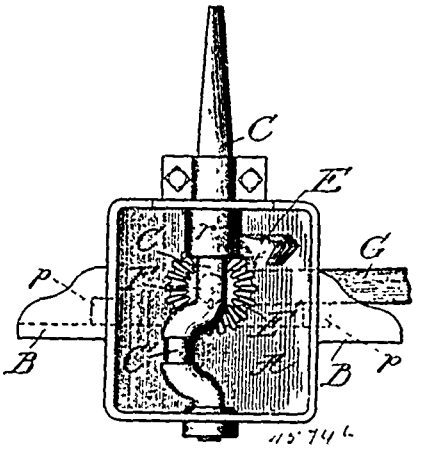
No. 45,745. Device for Unloading Cars.
(*Appareil pour décharger les chars.*)



George Henry Hullett, Cleveland, Ohio, U.S.A., 9th April, 1894; 6 years.

Claim.—1st. In a portable device for unloading cars, the combination with a truck and a rotary platform mounted thereon, of a lengthwise tilting platform pivoted at one side of its longitudinal centre to the rotary platform, and provided with a track on which cars may be run and supported, the tilting platform and rotary platform being constructed to allow the end of the long arm of the tilting platform to be depressed to rest on the adjacent track below the platform, and suitable means for drawing a car upwardly on the platform when in such inclined position, substantially as set forth. 2nd. In a portable device for unloading cars, the combination with a truck and a rotary platform mounted thereon, of a lengthwise tilting platform at one side of the longitudinal centre to one side of the rotary platform, and provided with a track on which cars may be run and supported, the tilting platform being constructed to allow the end of the long arm thereof to be depressed to rest on the adjacent track below the platform, and suitable means for drawing a car upwardly on the platform when in such inclined position. 3rd. In a portable device for unloading cars, the combination with a truck and a rotary platform mounted thereon, of a lengthwise tilting platform pivoted to the rotary platform, a buffer secured to the short arm of the tilting platform, and a hopper located on the buffer, and a chute connected with the hopper, substantially as set forth. 4th. In a device for unloading cars, the combination with a rotary platform, of a lengthwise tilting platform mounted on the rotary platform, said tilting platform being pivoted at one side of its longitudinal centre and its longer arm constructed of sufficient length to extend below the level of the rotary platform, means for drawing a car onto and up said inclined platform, a buffer near the free end of the shorter arm of said inclined platform, a chute carried by said platform through which the material is discharged, and means for tilting the platform endwise. 5th. In a device for unloading cars, the combination, with an inclined platform pivoted at one side of its longitudinal centre, and provided with a track on which cars may be run and supported, the said platform being constructed to allow the free end of the long arm thereof to be depressed below the plane of the axis of the platform to rest on an adjacent track, of a buffer located near the free end of the shorter arm of the platform, a chute through which the material is discharged, and a sliding trough carried by the shorter arm of the platform and adapted to receive the material as it falls from the chute, substantially as set forth.

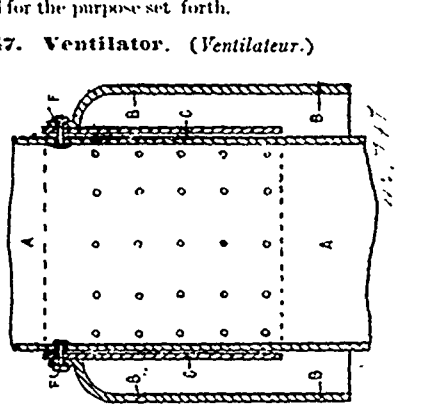
No. 45,746. Switch-Stand.
(*Plate-forme pour aiguilles.*)



Axel Albin Strom, Austin, Illinois, U.S.A., 9th April, 1894; 18 years.

Claim.—1st. In a switch-stand, the combination with the casing of a rotary-shaft having a crank-section at which to connect the switch-bar, a gear E fastened to said shaft at a point beyond its crank-section where the springy quality of said shaft between the gear and crank may play, and a shaft F carrying a gear E^1, meshing with the gear E, and a weighted arm G, substantially as and for the purpose set forth. 2nd. In a switch-stand, the combination with the casing of a vertical rotary target-shaft having a crank-section at which to connect the switch-bar, a gear E fastened to said shaft at a point above its crank-section where the springy quality of said shaft below the gear may play, and a shaft F carrying a gear E^1, meshing with the gear E, and a weighted arm G, substantially as and for the purpose set forth. 3rd. In a switch-stand, the combination with the casing of a base B, a vertical rotary target-shaft having a crank-section at which to connect the switch-bar, a gear E fastened to said shaft at a point above its crank-section where the springy quality of said shaft below the gear may play, a shaft F carrying a gear E^1, meshing with the gear E, and a weighted arm G, and stops *m* on the base in the path of the weighted arm at opposite sides of the shaft F, substantially as and for the purpose set forth.

No. 45,747. Ventilator. (*Ventilateur.*)

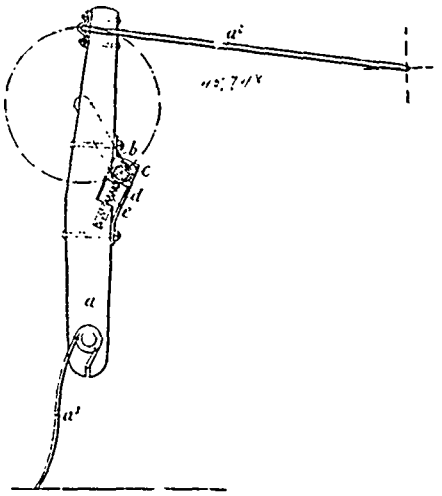


George Turner Orton, Winnipeg, Manitoba, Canada, 9th April, 1894; 6 years.

Claim.—The introduction of foul air into perforated stove pipes by means of jackets, and a means of closing the perforations by a

short horizontal revolving movement of encircling pipes, substantially as shown.

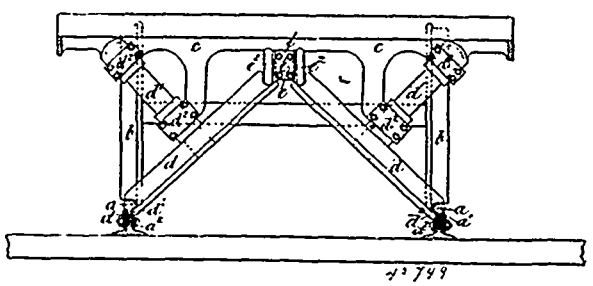
No. 45,748. Hay Tedder. (*Faneuse à foin.*)



Edward Christopher Blackstone, Stanford, England, 9th April, 1894; 6 years.

Claim. 1st. In a hay tedder, swath turner or similar implement, having forks or kickers, crank bearings adapted to slide in guides upon the said forks, substantially as and for the purpose described. 2nd. The combination with the forks or kickers of hay tedders, swath turners or similar implements of bearings sliding in guides upon the said forks and springs adapted to hold the said bearings in position in the guides and to allow the said fork to yield when they strike obstructions, substantially as described,

No. 45,749. Apparatus for Preventing Locomotives from Leaving the Rails. (*Appareil pour empêcher les locomotives de dérailler.*)



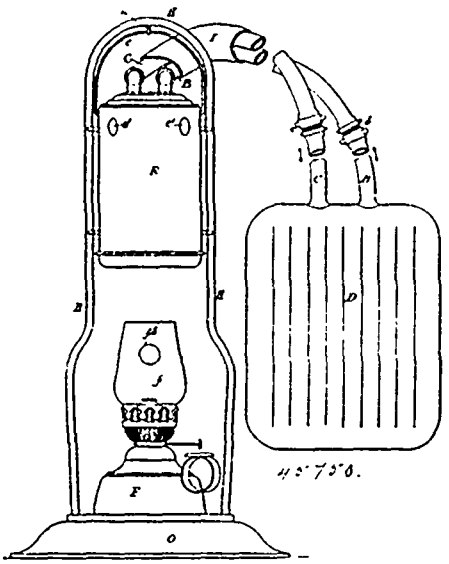
Mathew Belk, Palmerston, Wellington, Colony of New Zealand, 9th April, 1894; 6 years.

Claim.- 1st. The combination with a railway locomotive or vehicle of pulleys, wheels or rollers such as d, having axles d^1, and bearings d^2, as and for the purposes substantially as described herein and illustrated in the accompanying drawing. 2nd. The combination with a railway locomotive or vehicle of pulleys, wheels or rollers such as d, having axles d^1, and bearings d^2, axle such as c, having collars such as c^2, and bearings c^1, as and for the purposes substantially as described herein and illustrated.

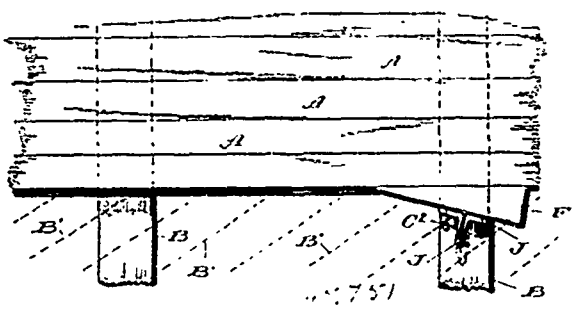
No. 45,750. Hot Water Heater.
(*Calorifère à eau.*)

Edward Wilson, Exeter, England, 9th April, 1894; 6 years.

Claim. 1st. A heating appliance consisting of a closed vessel or a coil from or near the top and bottom of which respectively tubes proceed and are connected with a pad or receptacle so as to constitute a closed circuit which is filled with water or other suitable liquid, substantially as specified. 2nd. A heating appliance consisting of a closed vessel or a coil from near the top and bottom of which respectively tubes proceed and are connected with a pad or receptacle so as to constitute a closed circuit, in combination with an outer vessel or reservoir containing water, in which the vessel or coil is immersed, and which outer vessel is heated by a lamp or other suitable means, substantially as specified. 3rd. The combination of two or more pads or receptacles connected together by tubes and to a single heating appliance, constructed and operating substantially as specified. 4th. The improved pad or receptacle provided with tubes made in one therewith for connecting such pad to the flow and return pipes of a circulating heating appliance, substantially as specified.



No. 45,751. Floor Set. (*Serre-joint pour planchers.*)



Hurbert A. Bates, Bath, Maine, U. S. A., 9th April, 1894; 6 years.

Claim.—The herein described floor-set, the same consisting of a body portion having an arm integral therewith and extended at right angles to the said body portion and to the ends of the three arms thus formed being provided upon their under sides with spurs or points, substantially as described. 2nd. A device for use in laying flooring, the same comprising a body portion, an arm integral with said body portion and extended at right angles thereto, the said three arms thus produced being each provided upon the under side of its outer end with a spur or point, the upper faces of the ends of the arms being reinforced or strengthened as described, and the ends of the arms being undercut, to receive a tool used in removing the device from the joist or floor, substantially as described.

No. 45,752. Boot and Shoe. (*Chaussures.*)

Oscar P. Hurd, Binghamton, New York, U. S. A., 9th April, 1894; 6 years.

Claim.- 1st. A boot or shoe upper comprising a vamp section, a front leg section secured to the vamp section, a rear leg section secured also to the vamp section and to the sides of the front leg section, and having formed in each of its edges, adjacent to the front leg section, an opening which forms, when the parts are assembled, a break in each side of the boot or shoe, the said break extending from a point just above the vamp to about the middle of the shoe, and an elastic gore secured in each of said openings or breaks, substantially as described. 2nd. A boot upper comprising a vamp section, a front leg section secured to the vamp section, an outer rear leg section secured to the vamp and to the front leg section, and having formed in each of its edges, adjacent to the front leg section, an opening which forms, when the parts are assembled, a break in each side of the boot, an inner rear leg section conforming to the shape of the outer rear leg section and secured to the inside thereof, and one more sections of elastic material secured in the openings on the side of the boot and having the rear edge thereof secured to the edges of the two rear leg sections, substantially as

described. 3rd. A boot upper comprising a vamp section, a front leg section secured to the vamp section, an outer rear leg section

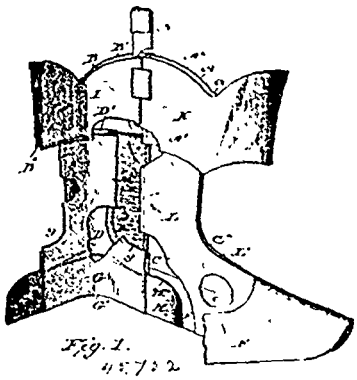


Fig. 1.

secured to the vamp and to the front leg section, and having formed in each of its edges, adjacent to the front leg section, an opening which forms, when the parts are assembled, a break in each side of the boot, an inner leg section having its upper portion conforming to the shape of the outer rear leg section and extending downwardly to the lower edge of the vamp and on the inner side thereof, sections of elastic gore secured in the openings on each side of the shoe and having their rear edges arranged between the edges of the rear leg sections, and a counter-stiffener arranged between the inner rear leg section and the inner portion of the vamp, the said counter-stiffener being secured to the inner side of the vamp, and the vamp, the counter-stiffener, and the rear leg section being firmly secured to each other, all substantially as described.

No. 45,753. Sheet Metal Spring.

(*Ressort en feuille métallique.*)

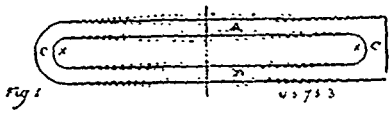


Fig 1

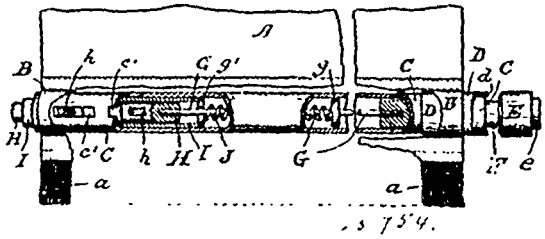
Charles La Dow, Albany, New York, U.S.A., 10th April, 1894; 6 years.

Claim.—1st. A spring made of sheet metal, having two opposing portions adapted to have edgewise movement relatively to each other by means of a slit or other narrow opening separating said opposing portions. 2nd. A sheet metal spring formed by cutting a slit into the sheet so as to separate a certain portion thereof, and to leave another portion thereof jointed together, substantially as described. 3rd. A spring made of plate metal, having a slit partially dividing the plate so as to make two opposing members, in combination with an integral portion joining said members. 4th. A spring made from thin elastic metal, adapted to have edgewise motion produced from different portions of the metal by means of a slit or other similar perforation cut from the body of the metal. 5th. A spring constructed from sheet metal having a slit between two adjacent edges of the metal. 6th. A spring having the movable portions A, B, made integral with portion C, and having the round portion X at the end of the slit which divides A and B. 7th. A plate of metal adapted to have spring action imparted thereto in an edgewise direction by means of a slit dividing or partially dividing said plate so that it may operate as described. 8th. A plate of metal adapted to have spring action in an edgewise direction by means of a slit dividing or partially dividing said plate, so that it may operate as described, in combination with a rib made integral with the plate and adapted to stiffen it in cross section. 9th. A spring having portions A, B and C, C, in combination with a slit arranged transversely between C, C. 10th. A spring having portions A, B, divided by a slit arranged longitudinally between A and B, in combination with a transverse slit opening into the longitudinal slit adapting the metal to spring both endwise and sidewise.

No. 45,754. Holding Mechanism for Spring Actuated Shades. (*Mécanisme actionné par un ressort pour stores de fenêtres.*)

Edward Thomas Burrowes, Portland, Maine, U.S.A., 10th April, 1894; 6 years.

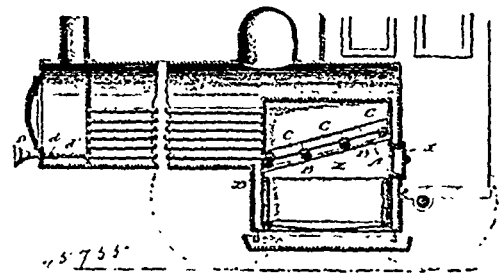
Claim.—1st. In spring actuated holding mechanism for shades an exterior tube formed of thin sheet metal slotted as shown, a short reinforcing or strengthening interior tube formed of similar material its ends serving as a step for the spring actuated holding mechanism, suitable retaining ferrules fitting the ends of said exterior tube, spring actuated rods mounting at their outer ends suitable friction heads, and at their inner ends a suitable stem having a rectangular perforation, handles, or pendants, having tenons fitting the rectangular perforated stems and secured by screws as shown, each of said rods being provided with a loose and rigid collar, and a helical



spring mounted therebetween, substantially for the purpose specified. 2nd In spring actuated holding mechanism for shades, an exterior tube formed of thin sheet metal slotted as shown, a shorter reinforcing interior tube having slots registering with those of the exterior tube, suitable retaining collars fitting the ends of the latter, spring actuated rods mounting at their outer ends suitable friction heads, and at their inner ends a suitable stem to which are attached the operating pendants, and each rod provided with one rigid collar, one loose collar and a helical spring mounted between said collars operating, substantially for the purpose set forth.

No. 45,755. Boiler Furnace.

(*Fourneau de chaudières.*)

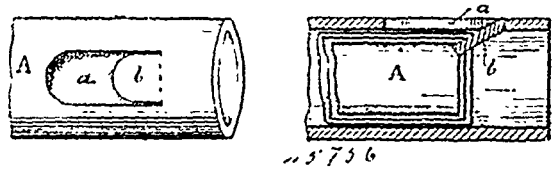


Albert Franklin Kingsley, Washington, Columbia, U.S.A., 10th April, 1894; 6 years.

Claim.—1st. The combination, with the flues and fire box of a boiler furnace, of a series of air conduits formed each of tubular laterally perforated fire clay sections put together end to end, and a series of fire clay supports for said conduits placed below and extending cross wise of the latter, said supports and sections being provided respectively with recesses and engaging shoulders, whereby they are interlocked, the one serving to hold the other properly spaced and in place without any rigid connection or joint between the two, substantially as hereinbefore set forth. 2nd. The combination, with the flues and fire box of a boiler furnace, of the water bars A, the transverse fire clay supports B, and the perforated air conduit sections C, those parts being constructed, fitted together and adapted to operate, substantially in the manner and for the purpose hereinbefore set forth.

No. 45,756. Postal and Other Tubes.

(*Tube postal et autres.*)

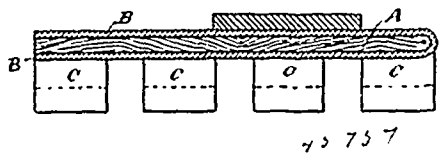


Peter Tyrer, Cranfield Lodge, Bexley Heaths, Kent, England, 10th April, 1894; 6 years.

Claim.—1st. As an improved article of manufacture, a tube for the transmission of papers or other articles, said tube having apertures in the substance thereof to facilitate the removal of the contents, said apertures being provided with tongues formed from the material of which the said tube is composed and which can be pressed inwards by the thumb or finger, thereby preventing the papers or other articles enclosed from slipping out of or being accidently withdrawn from the tube, substantially as described. 2nd. As an improved article of manufacture, a tube for the transmission of papers or other articles, said tube having apertures in the substance thereof to facilitate the removal of the contents and provided with tongues formed separately from the said aperature by incision at any other part of the tube and which can be pressed inwards by the thumb or finger, thereby preventing the papers or other articles enclosed, from slipping out of or being accidently withdrawn from

the tube, substantially as described. 3rd. As an improved article of manufacture, a tube for the transmission of papers or other articles provided with tongues formed by incision at any convenient part of the tube, and which can be pressed inwards by the tumb or finger, thereby preventing the papers or other articles enclosed, from slipping out of or being accidentally withdrawn from the tube, substantially as described.

No. 45,757. Piano Damper.
(*Etouffoir pour pianos.*)

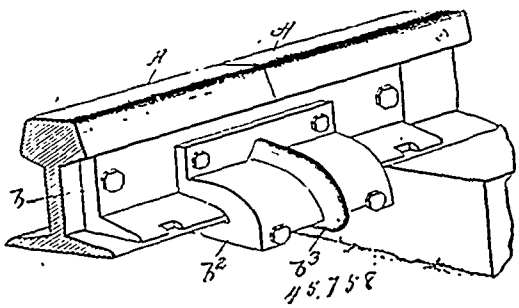


No 757

Antonio Pratte, Montreal, Quebec, Canada, 10th April, 1891; 6 years.

Claim.—1st. A damper for pianos, having four equally spaced wedges C, substantially as described and for the purposes set forth.

No. 45,758. Rail Joint. (*Joint de rails*)

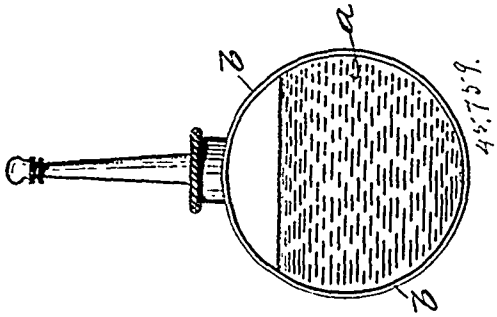


No 758

Solomon F. Stever, Fairfield, Iowa, U.S.A., 10th April, 1894; 6 years.

Claim.—1st. An angle-bar adapted to fit into the hollow at the side of two railway rails placed end to end, and a jaw of less length than the angle-bar integral with the same, forming a substantially central reinforcement thereto and to be at the place of juncture of the two rails when the device is in use, the jaws being adapted to inclose the flanges of the two rails at their ends on one side and also bear directly against and sustain the under sides of the rails at the joint, substantially as described. 2nd. An angle-bar adapted to fit into the hollow at the side of two railway rails placed end to end, and a jaw integral with and of less length than the angle-bar, forming a substantially central reinforcement thereto, the jaw being provided with bolt-holes and having a tapering opening of a length greater than the width of the flange of a rail, and being adapted to inclose the flange and bear directly against and sustain the under sides of the two rails, substantially as described. 3rd An angle-bar adapted to fit into the hollow at the side of two railway-rails placed end to end, and a jaw integral with the angle-bar and extending downward and outward from the same, the jaw being of less length than the angle-bar and placed at about the centre thereof to be at the point of juncture of the two rails, forming a reinforcement, and having openings for the reception of bolts, substantially as set forth.

No. 45,759. Oiler. (*Graisseur.*)

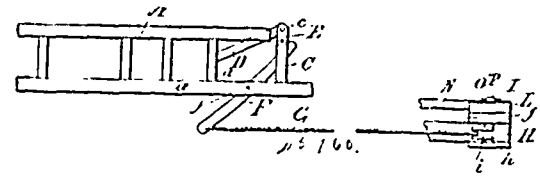


45,759.

James Lund, Heaton Chapel and Robert Henry Taylor, Ardwick, Manchester, both in England, 10th April, 1894; 6 years.

Claim.—1st. An oil feeder formed wholly or partly of a transparent and at the same time flexible material or substance such as celluloid or horn, substantially as and for the purpose set forth. 2nd. An oil feeder, as specified in the preceding claim, the body of which is formed wholly or partly of a transparent and at the same time flexible material or substance, the transparency of which permits to observe the quantity of the oil in the body of the oil feeder and the flexibility to eject it on pressure being exerted thereon, substantially as set forth.

No. 45,760. Horse Power or Capstan, Etc.
(*Machine mue par un cheval ou cabestan.*)

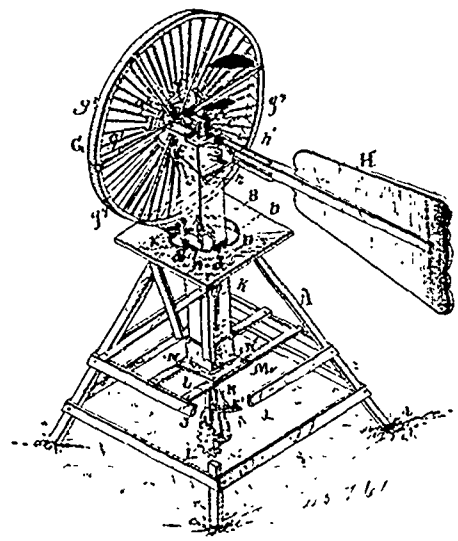


No 760.

Hubert Trefflé Chalifoux, St. Hyacinthe, Quebec, Canada, 10th April, 1894; 6 years.

Claim. In a capstan or horse power for hay presses and the like, the combination with a suitable frame having cross pieces *h*, of a crank shaft journalled in the said cross pieces, the crank *i*, the disc J, having recesses K on its upper surface, the loose disc L, the dogs M having their lower ends rounded at *m*, carried in the said loose disc, the lever N secured in the recess *n* on the said loose disc L, and means for connecting the said crank with the operating lever of the press, substantially as set forth.

No. 45,761. Wind Mill. (*Moulin à vent.*)

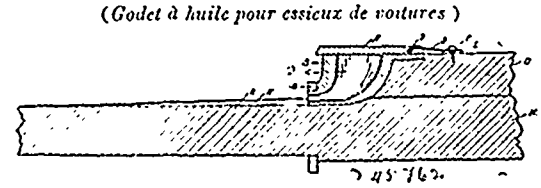


No 761

Ever Everson, Mankato, Kansas, U.S.A., 10th April, 1894; 6 years.

Claim. In a wind mill, the combination with a derrick, a stock C mounted and adapted to turn in the said derrick and carrying the operating mechanism, and having the tail vane pivotally attached thereto, of arms *h h*¹, projecting from opposite sides of the tail vane, the arm *h*¹ extending alongside and parallel with the stock, a windless I within convenient reach having notched hand wheel I¹, latch J to engage with the notched hand wheel, and cords reversely wound on the said windlass at their lower ends, and having their upper ends operatively connected with the said arms *h* and *h*¹, substantially as described and for the purpose set forth.

No. 45,762. Oil Cup for Carriage Axles.
(*Godet à huile pour essieux de voitures*)



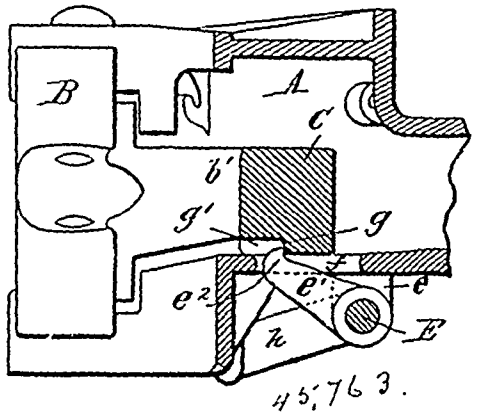
No 762.

George Wellington Butler, Oxford, Kent, Ontario, Canada, 10th April, 1894; 6 years.

Claim. 1st. A carriage axle oil cup composed of metal or other suitable material having an aperture leading to the axle at the inner end of a wheel hub, a lid to cover the oil opening at the top, and a spring to hold the said lid firmly on the oil cup, substantially as and for the purpose hereinbefore set forth. 2nd. In combination a carriage axle oil cup, as described, carriage axle having a groove or crease on its upper side to convey the oil from the discharge or

feed aperture of the oil cup over the bearing surface of the axle and the wooden support or bed piece on the top of the axle to which the oil cup is firmly attached, substantially as and for the purpose hereinbefore set forth.

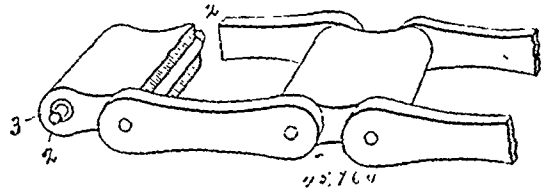
No. 45,763. Car Coupler. (*Attelage de chars.*)



The Gould Coupler Company, New York, assignee of Willard F. Richards, Buffalo, both of New York, U.S.A., 11th April, 1894; 6 years.

Claim.—1st. The combination with the draw-head and the swinging coupling-jaw, of a lock engaging with said jaw, a transverse rock shaft arranged on the underside of the draw-head, and a shifting arm or lever securely directly to said shaft and adapted to engage with said lock, substantially as set forth. 2nd. The combination with the draw-head having a slot in its bottom and the swinging coupling jaw, of a lock mounted on an upright pivot and capable of swinging in a horizontal plane, a transverse rock shaft journalled on the underside of the draw-head, and a vertically swinging shifting arm secured to said shaft projecting through the slot of the draw-head and adapted to engage with said lock, substantially as set forth. 3rd. The combination with the draw-head having a longitudinal slot in its bottom, and the coupling-jaw, of a horizontally swinging lock provided in its underside with a recess opening at the front side of the lock and forming a shoulder, a horizontal rock shaft journalled on the underside of the draw-head, and a shifting lever mounted on said rock shaft, extending through the slot of the draw-head and engaging against the shoulder of the lock, substantially as set forth.

No. 45,764. Process for Manufacturing Rivets, Studs, etc. (*Procédé pour la fabrication de rivets, tenons, etc.*)



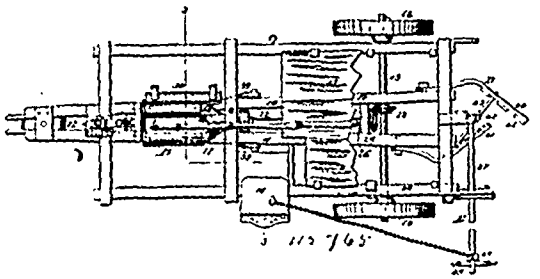
William Sanfield Wilson and David S. Henderson, both of Brantford, Ontario, Canada, 11th April, 1894; 6 years.

Claim.—The herein described process for providing metal with surfaces of hardened and soft metal respectively, which consists of charging the metal with a sufficient quantity of carbon, then cutting the carbonized skin from that portion required to be soft, then heating the metal to the required temperature, and then submerging the metal in a hardening fluid, substantially as and for the purpose specified.

No. 45,765. Cane Planter. (*Plantoir.*)

Eligio Olivara Y. Martinez and Edwards Manuel Acevedo, both of Havana, Cuba, 11th April, 1894; 6 years.

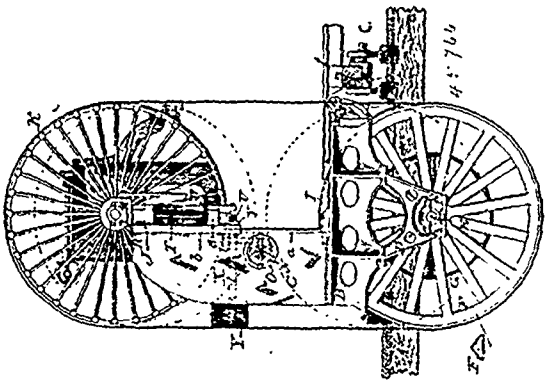
Claim.—1st. In a planter, a revolving seed box provided with a series of pockets adapted to receive cane, and a knife held stationary at one end of the box, whereby cane placed in the box will be cut automatically in suitable lengths, as and for the purpose set forth. 2nd. In a cane planter, a planting cylinder, and means for revolving the same, said cylinder being provided with pockets to receive the cane and held to revolve in close proximity to a knife, as and for the purpose set forth. 3rd. In a cane planter, the combination, with a revolving cylinder provided with pockets to receive cane, of a shield or fender located at one side of the cylinder, and a stationary knife located in close proximity to one end of the cylinder, as and for the purpose specified. 4th. In a cane planter, the combination, with a revolving seed box provided with a series of pockets in its exterior surface, one end of the box being conical or bevelled, of a shield located opposite one side of the box, and a stationary



knife extending over the conical or tapering end of the box, as and for the purpose set forth. 5th. In a cane planter, the combination, with a revolving seed box having a tapering or bevelled surface at one end and provided with pockets produced longitudinally and exteriorly therein, the said pockets extending through the conical end, of a shield located at one side of the box, and a stationary knife extending over the tapering end of the box, whereby the pockets, as the box is revolved, are brought beneath the knife, as and for the purpose specified. 6th. In a cane planter, the combination, with a revolving cylinder having exterior pockets, and a shield located adjacent to one side of the cylinder, of a knife held stationary and extending over the pockets of the cylinder as the latter is revolved, and a plough located beneath the cylinder, the said plough being provided with side fenders extending rearwardly from the share, as and for the purpose set forth. 7th. In a cane planter, the combination, with a revolving seed box having exterior pockets produced therein, a shield located at one side of the box, and a stationary knife extending over the pockets as the box is revolved, of a plough located beneath the cylinder, comprising a share and fenders projected rearwardly from each side of the share, the pockets in the seed box being adapted to drop their contents between the fenders of the plough, and a covering device located at the rear of the seed box and following the path of the plough, as and for the purpose specified. 8th. In a planter, a covering device, the same consisting of two beams having their inner ends connected with a planter and their outer ends carried one in advance of the other, the outer ends of the being also at angles to each other, and covering boards connected with the beams, as and for the purpose set forth. 9th. In a planter, the combination, with the frame of the planter, of two covering beams pivotally connected with the frame, the opposite ends of the beams being carried one in advance of the other and one at an angle to the other, and means, substantially as shown and described, for raising or lowering the covering beams, as and for the purposes set forth.

No. 45,766. Band Saw Mill.

(*Scierie à lame sans fin.*)

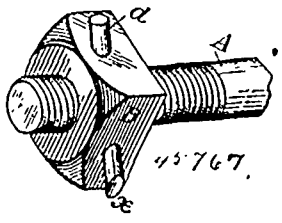


George M. Hinkley, Dempsey B. Hanson, William H. Trout and The Edward P. Allis Company, all of Milwaukee, Wisconsin, U.S.A., 11th April, 1894; 6 years.

Claim.—1st. In a band saw mill, the combination with a framework or support, of a bed-plate B, having an opening H up through which the lower band saw wheel may project, a shaft journalled in bearings on said bed-plate and provided with a lower saw-carrying wheel, an upright standard or column mounted upon but independent of the bed-plate, and an upper saw-carrying wheel mounted upon said standard, substantially as shown and described. 2nd. In combination with a framework or support, a bed plate B provided with the opening H, the shaft E journalled in bearings on the bed-plate, and provided with a saw-carrying wheel F projecting up into the opening H, a plate I covering the upwardly projecting portion of the wheel F, an upright column secured to but independent of the base-plate, and a saw-carrying wheel supported by the upright column, substantially as shown and described. 3rd. In a band saw

mill, the combination with a frame in which the upper saw wheel is carried, of a bar hung upon hooks on said frame, a weighted lever connected with said bar, and rods supporting at their upper ends the bearings for the upper saw wheel shaft, and resting at their lower ends upon the rod or shaft, all substantially as shown and described. 4th. In a band saw mill, the combination with a frame as J, provided with the perforated lugs c, of the hooks V having threaded shanks extending through the lugs where they are provided with nuts d, a rod or bar U notched to receive the hooks, the upper saw wheel K, having its shaft journalled in bearings R, S, rods T supporting at their upper ends the said bearings and resting at their lower ends in notches formed in the rod or bar U, and a counterweighted lever projecting from that side of the bar or rod U opposite the rods T, substantially as shown and described.

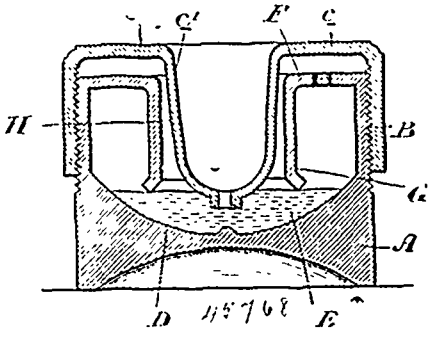
No. 45,767. Nut Lock. (*Arrête-écrou.*)



John Homer, Dubois, Pennsylvania, U.S.A., 11th April, 1894; 6 years.

Claim. The combination of a bolt, a nut having a transverse opening wholly within its body for receiving a portion of the thread of said bolt, and a key blunt in cross section having on its entering end a forwardly bevelled cutting edge adapted to shear off a portion of the thread of the bolt, whereby the nut is securely locked by the swaging action of said blunt portion, substantially as described

No. 45,768. Ink Stand. (*Encrier.*)



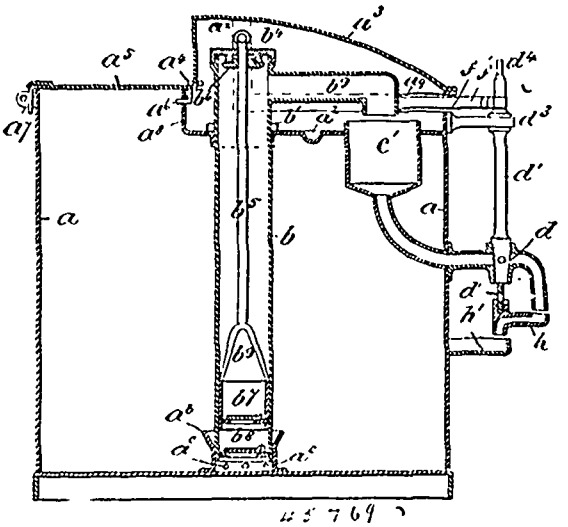
Thomas S. Shenston, Brantford, Ontario, Canada, 11th April, 1894; 6 years.

Claim.—1st. In an ink-stand, the combination of an ink-well A, having its upper section screw-threaded, a ring-shaped top F, having a downwardly projecting flange G, partially closing the said ink-well A, a cover C, screw-threaded to correspond with the ink-well A, having a ring-shaped top c^1, provided with a downwardly projecting cone-shaped flange H, entering the ink well, a cavity E, formed in the bottom of the ink-well A, substantially as and for the purpose specified. 2nd. In an ink-stand, the combination of the ink well A, having its upper sections screw-threaded, a bottom D, for the ink-well, a cavity E, formed in the middle portion of the bottom D, a ring-shaped top F, partially closing the ink-well A, a downwardly projecting flange G, surrounding the opening through the middle of the top F, the top F, being located below the top of the ink-well, a cover C, consisting of a band c^1, having a ring-shaped top c^1, a downwardly projecting cone-shaped flange H, surrounding the opening through the top c^1, and entering the ink-well, substantially as and for the purpose specified.

No. 45,769. Combined Tank or Cistern, Pump and Measure for Liquids. (*Réservoir citerne, pompe et mesure pour liquides combinés.*)

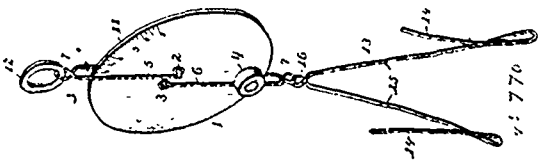
William Barnes, Ashbourn, Derbyshire, England, 11th April, 1894; 6 years.

Claim. 1st. The combination with a cistern, of a pump, having a spout from its barrel arranged so as to be turned to come over one or more measures fixed to the cistern to fill them to overflow, substantially as and for the purpose described. 2nd. The combination of the spout of the pump barrel having a projection f and f^1, with the cross bar d^1, on the spindle of the tap or taps or handle thereof, as set forth, for the purpose described. 3rd. The combination with the taps for discharging the liquid from the measures, of a drop catcher, substantially as set forth. 4th. The combination with the cistern, of an adjustable pump therein, a series of measures adapted



to be filled by the pump, one at a time, a tube leading from said measures and provided with a tap outside the cistern, and an automatic device to keep said taps closed, as set forth. 5th. The combination of a cistern, an adjustable pump therein, a series of measures located to be filled by said pump, each measure having a tube leading to outside the cistern and provided with a tap, as set forth.

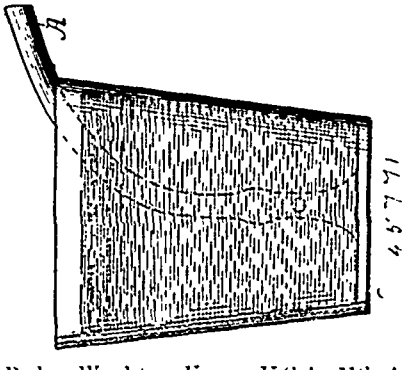
No. 45,770. Weighing Scales. (*Romaine*)



Robert A. Dunning, Bath, Maine, U.S.A., 11th April, 1894; 6 years.

Claim. A mail weighing apparatus, comprising a permanently-weighted scale bearing disc provided with eccentric bearings 2 and 3, detachable loops 5 and 6 engaging said bearings and having their parallel arms provided with interlocking hooks and keepers 9 and 10, and further provided at their outer extremities with eyes 7, a finger-ring 11 engaging one of the eyes 7, and a holder 13 connected to the eye of the other loop, substantially as specified.

No. 45,771. Vacuum Holder for Syringes, etc.
(*Porte-vide de seringue, etc.*)

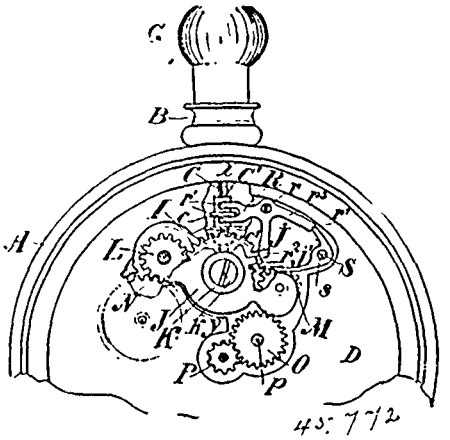


James C. Parker, Woolston, Kansas, U.S.A., 11th April, 1894; 6 years.

Claim. 1st. A holder for the feed tube of syringes, pumps, etc., comprising a elastic bell shaped sucker attached to the inlet ends of such tubes, as specified. 2nd. In combination with the suction tube of a syringe or similar article, a holder comprising a hollow shank communicating with the suction tube and having induction or inlet apertures, and a subjacent hollow bell-shaped sucker adapted to be held in contact with the bottom or side of a vessel by atmospheric pressure, substantially as described. 3rd. In combination with a tube for syringes, etc., a rubber vacuum holder, such as

B, having a ring or clip *f* formed integral thereon, for the purpose set forth.

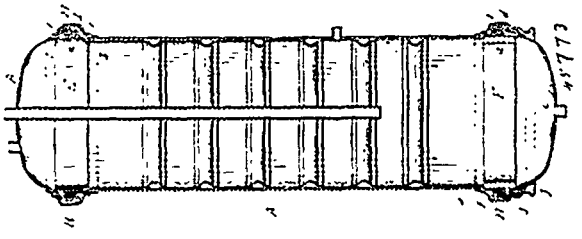
No. 45,772. Stem Winding Watch.
(*Montre à remontoir*)



George S. Klein, Toronto, Ontario, Canada, 11th April, 1894; 6 years.

Claim.—1st. The combination with a stem arbour of indeterminate length in a case pendent, of a collar having a stem longitudinally adjustable within the bevel pinion by which the winding and setting train is set in motion, and connected to the stem arbour by a hollow threaded plug provided with a series of splits, which plug is screwed home into the collar, and means whereby the collar is operatively connected to the yoke so as to change it to the setting or winding positions, as shown and for the purpose specified. 2nd. The combination with the stem arbour C, in a case pendant, of a collar C^1, having a square stem c^1, extending through the bevel pinion H, a threaded plug E, made hollow and provided with splits *c*, and a square upper hole c^2, to grip the stem arbour and tapered at the top so as to fit into a correspondingly taper at the top, of the cylindrical hole c^2, and an annular projection *c*, made in the collar and means whereby the annular projection *c*, is connected to the yoke, so that the position of such yoke is changed to throw in the winding or setting train, as and for the purpose specified. 3rd. The combination with the stem arbour C, collar C^1, connected to the stem arbour by the threaded split plug E, as specified, and having an annular ring *c*, of the bevel pinion H, meshing with the crown wheel *i*, of the gear wheel I, the yoke J, containing the gear wheels L and M, and the pivoted bell crank R, provided with jaws r^1, which extend at each side of the annular projection *c*, of the collar C^1, the arm r^2, designed to be brought into engagement with the notch *j*, the tail r^3, having a notch r^4, made in the end and the spring crank *s*, one end of which fits into the notch r^4, and the other into the notch j^1, in the yoke J, as and for the purpose specified. 4th The collar C^1, having a cylindrical hole c^4, threaded as specified, and the threaded plug E, provided with splits *c*, cylindrical opening c^1, and the square top opening c^2, which plug E, is screwed home into the cylindrical threaded hole c^2, of the collar, as and for the purpose specified. 5th. The combination with the stem arbour, of the collar C^1, split plug B, designed to be inserted in a cylindrical socket in the collar and grip, by the square opening at the top of the plug, the stem arbour, and the bevel pinion H, situated on a square stem of the collar and designed to communicate motion to the winding or setting trains, whichever may be thrown, in, as and for the purpose specified.

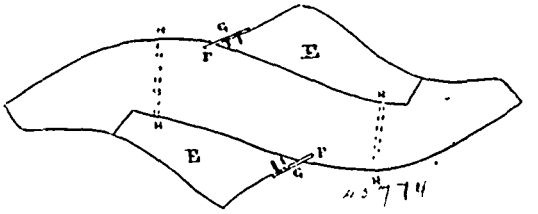
No. 45,773. Range Boiler. (*Chaudière de cuisinière.*)



Valentin Wilhelme, Paterson, New Jersey, U.S.A., 11th April, 1894; 6 years.

Claim.—1st. In a range boiler, the combination, with a cylindrical shell, of top and bottom heads, the edges of the shell and heads being doubled over and folded to form a close joint, and of sheet metal rings placed over said doubled and folded joints and spun in close contact with said joints, substantially as set forth. 2nd. In a range-boiler, the combination with a cylindrical shell, of top and bottom heads, the edges of the heads and shell being doubled over and folded to form a tight joint, and a sheet metal ring spun over each end of the boiler at the joint, so as to overlap part of the shell and part of each head, each ring having a raised central portion and a shoulder at each side of the raised central portion, substantially as set forth 3rd. In a range boiler, the combination, with a cylindrical shell, of top and bottom heads, the edges of the heads and shell being doubled over and folded to form a tight joint, reinforcing rings inside of said shell and heads, and a sheet-metal ring placed over each doubled and folded joint and spun in close contact with said joint, substantially as set forth.

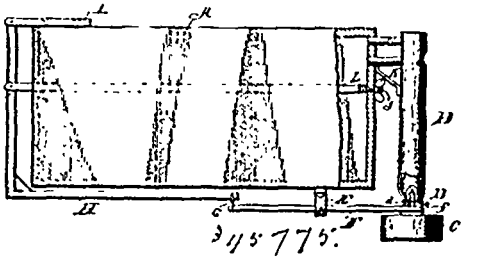
No. 45,774. Shoemaker's Last. (*Forme.*)



Clinton M. Hurlbut, Toronto, Ontario, Canada, 11th April, 1894; 6 years.

Claim.—A combination of a pair of lasts (being right and left) in one last, substantially as and for the purpose hereinbefore set forth.

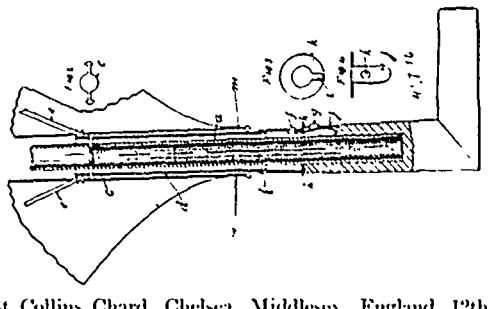
No. 45,775. Heat Regulator. (*Regulateur de chaleur.*)



John J. Schrag, Valentine, Kansas, U. S. A., 12th April, 1894; 6 years.

Claim.—In a heat regulator, the combination, with the heating lamp, of the regulating sleeve moving over the wick having depending legs or arms, a horizontal lever pivotally mounted adjacent to the lamp and having a forked end engaging said depending legs or arms, an angle lever pivotally suspended from a suitable point of attachment at the upper end of its vertical arm, a link pivotally connecting one end of the horizontal arm of the angle lever to one end of said horizontal lever, and an adjustable thermostatic bar or rod pivotally connected at one end to the vertical arm of the angle lever, substantially as set forth.

No. 45,776. Umbrella. (*Parapluie.*)



Ernest Collins Chard, Chelsea, Middlesex, England, 12th April, 1894; 6 years.

Claim. In umbrellas and parasoles, a hollow stick or handle, a spring contained therein and acting at one end upon a sliding washer, said washer being attached to the runner carrying the ribs, a catch piece for retaining said runner in the closed position, substantially as described and illustrated.

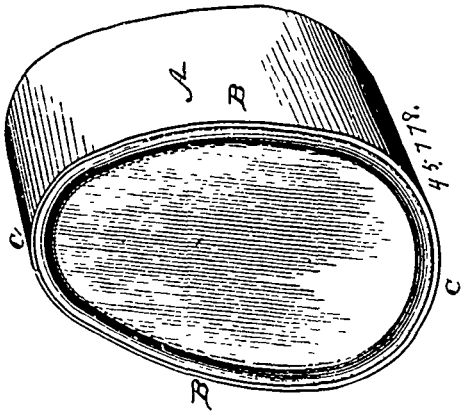
No. 45,777. Wall Finishing Compound.
(*Composition plastique.*)

Robert Edwin Haire, Grand Rapids, Michigan, U.S.A., 12th April, 1894; 6 years.

Claim. 1st. An adhesive composition, consisting of a base and animal glue, substantially in the proportions of two or six pounds of

the glue to 100 pounds of the base, the glue being in a finely divided condition and mixed with the base, said composition being capable of reduction in cold water, substantially as described. 2nd. The hereinbefore described method of making an adhesive compound of animal glue and a base consisting in grinding the glue and base separately, and then grinding both together the ingredients being in a dry condition when ground together and so finely divided as to be capable of being reduced in cold water, substantially as described.

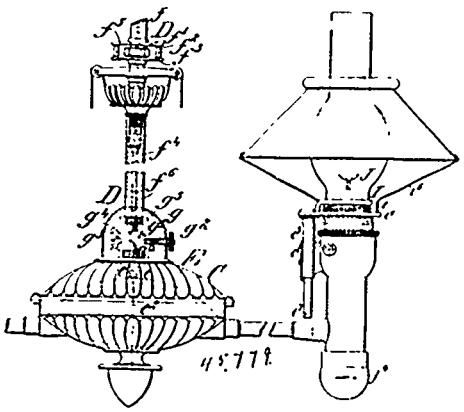
No. 45,778. Can. (*Boîte métallique.*)



Marshall J. Kinney, Astoria, Oregon, U. S A., 12th April, 1894, 6 years.

Claim. As an improvement in packing salmon, the fitting of entire cross sectional slices thereof in cans which conform in shape to that of the salmon section whereby the latter may be retained in natural shape, and turned out in said shape either before or after its final cooking, all substantially as set forth.

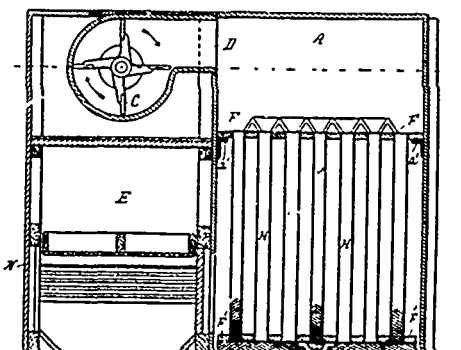
No. 45,779. Apparatus for Using Liquid Fuel.
(*Appareil à l'usage du combustible liquide.*)



Henri Galopin, Melbourne, Colony of Victoria, 12th April, 1894; 6 years.

Claim.—1st. In apparatus for using liquid fuel for lighting and heating purposes the employment of a kerosene tin or reservoir (such as A) to contain the liquid fuel, having a recess (such as a^2) in which is fitted the coupling piece to which the main service pipe is to be connected, and having a thin piece of sheet metal (such as A^1) adapted to be easily pierced through together with wire gauze (such as a^2) across the inside orifice of said screwed coupling piece, substantially as and for the purpose herein described and shown. 2nd. In apparatus for using liquid fuel for lighting and heating purposes, the employment of a screw-threaded spindle formed with channels or grooves (such as b^6), and having a pointed end (such as B) adapted to be forced through a piece of thin metal let into the side of the kerosene tin or reservoir from which the supply of kerosene is to be obtained, the other end of said spindle being provided with a hand-wheel, and the casing of said spindle having an air pipe (such as b^4) extending up to above the fuel in the tin or reservoir, substantially as and for the purposes herein described and shown. 3rd. In apparatus for using liquid fuel for lighting and heating purposes, the combination with a bracket (such as c^1) having a passage (such as c^4) formed through it, of a screw-threaded spindle carrying a stop valve (such as c^1) adapted to open and close said passage, substantially as and for the purposes herein described and shown. 4th. In apparatus for using liquid fuel for lighting and heating purposes, the employment of a stuffing box in a chandelier, consisting of a sleeve or tube (such as f^7) fitted with a series of leather or other washers (such as f^8) in one half, and with a series of washers formed of glycerine and glue, substantially in the proportion of 4 to 6, pressed closely together by means of a spiral spring (such as f^{14}) in the other half, the two said halves being divided by a metal dividing piece (such as f^{10}) inside said sleeve, the whole being constructed substantially as and for the purposes herein described and shown. 5th. In apparatus for using liquid fuel for lighting and heating purposes, the employment of a valve, having its seating or sealing part made of a composition of glycerine and glue, or of a pulp of leather or cork and glycerine and glue, enclosed or surrounded by an envelope of oilskin, substantially as and for the purposes herein described and shown. 6th. In apparatus for using liquid fuel for lighting and heating purposes, the combination with an oil reservoir (such as C) of a float (such as E) carrying a valve (such as e) adapted to open or close the delivery pipe or opening leading into said reservoir, substantially as and for the purposes herein described and shown. 7th. In apparatus for using liquid fuel for lighting and heating purposes, the employment of a holder or support carrying the lamp chimney and globe or shade secure upon the upper end of a vertically sliding rod, (such as i^2), with a spring such as i^4, bearing against a flat cut on said rod, and adapted to engage within a recess (such as i^7), when the said holder is raised, substantially as and for the purposes herein described and shown. 8th. In apparatus for using liquid fuel for lighting and other purposes, the employment of a baffle-plate, (such as J), fitted upon the upper end of a rod or tube (such as j), formed with Z-shaped protecting guides or plates fitting tightly within the wick tube, substantially as and for the purposes herein described and shown. 9th. In apparatus for using liquid fuel for lighting and heating purposes, the employment of a bracket (such as K), fitted with a short upwardly projecting pointed tube (such as k^1), together with some means such for instance, as the screw-threaded rod k^2, for forcing a kerosene tin down upon said pointed tube, thereby opening an air-hole by pressing down the point of a tube (such as k^4), connected to the hand-screw, substantially as and for the purposes herein described and shown. 10th. In apparatus for using liquid fuel for lighting and heating purposes, the combination with a wick fitting round a tube, of an annular ring connected by one or more bridges, the space between the bridges and the upper annular surface being sufficient to expose so much of the wick as will supply oil to flame without smoke, the said annular ring moving freely up and down with the wick, substantially as and for the purposes herein described and shown. 11th. In combination with apparatus for using liquid fuel for lighting and heating purposes, the employment of two levers, pivoted at about their centres to each other and having their inner ends shaped to correspond with the inside of the lamp glasses whilst their outer ends form handles, the whole being constructed and arranged substantially as and for the purposes herein described and shown.

No. 45,780. Dust Collector. (*Ramasse-poussière.*)

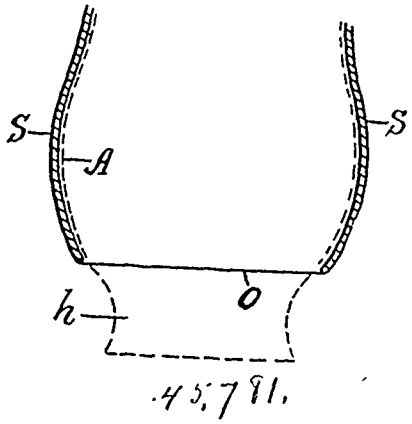


George Scothen Wilson, Tecumseh, Michigan, U.S.A., 12th April, 1894; 6 years.

Claim.—1st. In a dust collector, the combination of a chamber, a fan adapted to deliver dust laden air therein, a series of circular canvas tubes open at each end, the upper open ends communicating with said chamber, into which said dust laden air is delivered, the open lower ends communicating with a common dust receptacle, and means for conveying away the dust, substantially as described. 2nd. In a dust collector, the combination of a chamber, a fan adapted to deliver dust laden air therein, a series of circular canvas tubes open at each end, the upper ends communicating with said chamber and adapted to receive the dust therefrom, the open lower ends communicating with a common dust receptacle, means for con-

veying away the dust collected, and means for keeping the cloth tube in a constant state of tension in the direction of their length, substantially as described. 3rd. In combination with a chamber having a suitable inlet opening, a fan case and fan connected therewith by suitable passages and adapted to deliver dust laden air into said casing, a series of cloth tubes leading therefrom downward and being open and unobstructed throughout their whole extent, a dust receptacle communicating with the lower end of said tubes, and have therein an automatic valve adapted to keep said dust chamber substantially air tight and adapted to automatically discharge therefrom collections of dust therein, substantially as described. 4th. In combination with a casing having a suitable inlet opening, a fan case and a fan connected therewith by suitable passages and adapted to deliver air into said casing, a series of unobstructed cloth tubes leading therefrom downward, adjustable means for keeping said tubes in a constant state of a longitudinal tension, a dust receptacle communicating with the lower ends of said tubes and having therein an automatic valve adapted to keep said dust chamber substantially air tight, and adapted to automatically discharge collections of dust therein, substantially as described. 5th. In combination with a casing having a suitable inlet opening, a fan case and a fan connected therewith by suitable passages and adapted to deliver therein dust laden air, a series of cloth tubes leading therefrom downward, a perforated head common to two or more of the flues and sustained by the lower ends thereof, whereby the said tubes are kept in a constant state of tension, a dust receptacle communicating with the lower ends of said tubes, and means for discharging the dust from said dust receptacle, substantially as described. 6th. In combination with a casing having a suitable inlet opening, a fan case and a fan connected therewith by suitable passages to cause a downward current, a series of cloth tubes leading therefrom downward, the opening into the upper end of said tubes being choked or rendered smaller in diameter than the diameter of the tube proper, means for keeping said tubes in a constant state of tension, and a dust receptacle communicating with the lower ends of said tubes, substantially as described.

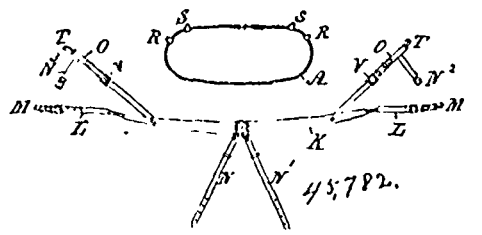
No. 45,781. Over-Stocking. (*Bas.*)



Gasper S. Grosch, Milverton, Ontario, Canada, 12th April, 1894; 6 years.

Claim.—1st. As a new article of manufacture, a stocking S, formed with an opening O, in the foot at the heel, and with a selvage edge around said opening, substantially as and for the purpose set forth 2nd. As a new article of manufacture, a stocking S, in which an opening O, is formed in the foot at the heel by dropping and locking the stitch, and then taking the loop or stitch up again, substantially as and for the purpose set forth. 3rd. As a new article of manufacture, a stocking S, in which an opening O, is formed in the foot at the heel, and with a selvage edge, in turning said edge and means for securing it to the stocking, substantially as and for the purposes set forth. 4th. As a new article of manufacture, a stocking S, in which an opening O, is formed in the foot at the heel, by dropping and locking the stitch, and then taking it up again, inturning the portion of the stocking around said opening, and means for securing said inturned edge to the stocking, substantially as and for the purposes set forth. 5th. As a new article of manufacture, a stocking S, having an opening O, formed in the foot at the heel, and the portion of the stocking around said opening turned in and secured by suitable means, substantially as and for the purposes set forth. 6th. As a new article of manufacture, a stocking S, in which an opening O, is formed in the foot at the heel, the edge of the stocking around said opening turned in and secured to the stocking at the one operation, substantially as and for the purpose set forth. 7th. As a new article of manufacture, a stocking S, in which an opening O, is formed in the foot at the heel, the edge of the stocking around said opening turned in, and secured to the inner loops or stitches of the knitted stocking, substantially as and for the purposes hereinbefore set forth.

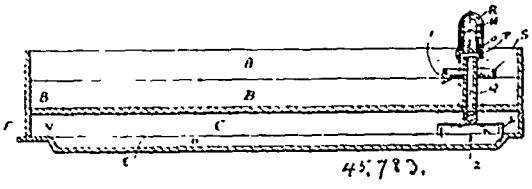
No. 45,782. Army Accoutrement. (*Effets d'équipement.*)



William Silver Oliver, Halifax, Nova Scotia, Canada, 12th April, 1894; 6 years.

Claim. -1st. The combination with the waist belt A, of the magazine brace, consisting of the straps K, L, N, N¹, N², N³, O, O, the reserve ammunition pouch B, and magazine bag C, as set forth, for the purpose described. 2nd. The combination with the waist belt, of the magazine brace, the magazine bag, the crossed straps P, P, attaching the great coat C, to the magazine brace and the reserve ammunition pouch, arranged as set forth. 3rd. The combination with the waist belt of the reserve ammunition pouch attached to the front, side or back of said belt, the magazine brace connected to said belt, the magazine bag attached to the magazine brace, the crossed straps to carry the great coat, etc. and the canteen and canteen straps or yoke connecting with the magazine brace or other portion of the equipment, as set forth. 4th. The magazine bag C, having strap loops E, E, for threading the waist belt therethrough, and metal D-loops A², A², for attachment to magazine brace, as set forth.

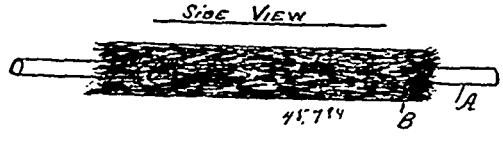
No. 45,783. Sap Evaporator.
(*Machine à vaporiser l'eau d'érable.*)



Louis Gauthier, Village de St. Pie, Québec, Canada, 12 avril 1894; 6 ans.

Résumé.—1. La combinaison des bouilloires comprenant les pièces suivantes, le canal élevé B, les cloisons C et C¹, les compe-joints F et F¹, le tube Q, la soupape P, le receptacle S, le barrage I, les augets D, la boite à syphon G et G¹, la flotte K et le levier pivoté N. 2. Le syphon fig. 4, comprenant les parties *d*, *i*, *f*, *g*, *c*.

No. 45,784. Electric Wire Covering.
(*Couverture pour fils électriques.*)



Franklin Streater Randall, Philadelphia, Pennsylvania, U.S.A., 12th April, 1894; 6 years.

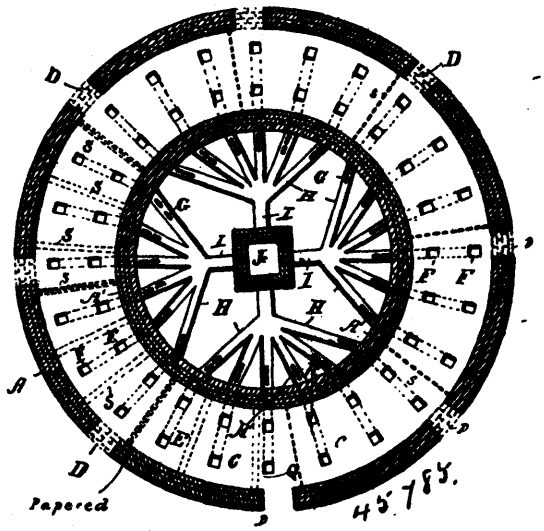
Claim A covering for electric wires, the same consisting of raw cotton in bulk, when applied in the manner, substantially as shown and described and for the purpose set forth.

No. 45,785. Kiln. (*Four*)

Adams Knacker, Edgar, Nebraska, U.S.A., 12th April, 1894; 6 years.

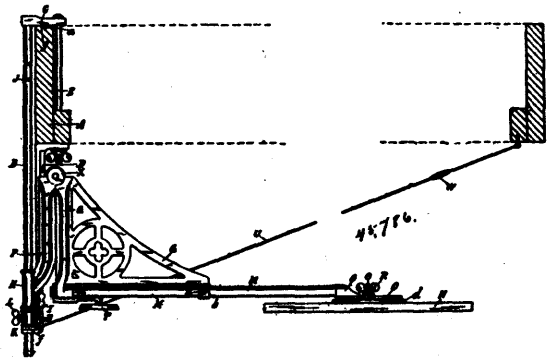
Claim.—1st. In a kiln, a circular or endless heat oven having filling openings in its outer wall, regularly spaced bed flues arranged in the bed of the oven, and having separate draft openings communicating with the interior thereof, a common smoke-stack for the several flues, short temporary imperforate baffle walls arranged transversely within the oven between the bed flues, and heating devices arranged at the top of the oven, substantially as set forth. 2nd. In a kiln, the combination of an enclosed circular heat oven or chamber having filling openings in its outer wall, regularly spaced bed flues formed in the bottom of the oven or chamber and communicating with a stack, a temporary fire wall adapted to be arranged transversely across the oven or chamber at one side of one of the filling openings and provided with fire pockets, baffle walls adapted to be built with unburned material between the bed flues, and extending half the height of the oven or chamber, and heating devices arranged at the top of said oven or chamber, substantially as set forth. 3rd. In a kiln, a side and top enclosed circular or endless heat oven or chamber provided with filling openings in its outer

wall, and fuel openings in the top arch thereof, regularly spaced bed flues formed in the bottom of the oven or chamber and leading to a common stack, a series of vertical baffle walls adapted to be built



with unburned brick from the bottom of the oven or chamber between the bed flues to half the height of such oven or chamber, a filling of combustible material adapted to be placed on top of certain of said baffle walls, and heating devices at the top of the oven or chamber, substantially as set forth. 4th. In a kiln, an endless or circular heat oven or chamber having a top arch provided with fuel openings, a common distributing pipe M, arranged longitudinally over the top of the arch and provided with valved branches leading into said fuel openings, a liquid or gaseous fuel tank, and valved supply pipe leading from said tank to the common distributing pipe, substantially as set forth.

No. 45,786. Bracket Table. (*Applique pour tables.*)



John W. Smyth, and Francis W. Smith, both of London, Ontario, Canada, 12th April, 1894; 6 years.

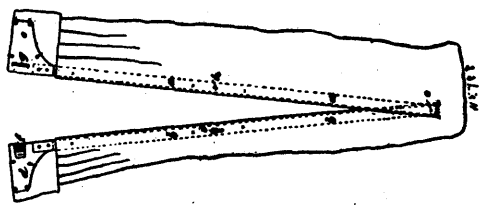
Claim.—1st. As a new article of manufacture, an adjustable bracket table, formed with a folding bracket F, G, substantially as shown and described, and for the purpose specified. 2nd. A folding bracket F, G, and a table N, connected therewith, in combination with and adjustable vertically on a standard B, and means for holding said bracket at the position to which it may be adjusted, substantially as shown and described, and for the purpose specified. 3rd. A folding bracket F, G, and a table N, connected therewith, in combination with and adjustable vertically and in a pivotal lateral direction, on a standard B, and means for holding said bracket at the position to which it may be adjusted, substantially as shown and described, and for the purpose specified. 4th. A folding bracket F, G, sleeve H, secured thereto, and a table N, connected to said bracket, in combination with and adjusted vertically and in a pivotal lateral direction on the standard B, and means for holding said bracket at the position to which it may be adjusted, substantially as shown and described, and for the purpose specified. 5th. A folding bracket F, G, a sleeve H, secured thereto, and a table N, connected to said bracket, in combination with a standard B, in which the grooves or recesses J are formed, and means secured to or supported by the sleeve H, for engaging with said grooves, substantially as shown and described, and for the purpose specified. 6th. A folding bracket F, G, a sleeve H, secured thereto, and a table N, connected to said bracket, in combination with a standard B, a collar K, and means for binding said collar on said standard, substantially as shown and described, and for the purpose specified. 7th. A folding bracket F, G, and a table N, connected therewith, in combination with, and adjustable on a standard B, the arm C, brace D, bolt E, and stay U, substantially as shown and described, and for the purpose specified. 8th. An arm M, in combination with and secured to revolve and move longitudinally in a folding bracket F, G, and means for holding said arm at the position to which it may be adjusted, and a table N, secured to said arm, substantially as shown and described, and for the purpose specified. 9th. An arm M, a folding bracket F, G, and means for supporting the latter, in combination with the table N, plates O, *d*, and bolt *e*, substantially as shown and described, and for the purpose specified. 10th. The combination of a folding bracket F, G adjustable vertically, and in a pivotal lateral direction in relation to a standard B, an arm M, secured to revolve and move longitudinally on said bracket, and a table N pivotally secured to said arm, and means for holding these devices at the position to which they may be adjusted, substantially as shown and described, and for the purpose specified. 11th. The combination of a folding bracket F, G adjustable vertically, and in a pivotal lateral direction in relation to a standard B, a stand T, an arm M, secured to revolve and move longitudinally on said bracket, and a table N, pivotally secured to said arm, and means for holding these devices at the position to which they may be adjusted, substantially as shown and described, and for the purpose specified. 12th. A folding bracket F, G, provided with a sleeve H, a thumb screw I, and a standard B, and means for securing the latter to a suitable support, in combination with an arm M, a thumb screw *b*, plates O, *d*, table N, bolt *c*, and thumb screw R, substantially as shown and described, and for the purpose specified.

No. 45,787. Method of Tanning Leather.
(*Méthode de tanner le cuir.*)

Martin Dennis, Newark, New Jersey, U. S. A., 12th April, 1894; 18 years.

Claim.—1st. In the manufacture of leather, a tanning bath containing a basic salt of chromium in solution, substantially as and for the purpose set forth. 2nd. In the manufacture of leather, a tanning bath containing basic chloride of chromium, substantially as and for the purpose set forth. 3rd. In the manufacture of leather, a tanning bath containing basic chloride of chromium and chloride of sodium, substantially as and for the purpose set forth. 4th. In the manufacture of leather, the treatment of hides or skins as follows:—first, fixing the gelatin in the properly prepared hide or skins, by means of a bath of basic chloride of chromium; second, then subjecting the said hides or skins to a bath of suspended carbonate of calcium, substantially as and for the purpose set forth.

No. 45,788. Dress Fastener. (*Agrafe pour robes.*)



Rosalie Schaefer, Berlin, Prussia, Germany, 12th April, 1894; 6 years.

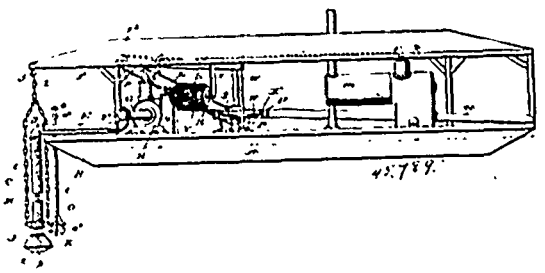
Claim.—A fastener for women's dresses and underskirts, consisting of two bars of very thin material hinged together at one end, and provided in the middle and at the top with hooks and eyes by means of which the bars can be clipped together, substantially as and for the purpose herein described with reference to the accompanying drawing.

No. 45,789. Dredging and Gold Saving Machine.
(*Appareil de dragage et séparateur de l'or.*)

Wilford A. Shahan, New Whatcom, Washington, U.S.A., 12th April, 1894; 6 years.

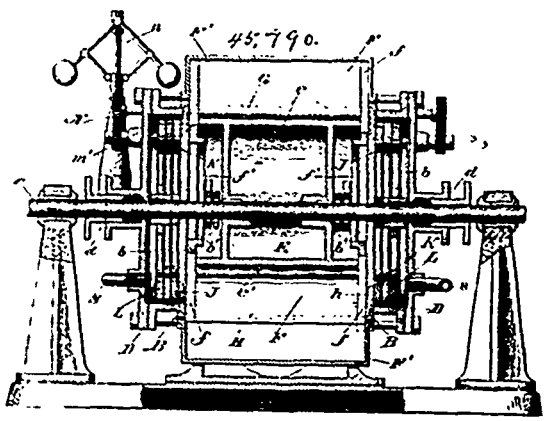
Claim.—1st. An apparatus of the class described, the combination with a suitably arranged suction pump having a short discharge pipe of an adjustable suction pipe connected with the inlet of said pump, and a rotary separator receiving the discharge from said discharge pipe, substantially as set forth. 2nd. In an apparatus of the class described, the combination with a suitably arranged suction pump, of a suction pipe adjustably connected with the inlet of said pump, a rotary separator receiving the discharge from said pump and rotated thereby, and an amalgamator receiving the separations from said separator, substantially as set forth. 3rd. In an apparatus of the class described, the combination with a suction pipe, of a single jet pipe discharging in a line coincident with the longitudinal centre of said suction pipe, substantially as set forth. 4th. In an apparatus of the class described, the combination with the barge, of a suitably arranged suction pump mounted on the barge, a pump suction pipe connected by a union joint with the inlet of said pump, a laterally swinging suction pipe arranged beyond one end of the barge and having a horizontal portion connected by a swivel

joint with said pump suction pipe, a rounded strainer cap telescoped onto the lower end of said suction pipe, and a lifting chain connected to said strainer cap at one end and adjustably at its



other end to a suitable point of attachment on the barge, substantially as set forth. 5th. In an apparatus of the class described, the combination of an adjustable suction pipe, the strainer cap fitted over the lower end of said suction pipe, and a hydraulic single jet pipe arranged at one side of the suction pipe and having a vertically disposed jet nozzle located in said strainer cap and arranged in a line with the longitudinal centre of the suction pipe, substantially as set forth. 6th. In an apparatus of the class described, the combination with the vertical suction pipe, of a sight tube loosely connected at its lower end to a point near the lower end of the suction pipe, substantially as set forth. 7th. In an apparatus of the class described, the combination with the vertical suction pipe, of a sight tube swiveled unto the suction pipe near its lower end and provided with a glass sight cap at its upper end and a suitable nipple connection to provide for the displacement of the water therein, and an electric lamp arranged near the lower end of said sight tube, substantially as set forth. 8th. In an apparatus of the class described, the combination with the suction devices, having a short discharge pipe, of a rotary separating screen arranged at an angle and adapted to receive the discharge from said discharge pipe and to be rotated thereby, a second shorter finer mesh screen arranged around the first screen, separate chute boards arranged to separately receive the discharge from each screen and also the separations from both, and an amalgamating pan receiving the substances from one of said chutes, substantially as set forth. 9th. In an apparatus of the class described, the combination with the separating device, of a circular tailings sluice arranged adjacent to said separating devices and having separate branch sluices, a centrifugal amalgamating pan arranged to work inside of the circle of said tailings sluice and provided with a flared outturned edge projecting over the inner edge of said sluice, said pan being adapted to contain a yielding bath of mercury which is caused to assume a bowl shape by the centrifugal force of the pan, substantially as set forth.

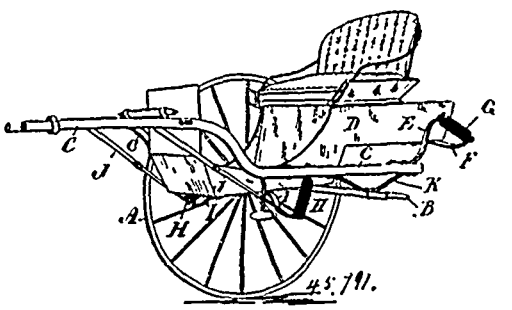
No. 45,790. Rotary Engine. (*Machine rotatoire.*)



The Challenge High Speed Engine Company, Lexington, Kentucky, assignee of John Vincent Davis, Auburn, New York, all in the U.S.A., 12th April, 1894; 6 years.

Claim. 1st. In a rotary engine the combination of a piston of equal diameters throughout, having an odd number of longitudinal lobes, with a series of equidistant abutment valves arranged in pairs one pair for each lobe of the piston the members of each pair being diametrically opposite, and rigidly united so as to move synchronously, the said valves being operated only by the piston and their mutual connection, substantially as described. 2nd. The combination of the cylinder and piston therein, and abutment valves, with the inlet ports beside each valve, and valve mechanism, substantially as described, for admitting steam successively into alternate ports and to three or more of such ports at a time, substantially as described. 3rd. In a rotary engine, the combination of the cylinder, a piston having an odd number of longitudinal lobes, and a similar number of intermediate depressions, and a series of abutment valves one for each lobe and depression of the piston, with means for admitting steam at one side of three or more alternate valves at a time, until all the valves have been in active work once during each revolution of the piston, and means for exhausting steam at the other side of such valves, substantially as described. 4th. In a rotary engine, a concentric piston of equal diameters throughout, having an odd number of longitudinal lobes, in combination with a series of equidistant abutment valves arranged in pairs one pair for each lobe of the piston, the members of each pair being diametrically opposite and rigidly united and mechanism for admitting steam against one valve of each pair and exhausting it in front opposite valve, substantially as described. 5th. The herein described valve mechanism for rotary engines, consisting of the three discs, the outer and inner non-rotatable discs having corresponding slots, and the intermediate rotatable disc a perforation adapted to intermittently register with those of the outer and inner discs, substantially as specified. 6th. The combination of an engine cylinder, having an even number of inlet ports, with a rotating disc having half as many openings adapted to simultaneously register with alternate ports, substantially as and for the purpose set forth. 7th. The combination in a rotary engine of the cylinder having an even number of equidistant ports, and a piston, with a rotating disc revolving with the piston provided with equidistant openings adapted to simultaneously register with three or more alternate cylinder ports and to register with all the cylinder ports once during each revolution thereof, substantially as described. 8th. The combination of the cylinder, its equidistant inlet ports, the rotating piston, the disc mounted on the piston shaft having equidistant openings adapted to simultaneously register with three or more alternate cylinder ports, and diametrically opposite abutment valves intermediate the cylinder ports, the opposite valves being connected, substantially as described. 9th. The combination of the cylinder, its inlet ports, and the piston and main shaft, with the valve mechanism consisting of three discs, the inner and outermost discs being stationary and having corresponding slots equal in number to the ports of the cylinder, the slots of the inner disc communicating with said ports, an intermediate rotating disc having openings adapted to register with alternate openings in the outer discs, and mechanism whereby the inner disc may be slightly rotated so as to vary the length of the register between the openings in the intermediate disc and the slots in the outer and inner disc, substantially as described.

No. 45,791. Road Cart. (*Désobligeante.*)

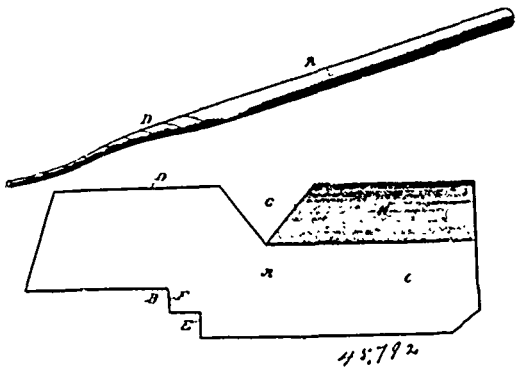


H. C. Hogarth, Tilsonburg, Ontario, Canada, 12th April, 1894; 6 years.

Claim.—1st. A road cart having the shafts mounted upon the axle and extending rearwardly thereof, bracket-arms secured to said shafts rearwardly of the axle, a bar secured to the body of the cart, the ends of said bar projecting from opposite sides rearwardly of the axle, a coiled spring connecting said ends to the top of said arms, and a bar secured to said body forwardly of the axle, the ends of said bar projecting from opposite sides, and coiled springs connecting said ends to the shafts forwardly of the axle, and straps J, connecting said shafts to said bar near the ends, as set forth, for the purpose described. 2nd. In a road cart having the body suspended from the shafts to gravitate, the combination, with the shafts mounted upon the axle, or bracket arms secured to said shafts rearward of the axle, a bar secured to the body of the cart, the ends of said bar projecting from opposite sides of the body, coiled wire springs connecting said ends and bracket arms, said springs inclining upward, inward and forward from said ends at about an angle of 45 degrees, and a bar secured to the body of the cart, the ends projecting from opposite sides forward of the axle, and coiled wire springs connecting said ends to the shafts, said springs inclining outward, downward and forward from said shafts at about an angle of 45 degrees, as set forth. 3rd. A road cart having the body suspended from the shafts by coiled wire springs rearward and forward of the axle, the rear springs located above the shafts and the front springs below the shafts, substantially as described. 4th. A road cart having the body suspended from the shafts by coiled wire springs rearward and forward of the axle and flexible straps J, J, connecting said shafts and cart to draw the body forward when depressed, as set forth. 5th. A road cart having the body D, suspended from the shafts C, by bracket arms E, E^1, coiled wire springs G, G^1, and bar

F, rearward of the axle, and coiled wire H, H¹, bar I, forward of the axle, as set forth. 6th. A road cart having the body D, suspended from the shafts by bracket arms E, E¹, coiled wire springs G, G¹, and bar F, rearward of the axle, and by bar I, and coiled wire springs H, H¹, forward of the axle, and straps J, J, attached to the shafts and to a front portion of the cart, to draw the body forwardly when depressed, as set forth.

No. 45,792. Miner's Squib. (*Serpentean de minerais.*)



John R. Powell, Plymouth, Pennsylvania, U.S.A., 13th April, 1894; 6 years.

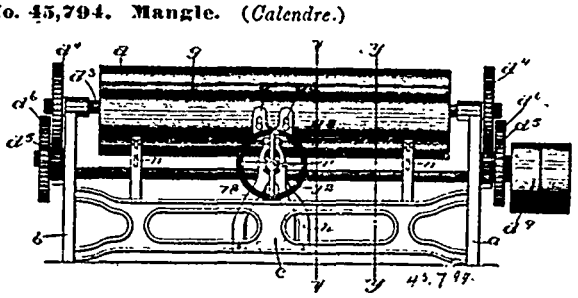
Claim. 1st. A mining squib having at one end an unsealed twisted portion extending as far as a point beyond the inner closed end of the tube of the squib, and adapted to be untwisted up to such point without affecting other parts of the squib, substantially as set forth. 2nd. A mining squib having a tube portion, an unsealed match roll or twist beyond one end of the tube portion, and a projected closure roll formed intermediate of one end of the tube portion and the beginning of the unsealed match roll or twist, substantially as set forth. 3rd. A mining squib comprising a paper blank having an end cut at one side edge forming a match and tube portion, and a projected closure piece located at the inner corner of said end cut and intermediate of the match and tube portions, the said blank being adapted to be rolled from one edge to successively form the tube, the intermediate closure roll from said projected closure piece, and a match roll from the match portion, substantially as set forth. 4th. In a mining squib, the paper blank having a V-shaped cut or notch in one edge forming at one edge a sealing strip and leaving at its opposite side an unsealed match portion, said blank being adapted to be rolled into a tube and match roll, the tube of which is sealed from the apex of said cut to one edge of the blank while the match portion is left unsealed up to said apex, substantially as set forth. 5th. In a mining squib, the blank consisting of a single rectangular piece of paper having an end cut at one side edge and forming a match and tube portion, a projected closure piece located at the inner corner of said end cut, and a V-shaped cut or notch in one edge opposite said end cut and forming beyond one side thereof, a sealing strip, substantially as set forth.

No. 45,793. Beer. (*Bière.*)

Frederick W. A. Wiesebrock, New York, State of New York, U.S.A., 13th April, 1894; 6 years.

Claim.—The process herein described of manufacturing beer, the same consisting in adding to a mash, prepared from malted and unmalted cereals, vegetable fibre from which the siliceous and extractive matters have been removed, said fibre not only commingling with the mash and settling and forming a filtering stratum, but also forming an absorbent for colour and impurities whereby the colour of the filtered wort may be regulated and a pure and brilliant wort is obtained, substantially as described.

No. 45,794. Mangle. (*Calendre.*)

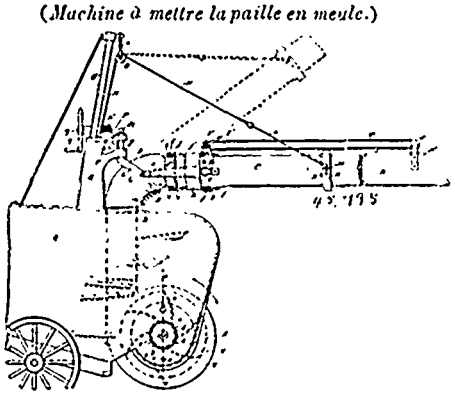


John Carroll Poland, Boston, Massachusetts, U.S.A., 13th April, 1894; 6 years.

Claim. 1st. In a mangle, an ironing cylinder and means for rotating it, combined with two ironing beds each having a universal self adjustment, the adjacent edges of said beds overlapping one another to maintain the continuity of the ironing surface as the beds move independently relatively to each other, substantially as described. 2nd. In a mangle, an ironing cylinder and means for rotating it, combined with two ironing beds, the adjacent edges of which overlap one another, supports to which said ironing beds are universally connected, and means for moving said beds simultaneously, substantially as described. 3rd. In a mangle, an ironing cylinder and means for rotating it, combined with two ironing beds, pivoted supports therefor to which they are universally connected, trunnioned blocks carried by said supports, and a hand operated adjusting rod passing through said blocks for simultaneously moving the ironing bed supports, substantially as described. 4th. In a mangle, an ironing cylinder and means for rotating it, combined with two ironing beds, pivoted supports therefor to which they are universally connected, trunnioned blocks carried by said supports, a screw rod or shaft passing through said blocks and the pressure spring, substantially as described. 5th. In a mangle, an ironing cylinder and means for rotating it, combined with two ironing beds, each having a universal self adjustment, the ironing surface of one of said beds at its lower edge being cut away on a line tangentially to the cylinder, presenting a narrow tapering recess next the cylinder, and the lower edge of the other bed having a thin tapering lip entering said tapering recess and terminating adjacent the curved ironing surface of the first named bed, substantially as described. 6th. In a mangle, an ironing cylinder and means for rotating it, combined with two ironing beds each having a universal self adjustment and hinged at points below the cylinder and simultaneously movable toward the cylinder bodily, and overlapping one another at their adjacent edges to maintain the continuity of the ironing surface as the beds move independently relatively to each other, and back stops for said ironing beds which support them when away from the cylinder, substantially as described. 7th. In a mangle, the combination of an ironing cylinder and two ironing beds co operating therewith and adjusting levers therefor for moving them bodily towards and permitting them to move bodily from the cylinder and adjusting devices for adjusting said beds vertically, substantially as described.

No. 45,795. Straw Stacker.

(*Machine à mettre la paille en meule.*)

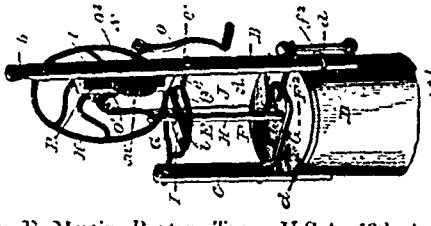


Frank F. Landis, Waynesborough, Pennsylvania, U.S.A., 13th April, 1894; 6 years.

Claim. 1st. The combination, with the stationary delivery pipe, the swinging discharge pipe, and a flexible junction pipe connecting the aforesaid pipes, of a jointed support operatively connected to the discharge pipe, whereby the junction pipe is prevented from telescoping, substantially as set forth. 2nd. The combination, with the stationary delivery pipe, the swinging discharge pipe revoluble upon its own axis, and a flexible junction pipe connecting the aforesaid pipes, of an adjustable deflector at the free end of the discharge pipe, and a support, such as a cord, connected to the said discharge pipe, whereby the said discharge pipe is free to move vertically and horizontally and discharge the straw to the right or to the left, and at different angles, substantially as set forth. 3rd. The combination, with the end of the discharge pipe, of a flexible deflector, and means for supporting the deflector and constraining it to move in a curve, whereby the straw is curved around gradually and is projected downward on the stack at different angles, substantially as set forth. 4th. The combination, with the stationary delivery pipe, and a standard provided with a bearing arranged in line with the said pipe, of a flexible junction pipe connected to the delivery pipe, a discharge pipe connected to the junction pipe, a collar provided with rearwardly extending arms and carried by the discharge pipe, and a vertical shaft journalled in the said bearing and provided with a yoke pivoted to the said arms, substantially as set forth. 5th. The combination, with the stationary delivery pipe, and a stationary support provided with a bearing, and a sheave over the axis of the delivery pipe, of the flexible junction pipe, and the discharge pipe connected to the delivery pipe, the collar provided with rearwardly extending arms and carried by the discharge pipe, the vertical shaft journalled in the said

bearing and provided with a yoke pivoted to the said arms, a lifting cord or chain passing over the said sheave and connected with the discharge pipe, and means for winding up the said cord, whereby the said discharge pipe may be raised, lowered and swung around, substantially as set forth. 6th. The combination, with the delivery pipe, and the flexible junction pipe, provided with a collar on its free end, of the discharge pipe journalled on the free end of the junction pipe, and the brackets secured to the discharge pipe, extending over the said collar, and provided with rollers bearing against the side of the collar, substantially as set forth. 7th. The combination, with the delivery pipe, and the discharge pipe; of a flexible junction pipe consisting of a series of articulated segments inclosed in a tube of flexible material, substantially as set forth. 8th. The combination, with the delivery pipe, and the diecharge pipe, of a flexible junction pipe consisting of a series of overlapping conical segments, a series of flexible straps connecting the said segments, and an inclosed tube of flexible material, substantially as set forth. 9th. The combination, with a straw chamber, and a discharger casing provided with a delivery passage, of a revoluble discharger consisting of a disc provided with arms and operating to forcibly project the straw up the delivery passage, substantially as set forth. 10th. The combination, with a straw chamber, and a dischbrger casing provided with a delivery passage, of a revoluble discharger consisting of a disc provided with arms, and a feeding device operating to assist the passage of the straw from the straw chamber into the discharger casing, substantially as set forth. 11th. The combination, with the barrel provided with projections, of the discharger provided with arms, and casings inclosing the said parts, substantially as set forth. 12th. The combination, with the straw chamber, and the discharger casing, of the conical throat piece interposed between the said parts, and the revoluble discharger provided with arms, substantially as set forth. 13th. The combination, with the discharger casing provided with an inlet opening on one side, of the laterally movable and revoluble discharger consisting of a disc provided with arms and normally pressed toward the inlet opening by the air pressure behind its said disc, substantially as set forth. 14th. The combination, with the straw chamber, and the discharger casing, of a yielding discharger adapted to be moved laterally by the incoming straw to prevent it from becoming choked, substantially as set forth. 15th. The combination, with the discharger casing, of a revoluble discharger consisting of a disc and a series of arms provided with channel shaped faces, substantially as set forth. 16th. The combination, with the discharger casing, of a revoluble discharger consisting of a disc and a series or rearwardly curved arms provided with forwardly bent tips, substantially as set forth. 17th. The combination, with the discharger, of the discharger casing provided with an inlet upon one side and an opening for inserting the discharger on the other side, and a removable cover plate closing the said opening, substantially as set forth. 18th. The combination with the discharger, and its casing, of one or more straw guides connected at one end to the casing and projecting therein in the direction of the motion of the discharger, substantially as set forth. 19th. The combination with the discharger and its casing, of a straw guide consisting of a row of fingers arranged inside the said casing, substantially as set forth. 20th. The combination with the discharger and its casing, of a spring-actuated straw guide pivotally connected to the casing, and provided with a stop whereby the straw guide is prevented from striking the discharger, substantially as set forth. 21st. The combination with the straw chamber provided with spirally arranged ribs, of the discharger casing, the discharger shaft, the barrel secured on the said shaft inside the said chamber, and the discharger secured on the said shaft inside the said casing, substantially as set forth. 22nd. The combination with two dischargers, and means for revolving them in opposite directions, of a single discharger casing provided with a delivery passage common to the two said dischargers, substantially as set forth.

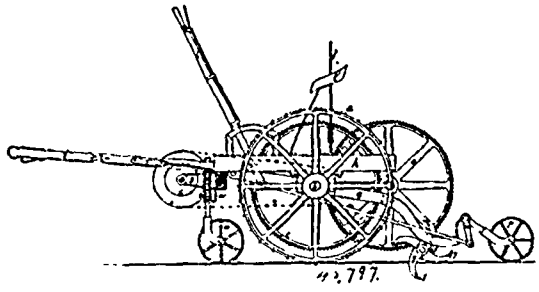
No. 45,796. Churn. (*Baratte.*)



William F. Martin, Roxton, Texas, U.S.A., 13th April, 1894; 6 years.

Claim.—1st. In an apparatus substantially as described, the combination of the frame uprights, the connections between the same, having central ring like portions for the passage of the dasher rod, and the lower connection being formed in sections having an adjustable connection, all substantially as and for the purposes set forth. 2nd. The combination substantially as described, of frame uprights, the connections between the same, having intermediate ring like portions and adapted to adjust the uprights together and apart, the dasher rod movable vertically within said ring-like portions, and devices for operating said rod, all substantially as set forth. 3rd. The combination, substantially as described, of the uprights, the upper connection between the same, the lower connection formed in sections one have a ring-like portion and the other a threaded shaft, the dasher rod, and operating devices for reciprocating the said rod, all substantially as set forth. 4th. The improved apparatus, substantially as described, consisting of the frame uprights, the upper connection E having a central ring-like portion, the guide I fitted and held in said portion, and having a central guide opening the lower connection formed in sections F^1, F^2, having a threaded connection, the dasher rod, the fly wheel, and pitman connecting said wheel and the dasher rod, and the operating gearing, substantially as set forth.

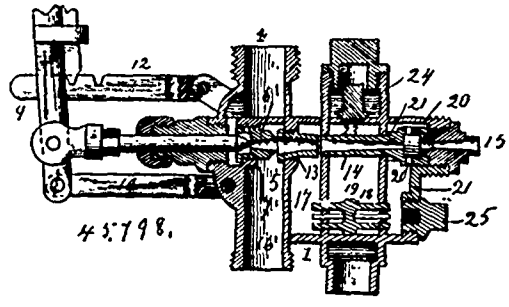
No. 45,797. Cultivator. (*Cultivateur.*)



James Botterell Uren, Clinton, British Columbia, Canada, 13th April, 1894; 6 years.

Claim.—The combination of driving wheels *a*, *a*, axle C, spur gearing *c*, *d*, *e*, *f*, with cultivators *g*, *g*, etc., teeth g^1, g^1, etc., wood frame *h*, draught pole *i*, lever *j*, clutches K, K, lever *l*, rod *m*, arm *n*, shaft *o*, wheels *p*, *p*, iron frame *q*, bearings *t*, *t*, etc., axles C, *r*, *s*. seat t^1, wheel *u*, spring *b*, bracket *w*, and chain wheel 1, chain 2, wheel 3, shaft 4, bearings 5, 5, and seeder 6, substantially as and for the purpose hereinbefore set forth.

No. 45,798. Injector. (*Injecteur.*)



Parker Pillsburg Hogue, Cincinatti, Ohio, U.S.A., 13th April, 1894; 6 years.

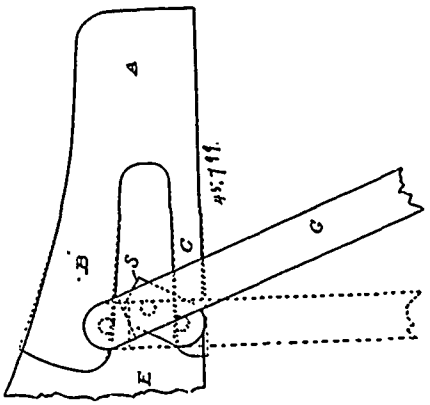
Claim.—In an injector the combination of the two barrels, located one above the other, and the steam jet, lifting-jet and combining-tube all in the upper barrel, of the chamber surrounding the combining-tube having a vertically movable valve in its upper end and an automatic horizontally movable valve at its lower end in said lower barrel and the chambers at each side of said chamber communicating respectively with the lifting and combining tubes, substantially as described.

No. 45,799. Clasp. (*Agrafe.*)

Charles La Dow, Albany, New York, U.S.A., 13th April, 1894; 6 years.

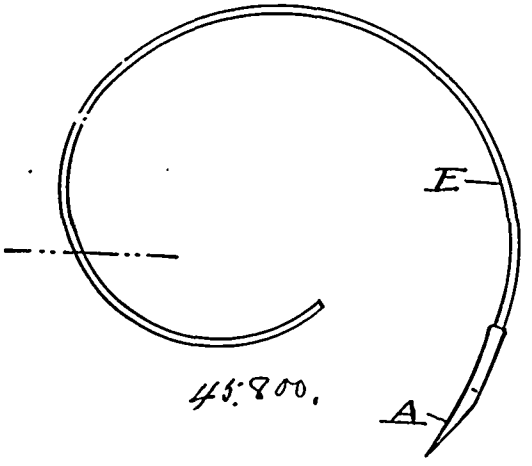
Claim.—1st. A clasp having expansible parallel wing portions adapted to serve as a socket and made integrally with a blade portion, substantially as described. 2nd. A U-shaped clasp with a blade portion and opposing movable sides adapted to be self contracting to a separate body whereby the blade portion may be mounted on and supported relatively to a separate body. 3rd. A clasp having the point A, and elastic side portions B, C, adapted to adjustably grasp a separate body at three edges simultaneously. 4th. A clasp having the closed end A, and elastic portions B, C, integral therewith forming an open end and adapted to be operated as described. 5th. A clasp having the closed end A, and movable portions B, C, made integral therewith and adapted to be moved relative to each other by reason of the elasticity resting therein. 6th. A clasp having the closed end A, and movable integral portions B, C, adapted to be sprung apart to grasp a separate body E, and to be self-contracting upon said body. 7th. A clasp having point A, and movable portions B, C, made integral therewith and adapted to grip a separate body E, in com-

bination with the portions *b*, *c*, adapted to brace the point A against side strains. 8th. A clasp having opposing channels adapted to



have movement towards and from each other by bending the wings B, C, substantially as illustrated in Fig. 2, and adapted to grip a separate body in said channels. 9th. A U-shaped clasp having self-contracting sides forming an elastic chamber closed in front and on both sides and having expansible rear portions adapted to be spread so that a separate body may be inserted into the chamber, and held from movement relatively thereto by the sides contracting upon said body. 10th. A clasp having the blade portion A, and side portions B, C, lined with another metal as at *x* adapted to form a skin to prevent breakage of the wings of the blade. 11th. A clasp having front and side contact with a separate body, in combination with the bracing portions *b*, *c*. 12th. The hereinbefore described clasp, in combination with lever G, adapted to operate the clasp, substantially as described.

No. 45,800. Clasp. (*Lien.*)



Charles La Dow, Albany, New York, U.S.A., 13th April, 1894; 6 years.

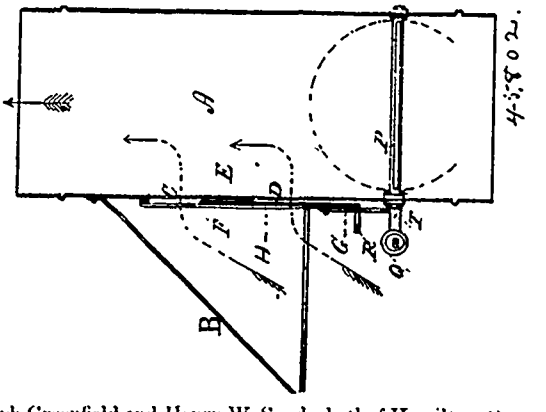
Claim.—1st. A clasp having an expansible portion adapted to serve as a socket and made integerally with a blade portion substantially as described. 2nd. A clasp with a blade portion and an integral portion, having opposing movable sides, adapted to be self-contracting upon a separate body whereby the blade portion may be mounted on and supported relatively to a separate body. 3rd. A clasp having a pointed portion and an integral elastic portion adapted to secure the point to a separate body in such manner that the point may project beyond said separate body and also be removable therefrom by operating the elastic portion. 4th. A clasp having the point A, the elastic body portion D, and the side portions B, C, adapted to adjustably grasp a separate body. 5th. A clasp having the end A, and elastic portions B, C, integral therewith, adapted to be operated as described. 6th. A clasp having the end A, and movable portions B, C, made integral therewith and adapted to be moved relative to each other by reason of the elasticity in the body B. 7th. A clasp having the end A, body D, and movable integral portions B, C, adapted to be sprung apart to grasp a separate body E, and to be self-contracting upon said body. 8th. A clasp having the end A, body D, and integral movable portions B, C, adapted to grip a separate body E, in combination with the inclined portions *b*, *c*, adapted to maintain the end A, against endwise movement relatively to body E. 9th. A clasp having point A, body portion D, and movable portion D, C, made integral with the body D, and adapted to grip a separate body E, in combination with the portions *b*, *c*, adapted embrace the point A, against rearward stram. 10th. A clasp having opposing channels adapted to have movement towards and from each other by bending the body D, substantially as illustrated in fig. 6, and adapted to grip a separate body in said channels. 11th. A clasp having a blade portion and an elastic portion integral therewith, whereby blade and socket may be in one piece and the blade have an elastic connection with the support on which it is mounted. 12th. A clasp having self-contracting sides forming an elastic chamber closed on three sides and with an expansible slit in its fourth side adapted to be spread so that a separate body may be inserted into the chamber and held from movement relatively thereto by the side contracting upon said body in combination with a blade or other cutting portion made integral with the socket and located at one end thereof. 13th. An elastic clasp cutter adapted to be applied to or removed from and also adjusted relatively to a supporting body, adapting said cutter to be held by its own resiliency in different positions on its support, and to be removed when worn, or to be held in various positions relatively to its fellows. 14th. A clasp constructed from sheet metal folded so as to form a longitudinal chamber with grooves therein and having a slit between two edges of the metal adapted to be acted upon by an operating device. 15th. A clasp having the blade portion A, body portion D, and side portions B, C, indented as at *x*, adapted to form a "stop" to prevent undue movement of the blade relatively to the body on which it is mounted. 16th. A clasp having front and rear walls, in combination with the inclined bracing portions *b*, *c*. 17th. A clasp having an opening or slit with bevelled edges, in combination with a device having bevelled or inclined portions adapted to interlock with the bevelled edges of the slit. 18th. In an agricultural implement a clasp having a cutting or digging portion made integral with an elastic self-contracting body portion whereby it is adapted to be self locking to another body, for the purpose of renewing the worn portions of said implement. 19th. An elastic clasp adapted to be mounted on a separate body, the clasp having a tooth or projection or indentation which acts as a stop to prevent accidental movement of the clasp relatively to the body on which it is mounted. 20th. In an agricultural implement, a detachable point adapted to be clamped to its support by spring action between itself and its support and also adapted to be turned end for end, and clamped in said reversed position to its support by spring action. 21st. The hereinbefore described clasp, in combination with lever G, adapted to operate the clasp and having shoulder S, adapted to abut against the clasp to prevent the lever from moving too far.

No. 45,801. Fertilizer. (*Engrais.*)

Stephen L. Goodale, Saco, Maine, U. S. A., 13th April, 1894; 6 years.

Claim.—1st. The new art or process of rendering insoluble hydrated phosphate of alumina and of iron easily soluble and so available as rapidly acting plant fertilizers, which consists in heating these phosphates, in suitable receptacles, by the indirect application of heat, until all the water of constitution is expelled, or usually, until heat has been applied sufficient to raise the temperature of the mass to about 325 C, and then arresting the heat and allowing the resulting product to cool spontaneously, substantially as and for the purpose described. 2nd. The new and useful product, fertilizer and plant food, consisting of the residuum of hydrated phosphates of alumina, or of iron or of both alumina and iron, from heating, and not burning, said crude phosphates until all their water of constitution is expelled, or usually until the temperature of the mass reaches about 325° centigrade, substantially as described.

No. 45,802. Ventilator for Stove Pipes.
(*Ventilateur pour tuyaux de poêles.*)

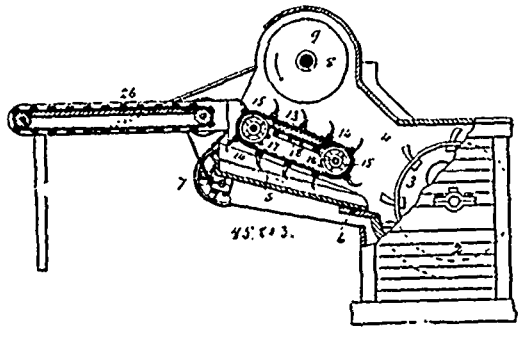


Joseph Greenfield and Henry W. Searle, both of Hamilton, Ontario, Canada, 13th April, 1894; 6 years.

Claim. In a stove pipe ventilator and foul air and vapour duct, the combination of the ducts C and D in the stove pipe A, which

are opened or closed by a sliding damper S, working in guide L, and operated in connection with the damper P, on the spindle T by the action of the handle Q, and cranks K and G, or independent of the damper P, by means of the handle R, on the sliding damper S, all in connection with the canopy B, on the stove pipe A, as set forth.

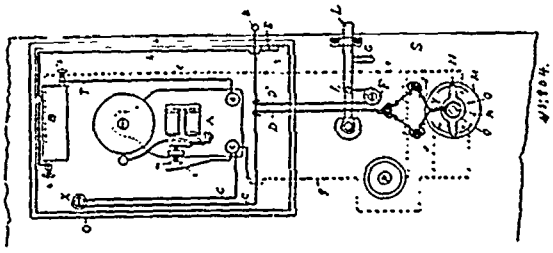
No. 45,803. Feed Regulator for Thrashing Machines.
(*Régulateur d'alimentation pour machines à battre.*)



George W. Hallett, Aberdeen, South Dakota, U.S.A., 13th April, 1894; 6 years.

Claim.—1st. The combination, with the thrashing machine cylinder, of hand cutting discs provided on a transverse shaft arranged before said cylinder and rotating at a high rate of speed, an inclined and more slowly operating regulator device arranged beneath said discs and consisting of endless chain belts with transverse bars fixed thereon and provided with backwardly curved square cornered teeth, a table to support the bars of the upper side of the conveyor, and means for driving the cylinder, discs and conveyor, substantially as described. 2nd. The combination, with the cylinder, of a series of rapidly rotating cutting discs, a conveyor arranged immediately beneath said discs and operating more slowly and inclined toward the conveyor, said conveyor made up of endless chain belts, metal bars fixed thereon, and square cornered curved teeth provided on said bars for holding the lower side of the bundle, a floor over which the upper bars operate, and shaker-pans provided beneath said conveyor for catching loose grain falling through the regulating conveyor, substantially as described and for the purpose specified.

No. 45,804. Electric Burglar Alarm.
(*Sonnerie électrique d'alarme.*)



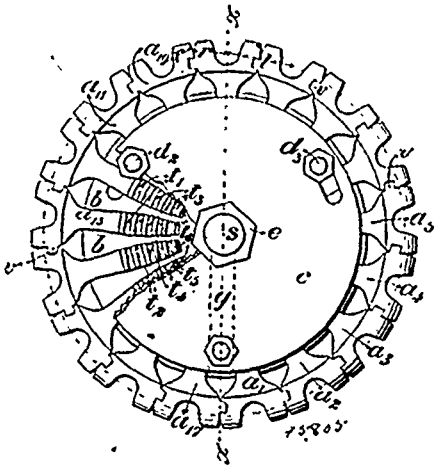
David Cameron Ferguson, Ottawa, Ontario, Canada, 13th April, 1894; 6 years.

Claim.—1st. In a burglar alarm, an electric bell actuated by a graduated circuit retainer, a lever, a latch, and a knob, as shown and described for the purpose set forth. 2nd. In a burglar alarm, the switch N on the spindle of the lock, the electrical connections V, W, the button P and the alarm bell, as shown and described for the purpose set forth. 3rd In a burglar alarm, the wires *g* and *c*, lock spindle R, lever N and button, as shown and described for the purpose set forth. 4th. In a burglar alarm, a centrally pivoted lever on the lock spindle, electrical connections within reach, wires *g* and *c* and an electric alarm bell provided with the wires *g* and *c*.

No. 45,805. Gear Chain Wheel.
(*Roue d'engrenage à chaînes.*)

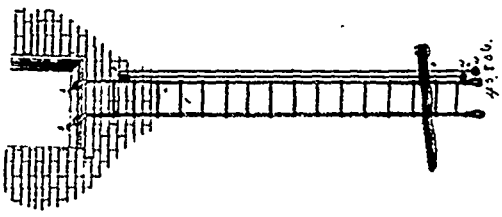
Thomas W. Van Tuyl, Petrolia, Ontario, Canada, 13th April, 1894; 6 years.

Claim.—1st. A sprocket, or chain wheel made up of parts, or with its rim composed of sections, held or locked together firmly, but not permanently, such that the number of teeth in the wheel can be increased or diminished, by the interposition or removal of one or more of such parts or sections 2nd A sprocket or chain wheel, with its rim composed of sections, consisting of parts of two adjacent teeth and the space between them, held or locked together firmly, but not permanently, such that the number of the teeth in the wheel, can be increased or diminished by the interposition or removal of one or more of such sections 3rd. A sprocket or chain wheel, with its rim composed of sections, from some or all of which extend radial arms, which are griped between two plates held together by clamp



nuts, a radial slot provided in one plate to facilitate the interposing of additional or the removal of some of the sections, substantially as shown and described and for the purpose specified.

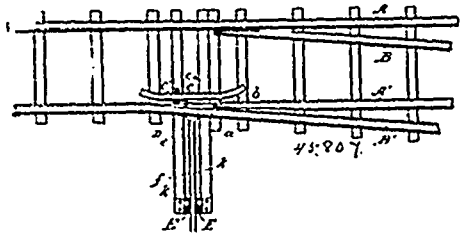
No. 45,806. Fire Escape. (*Sauveteur d'incendie.*)



Margaret Killeen, Halifax, Nova Scotia, Canada, 13th April, 1894; 6 years.

Claim.—1st. My fire escape formed as a whole of ladder, grapplings, connection attached to said ladder, through slot in which said connection runs a heaving line with balls, to which line also is attached a life belt, as set forth. 2nd. The combination of the ladder or rope with connection, and the heaving line threaded therethrough, as set forth.

No. 45,807. Railway Switch.
(*Aiguille de chemin de fer.*)

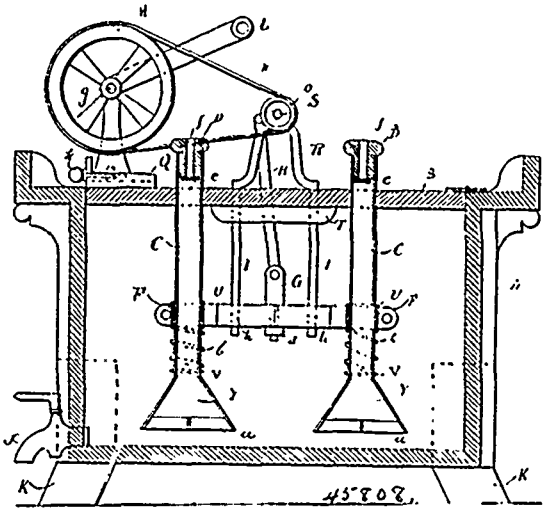


Richard Turner Gilham, Chicago, Illinois, U. S. A., 13th April, 1894; 6 years.

Claim.—1st. In combination, with two railway tracks, a pivoted switch so located in relation to such tracks that when in its normal position the main track will be open, substantially as specified. 2nd. In combination, with two railway tracks, a pivoted switch having its larger end bevelled, substantially as and for the purpose specified. 3rd. In combination, with two railway tracks, a pivoted switch, and a side weight secured to the switch to cause it to stand normally in an inclined position, substantially as and for the purpose specified. 4th. In combination, with two railway tracks, a switch pivoted at one end, and movably secured at or near its opposite end against vertical play, substantially as specified. 5th. In combination, with two railway tracks, a pivoted switch, and a lever for rocking the same, substantially as and for the purpose specified. 6th. In combination, with two railway tracks, a pivoted switch, a lever for rocking the switch, and a grooved wearing plate under the switch, substantially as specified 7th In combination, with railway tracks, a rocking switch, and means, substantially as shown, for preventing longitudinal movement of the switch. 8th. The combination, with two tracks as A, A^1, and B, B^1, of a pivoted switch, substantially as and for the purpose specified. 9th. In combination, with railway

tracks, a switch having a trunnion *b* at one end adapted to enter a socket or recess in the end of a rail, and having a groove *d* in its side face, and a plate *c*, having an end c^1, adapted to enter the groove *d*, substantially as as and for the purpose specified.

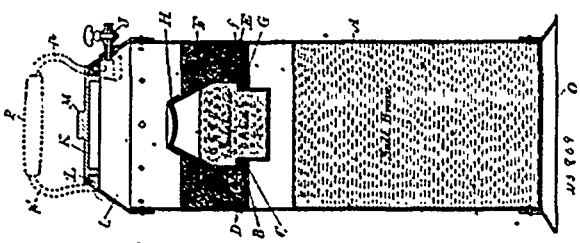
No. 45,808. Washing Machine. (*Machine à laver.*)



Eugène Beaulieu, Montréal, Québec, Canada, 13 avril, 1891; 6 years.

Réclame. 1er. Dans une machine à laver, le coussinet P, à coulisse s ajustable Q, avec vis de rappel *k*, tel que décrit. 2ème. Dans une machine à laver, la combinaison de la piece B, avec les tubes C, comprenant les parties *c*, D. Y, *a*, U, V, les ressorts C, de la croix E, comprenant les pièces G, *d*, F, les pièces H, S, R, I, P, *g*, M, O, L, et le coussinet ajustable P, avec coulisse C, et vis de rappel *k*, le tout tel que décrit précédemment.

No. 45,809. Fire Extinguisher. (*Extincteur d'incendie.*)



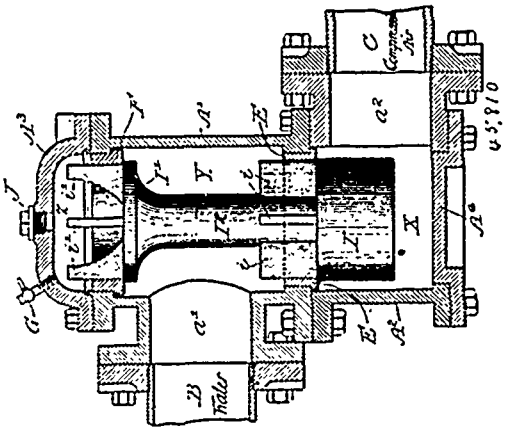
John Gardiner Dundalk, assignee of William H. Moore, Owen Sound, all in Ontario, Canada, 14th April, 1894; 6 years.

Claim.—1st. In a fire extinguisher, a cylinder containing in its lower portion salt brine, and in its upper portion carbonate of soda in a powdered or dry state, and sulphuric acid contained in a vessel readily upset, substantially as and for the purpose specified. 2nd. In a fire extinguisher, the combination of the cylinder A, the plate B secured within the cylinder A, and having an opening formed therethrough, a flange C surrounding the opening the plate, a bottle or vessel F supported upon the flange and plate, an easily removable cap H for the bottle, and a faucet to permit of the discharge of the contents from the cylinder, substantially as and for the purpose specified. 3rd. In a fire extinguisher, the combination of the cylinder A, the plate B secured within the cylinder having an opening therethrough, a flange surrounding the opening through the cylinder, a bottle or vessel F, supported upon the flange C, and having a flange G, resting upon the plate B, a cap for the vessel or bottle F, a top I for the cylinder, a cover K to close the opening through the top, a faucet J fitted to the top, a handle P secured to the top, substantially as and for the purpose specified.

No. 45,810. Valve for Automatic Fire Extinguishers.
(*Soupape pour extincteur d incendie.*)

Wallace Thurman, assignee of Frank Gray, both of Chicago, Illinois, U.S.A., 14th April, 1894; 6 years.

Claim. 1st. In a valve for automatic fire extinguishers, the combination with the casing having communicating chambers X and Y, the former being located below the latter, the water inlet opening communicating with the chamber Y, the main outlet opening communicating with the chamber X, a valve seat surrounding the opening through which said chambers communicate, a valve having equal opposing areas exposed to the water in chamber Y, whereby the valve is balanced so far as the pressure in said chamber is concerned, said valve having a disc located in chamber X, and adapted to seat toward the chamber Y, whereby the pressure of the fluid in cham-



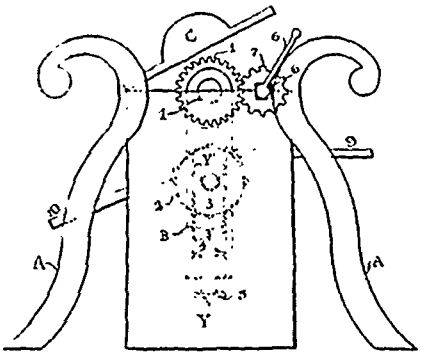
ber X, acting upon said disc, will hold it normally seated, and whereby the weight of the valve itself will unseat it upon a reduction of said pressure, substantially as set forth. 2nd. In a valve for automatic fire extinguishers, the combination with the casing having communicating chambers X and Y, the former being located below the latter, the water inlet opening communicating with the chamber Y, the main outlet communicating with the chamber X, a valve-seat surrounding the opening through which said chambers communicate, a valve having equal opposing areas exposed to the water in chamber Y, whereby the valve is balanced so far as the pressure in said chamber is concerned, said valve having a disc located in chamber Y, and adapted to seat toward the chamber Y, whereby the pressure of the fluid in chamber X, acting upon said disc, will hold it normally seated, and whereby the weight of the valve itself will unseat it upon a reduction of the pressure in said chamber X, the valve being located entirely within the casing, and without a stem or other part extending through the casing, substantially as set forth. 3rd. In a valve for automatic fire extinguishers, the combination of a casing having a chamber X, with which the main outlet opening communicates, a chamber Y, with which the inlet opening communicates, said chamber Y, being located directly above the chamber X, and communicating therewith through a suitable opening, a valve-seat surrounding said opening, a chamber Z, located directly above the chamber Y, and communicating therewith through a suitable opening, a valve-seat surrounding said opening, and a valve having a disc located in chamber X, a disc I^1, located in chamber Y, and a stem connecting said discs, said discs being adapted to seat toward the chamber Y and Z, respectively, and close the openings through which the three chambers communicate, said discs having equal opposing areas exposed to the water in chamber Y, whereby the valve is balanced so far as the pressure in sa'd chamber is concerned, and whereby the pressure of the fluid in chamber X, acting upon the disc I, holds the two discs normally seated in opposition to the weight of the valve, the valve being adapted to be unseated by gravity upon a reduction of the pressure in chamber X, substantially as set forth. 4th. In a valve for fire extinguishers, the combination with a casing having a chamber X, for containing compressed air, a chamber Y, for containing water, and a chamber Z, for containing pressure lower than that in the chamber first aforesaid, of the valve-seat E, between the chambers X and Y, the valve-seat F, arranged between the chambers Y and Z, and a valve having a disc I, located in the chamber X, a disc I^1, located in the chamber Y, and the stem I^2, connecting said discs, said valve having equal opposing surfaces exposed in chamber Y, substantially as set forth.

No. 45,811. Beef Break.
(*Pilon à viande.*)

Thomas Prichard and James Colbeck, both of Saginaw, Michigan, U.S.A., 14th April, 1894; 6 years.

Claim.—1st. A roller beef break, consisting of two rollers, one journalled upon the frame, the other journalled underneath the first on a sliding frame, a spring 4, underneath the sliding frame, a set screw moving the spring and sliding frame up and down in its groove, gearing upon one end of the upper roller, meshing into a geared pinion, and the crank operating the pinion, one or both of the rollers being provided with blunt teeth, substantially as specified. 2nd. In a beef break, the combination with a main frame, a roller provided with flat teeth journalled on the main frame, of a roller journalled underneath the other roller on a frame sliding in grooves in the main frame, and the sliding frame, a spring underneath the sliding frame, a set screw operating the sliding frame, a geared pinion and crank journalled in the main

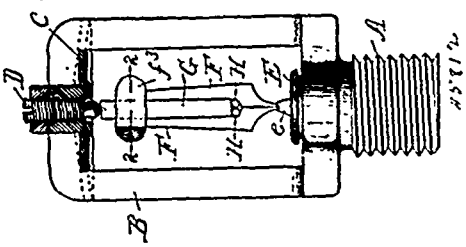
frame at the side of the upper roller, and meshing into a geared wheel on the end of the roller, and the geared wheel on the end of



the roller, and the cap C, substantially as and for the purpose set forth.

No. 45,812. Sprinkler Head for Fire Extinguishers.

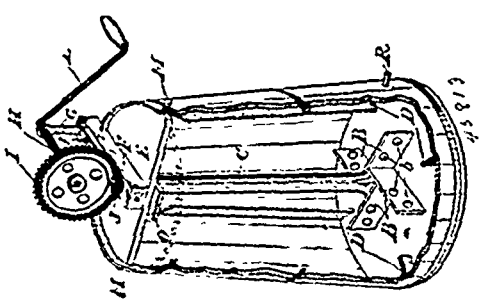
(*Tête d'arrosoir pour extincteur d'incendie.*)



Wallace Thurman, assignee of Valentine Lapham, both of Chicago, Illinois, U.S.A., 14th April, 1894; 6 years.

Claim.—1st. In a sprinkler head, the combination, with a suitable frame and a cap, of a strut having a bearing point at each end, said strut having also a part F, provided with a laterally extending bearing surfaces, a part G provided with a laterally extending bearing surface opposed to the bearing surface of the part F, a roller interposed between said bearing surfaces, and fusible means for holding the several parts in place, a portion of the part F, being located upon one side of the part G, and the points of contact between the roller and laterally extending bearing surfaces being located upon the corresponding side of a plane passing through the bearing points of the strut, substantially as set forth. 2nd. As a new article of manufacture, a strut consisting of the two parts F, F, having their inner faces off-set to form shoulder f^2, the part G, interposed between the parts F, the rollers H, H, interposed between part G and the shoulders f^2, and means fusible at a predetermined temperature for holding the several parts in place, substantially as set forth. 3rd. As a new article of manufacture, a strut having two parts F, each provided with a lip f^3, which extends toward and overlaps the other, and a part G interposed between the parts F and overlapped by said lips, the meeting surfaces of the several parts being soldered together, substantially as set forth.

No. 45,813. Churn. (*Baratte.*)

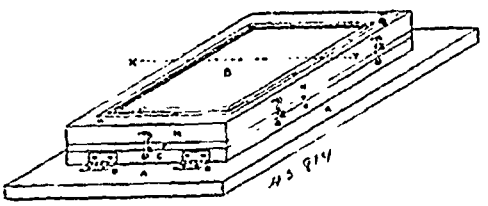


Horatio N. Rathburn and John T. White, both of Belwood, Ontario, Canada, 14th April, 1894; 6 years.

Claim.—1st. In a churn, breakers attached to the inner side of a churn against which the cream may be dashed when set in rotary motion, substantially as and for the purpose specified. 2nd. In a churn, breakers radially arranged and attached to the inner side of a churn, against which the cream may impinge when set in motion by rotatable dashers, substantially as and for the purpose specified. 3rd. In a churn, the combination, with the breakers D, formed within the churn on the side thereof, of the dashers of fans B, operated substantially as and for the purpose specified. 4th. In a churn, the combination, with the breakers radially affixed to the inner side of the churn D, of the rotatable dashers or fans B, perforated with holes *b*, and operated substantially as and for the purpose specified. 5th. In a churn, the rotatable dashers B, held in suspension near the base of the churn, perforated with holes *b*, and adapted to rotate by means of the verticle spindle C, suitably geared and journalled, in combination with breakers D, radially attached to the inner side of the churn at the periphery of the base and a plug R, for withdrawing the water and residue, substantially as and for the purpose specified. 6th. In a churn, the cover E, in combination with pins M, passing through holes in the side of the churn A, and fitting into holes on the edge of the cover E, the block F, secured to the cover E, and bearing piece O, by bolts *f*, *f*, the standards G, G, the axle H, crank handle L, the bevel gear wheel I, spur pinion *j*, meshing with the bevel gear wheel I, and rigidly attached to the vertical spindle C, the rotatable dashers B, with holes *b*, and the breakers D, attached to the side of the churn A, and radially arranged, substantially as and for the purpose specified.

No. 45,814. Stylograph Duplicator.

(*Stylographe duplicata.*)

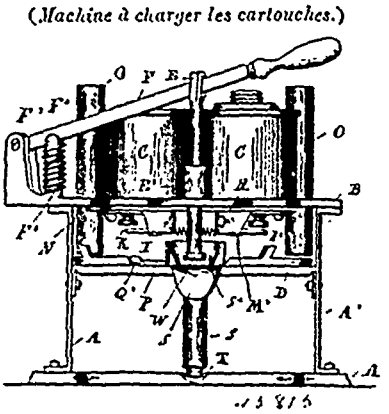


William Baker, Stratford, Ontario, Canada, 17th April, 1894; 6 years.

Claim.—1st. In a stylograph duplicator, the combination of a base portion A, the hard polished surface B integral therewith, the combination frame G, H, adapted to hold a woven fabric in a taut position over the hard polished surface, substantially as shown and described. 2nd. The herein before described stylograph duplicator comprising in combination, the base portion A, hard polished projection B, the two part frame G, H, adapted to hold a wax stencil paper and a protector in a taut position over the said polished surface, and means for locking the said two part frame to the base block, substantially as shown and described.

No. 45,815. Cartridge Filler.

(*Machine à charger les cartouches.*)



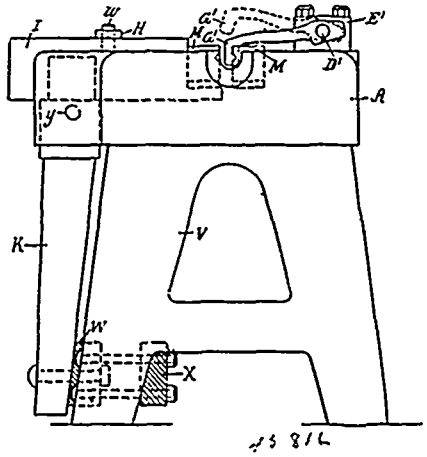
Lewis R. Smith, Portland, Michigan, U.S.A., 17th April, 1894; 6 years.

Claim.—1st. In a cartridge loading machine, the combination of the magazines at opposite sides thereof, a plate pivoted below the same, charge receptacles thereon having apertures adapted to connect alternately with each of the magazines horizontally movable valves for the bottom of the receptacles adapted to be alternately opened to discharge the contents of said receptcles, and a spring uniting the valves, substantially as described. 2nd. In a cartridge loading machine, the combination of the frame, the magazine supporting table, the magazine theron, a plate pivoted below said table, charge receptacles formed at opposite sides of said plates having apertures through the table, valves for the bottom of said charge receptacles, a spring connecting said valves and acting with its tension to hold them normally closed, and a stop in the path of said valves adapted to alternately open the same when the table is rocked, substantially as described. 3rd. In a cartridge loading machine, the combination with a table, the magazine, the charger plate, the charge receptacles thereon, the valves K for the bottom of said receptacles, the arms K^1 secured to said valves and pivoted on a common pivot at the rear of the machine, the spring L connecting said arms, and the stop M between said arms extending on both

sides of the centre, substantially as described. 4th. In a cartridge loading machine, the combination with the frame, the magazine, the charger plate, the charge receptacles thereon, a horizontally adjustable side wall for such charger plate, and spring actuated cut-off plates for the receptacle, substantially as described. 5th. In a cartridge loading machine, the combination with a frame and magazines, of an oscillating charger plate pivoted below the magazines, charger receptacles on the plate at opposite sides thereof formed with a horizontally movable side wall, and movable cut-off plates slidingly secured below the receptacles, substantially as described. 6th. In a cartridge loading machine, the combination with a frame and magazines supported thereon, of an oscillating charger plate common to both magazines, and spring actuated cut-offs for the charger plate, substantially as described. 7th. In a cartridge loading machine, the combination with the frame, a wad rammer, of a shell holder consisting of a cylinder, a hooked plate at its forward edge, and a rearwardly extending hopper on one side only forming a counter weight and a cross-bar on the frame with which said hook is adapted to engage, substantially as described. 8th. In a cartridge loading machine, the combination with the magazine supporting table, the magazine thereon, the charger plate pivoted to the under side of said table, the charge receptacles secured to the under side of said plate, valves for the lower end of said receptacles secured to the under side of said plate, valves for the lower end of said receptacles, means for reciprocating the charger plate, a shell holder pivoted in the frame beneath said charger plate, and a hopper at the upper end of said shell holder, substantially as described. 9th. In a cartridge loading machine, the combination with the shell holder, the magazines and mechanism for delivering the charge from the magazine to the shell holder, of a wad receptacle, an oscillating plate beneath said receptacle, a cut-off Q, on said plate, and a guide-way Q^1 extending to the front of the machine, substantially as described.

No. 45,816. Bolt Heading Machine.

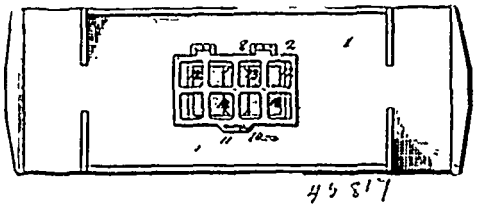
(*Machine à entêter les boulons.*)



John White, London, Ontario, Canada, 17th April, 1894; 6 years.

Claim.—1st. In a bolt heading machine, a die block M secured to the bed A, and a die block M secured to a reciprocating holder I, in combination with means for firmly holding said die blocks in juxtaposition, at the same time permit the reciprocating holder to give or yield when the bolt blank is not properly inserted between said die blocks M, M, substantially as and for the purpose set forth. 2nd. In a bolt heading machine, a die block M secured to the bed A, and a die block M secured to a reciprocating holder I, provided with an opening T, and a sliding bar G formed with an inclined plane n, and the ways L^1 and N^1, and means for permitting the reciprocating holder to give or yield when the bolt blank is not properly inserted between the die blocks M, M, substantially as and for the purpose set forth. 3rd. In a bolt heading machine, a die block M secured to the bed A, and a die block M secured to a reciprocating holder I, provided with an opening T, and a sliding bar G formed with an inclined plane m, the ways L^1 and N^1, and the lever K, and means for permitting the latter to give or yield when the bolt blank is not properly inserted between the die blocks M, M, substantially as and for the purpose set forth. 4th. In a bolt heading machine, a reciprocating die holder I, the ways L^1, and the pivotal bar H, one end of which is pivotally secured to said holder I, and the other end to the bed A, and formed with a projection O^1, in combination with a bar G, formed with a stud I, and the ways N^1, substantially as and for the purpose set forth. 5th. In a bolt heading machine, a reciprocating die holder I, the ways L^1, and the pivotal bar H, one end of which is pivotally secured to said holder I, and the other end to the bed A, and provided with a projection O^1, formed with the inclined plane q, in combination with a sliding bar G, provided with a stud I, formed with the inclined plane S, the ways N^1, and means for operating the bar G, substantially as and for the purpose set forth. 6th. In a bolt heading machine, a reciprocating die holder I, formed with an opening T, and an inclined projection R^1, in combination with a bar G, substantially as and for the purpose set forth. 7th. In a bolt heading machine, a reciprocating die holder I, formed with an opening T, in combination with a bar G, formed with an inclined projection P^1, substantially as and for the purpose set forth. 8th. In a bolt heading machine, a reciprocating die holder I, formed with an opening T, and a projection R^1 formed with an inclined plane U, and the ways L^1, in combination with a sliding bar G, formed with a projectionP^1, having the inclined plane m, thereon, the ways N^1, and means for operating said sliding bar G, substantially as and for the purpose set forth. 9th. In a bolt heading machine, a reciprocating die holder I, formed with an opening T, and a projection R^1, formed with an inclined plane U, and the ways L^1, in combination with a sliding bar G, formed with a projection P^1, having the inclined plane m, thereon, the ways N^1, the sliding head D, and means for operating the latter, and the ways b, b, substantially as and for the purpose set forth. 10th. In a bolt heading machine, a reciprocating die holder I, formed with an inclined projection R^1, an opening T, and a socket n, in combination with the sliding bar G, the lever K, and means for applying resistance to said lever, substantially as and for the purpose set forth. 11th. In a bolt heading machine, a reciprocating die holder I, formed with an opening T, and a socket n, in combination with the sliding bar G, formed with an inclined projection P^1, the lever K, and means for applying resistance to said lever, substantially as and for the purpose set forth. 12th. In a bolt heading machine, a reciprocating die holder I, formed with a socket n, with an opening T, and a projection R^1, a block L, a lever K, one end of which is inserted in said socket n, and means for applying resistance to said lever, in combination with a sliding bar G, formed with a projection P^1, and means for operating said bar G, substantially as and for the purpose set forth. 13th. In a bolt heading machine, a reciprocating die holder I, formed with a socket n, opening T, and a projection R^1, having an inclined plane U, a block L, a die block M, secured to said holder, a sliding bar G, formed with a projection P^1, having an inclined plane m, means for operating said bar G, and a bed A, formed with the ways L^1 and N^1, and having a die block M, secured thereto, in combination with a lever K, spring W, beam X, and a bearing consisting of the plates b^1, and bolts c^1, substantially as and for the purpose set forth. 14th. In a bolt heading machine, a lever K, in combination with a spring W, secured at one end to a stationary support, a beam X, secured to a stationary support, and a bearing, consisting of the plates b^1, and bolts c^1, interposed between said beam and said spring, substantially as and for the purpose set forth. 15th. In a bolt heading machine, a pitman E, secured at one end to the crank of the crank shaft, B, and formed with a cross head f, at the other end, in combination with a block g, and the sliding head D, formed with a socket h, substantially as and for the purpose set forth. 16th. A dog Q, held in place by, and oscillating perfectly free in the hub of the fly wheel C, adjacent to, and in combination with a shaft B, formed with a shoulder R, and any suitable means for engaging said dog Q, with said shoulder R, substantially as and for the purpose set forth. 17th. In a bolt heading machine, a dog Q, supported by and oscillating perfectly free in the hub of the fly wheel C, adjacent to the shaft B, a cam or arm u, secured to said dog, and a tension device engaging with said cam or arm, in combination with a shaft B, formed with a shoulder R, substantially as and for the purpose set forth. 18th. In a bolt heading machine, a dog Q, provided with a cam or arm u, said dog being supported by and oscillating perfectly free in the hub of the fly wheel C, adjacent to the shaft B, provided with a shoulder R, in combination with a trip bolt F, and means for adjusting said trip bolt in the path of said cam or arm u, substantially as and for the purpose set forth. 19th. In a bolt heading machine, a dog Q, provided with a cam or arm u, a spring r, the fly wheel C, and the shaft B, provided with a shoulder R, in combination with a trip bolt P, L-shaped lever O, handle lever N, and the bed A, in which the ways r are formed, substantially as and for the purpose set forth. 20th. In a bolt heading machine, a shaft D^1, and means for supporting the same, the arm F^1, and stock or bolt blank gage G^1, rigidly secured to said shaft D^1, in combination with a sliding head D, and a block H^1, secured thereto, in which the inclined slot I^1, provided with the horizontal extension c^1 is formed, substantially as and for the purpose set forth. 21st. In a bolt heading machine, a shaft D^1, held in place by, and oscillating perfectly free in boxes E^1, secured to the bed A, and the arm F^1, and stock or bolt blank gage G^1, rigidly secured to said shaft D^1, in combination with a sliding head D, and a block H^1, secured thereto, in which the inclined slot I^1, provided with the horizontal extensions c^1, and d^1 is formed, substantially as and for the purpose set forth. 22nd. In a bolt heading machine, the die blocks M, M, in combination with yielding devices, by which either or both of said die blocks individually or together with their supports or connections, will give or yield when the bolt blank is not properly inserted between said die blocks, substantially as set forth. 23rd. In a bolt heading machine, the application of yielding devices to the die blocks M, M, by which either or both of said die blocks individually or together with their supports or connections, will give or yield when the bolt blank is not properly inserted between them, at the same time when the bolt blank is properly inserted between said die blocks M, M, said devices will compress said die blocks to grasp and rigidly hold said bolt blank while the head is being formed thereon, substantially as set forth.

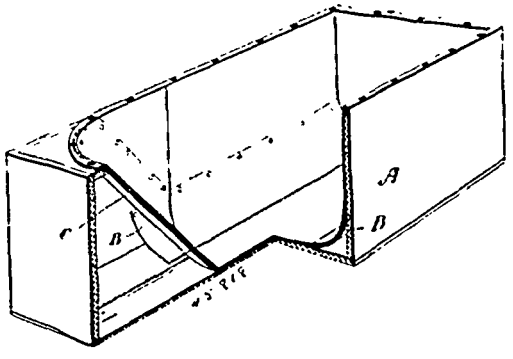
No. 45,817. Attachments for Electric Cars.
(*Attache pour chars électriques.*)



Isaac H. Davis, South Butte, Montana, U.S.A., 17th April, 1894; 6 years.

Claim.—In combination with a car floor or analogous covering, having an electric motor beneath the same and provided with an opening therethrough, of a metallic frame secured against the under side of the floor and projecting inwardly beyond the walls of the said opening to form supporting flanges, a cushion interposed between the said frame and the floor, and covering the said flanges, a plate of glass mounted in said opening and resting on the said cushion, and a guard hingedly mounted above the said plate of glass, and having a series of openings therein, substantially as described.

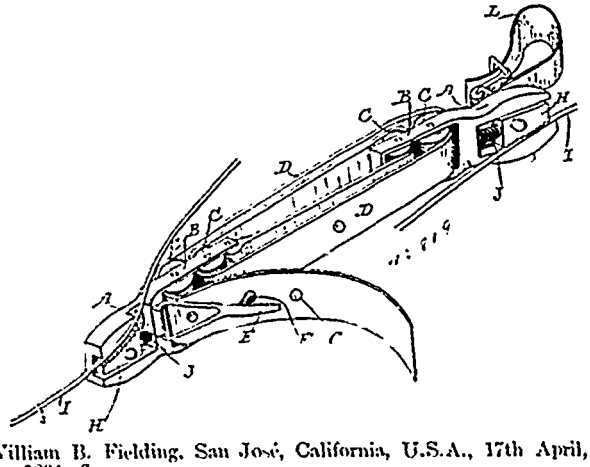
No. 45,818. Bath Tub. (*Baignoire pliante.*)



George Booth, Toronto, Ontario, Canada, 17th April, 1894; 6 years.

Claim.—As a new article of manufacture, a planished copper bath, the copper lining of which is supported at the side corners and head by the concaved sheet iron plates B, and the slanting concaved sheet iron head end plate C, respectively, both of which are suitably secured to the shell, so that the entire inner surface of the copper lining will always remain smooth, as and for the purpose specified.

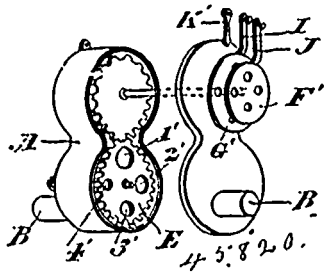
No. 45,819. Wire Tightener. (*Cric tendeur des fils.*)



William B. Fielding, San José, California, U.S.A., 17th April, 1894; 6 years.

Claim. 1st. An apparatus, consisting of the heads A, having the projecting forks or yokes, pulleys journalled between said forks, a strap secured at one end to one of the forks and passing around the pulleys, a locking device consisting of the swinging arm hinged to one of the heads, having a pin adapted to enter holes in the strap, and sliding spring actuated grip locks fitting into the heads and adapted to grip the wire, substantially as herein described. 2nd. A device for stretching or tightening wires, consisting of the heads, having inclined channels made in them, blocks adapted to slide in said channels and grip the wires between the opposing faces of the blocks and the head, guide pins extending from the blocks into guide holes in the heads, and springs whereby the blocks are normally forced against the gripping faces of the heads, forks extending from the opposite ends of the heads, having pulleys journalled between them, a strap passing around said pulleys and adapted to draw the blocks toward each other, a swinging bar hinged to one of the heads with a locking pin adapted to engage holes in the strap and retain it at any point, and a means for securing the apparatus to a post, consisting of the strap I, secured to one of the heads, substantially as herein described.

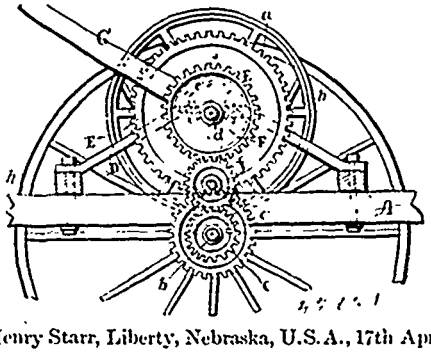
No. 45,820. Lense for Cameras. (*Lentille pour cameras.*)



Erskine Decker, Cassopolis, Michigan, U.S.A., 17th April, 1894; 6 years.

Claim.—A device of the class described, comprising a casing provided with a tube B, the bi-convex and bi-concave lenses in the tube, the toothed discs D, E, revolubly and concentrically mounted in the casing, and having one or more openings adapted to coincide with that of the tube as the discs are rotated the lenses in the opening of said disc D, and the indicator cranks I, J, controlling and operating said discs through suitable gearing, as and for the purpose specified.

No. 45,821. Motor. (*Moteur.*)



William Henry Starr, Liberty, Nebraska, U.S.A., 17th April, 1894; 6 years.

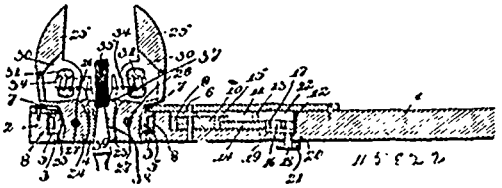
Claim.—1st. The combination with a shaft, of gear wheels mounted loosely on said shaft and having recesses in their inner faces, discs secured to said shaft between the gear wheels, dogs carried by said discs and adapted to alternately engage the recesses in the gear wheels when the discs are moved in one direction, and alternately ride over them when the discs are moved in the other direction, an axle, gear wheels carried by said axle, one of said gear wheels being adapted to mesh with one of the loosely mounted gear wheels, and a pinion located between the other gear wheel on the axle and other loosely mounted gear wheel, and a lever secured to said disc, substantially as set forth. 2nd. The combination with a shaft, of gear wheels mounted loosely on said shaft and having recesses in their inner faces, balance wheels secured to said shaft, discs secured to said shaft between the gear wheels, an operating lever secured to said discs, dogs carried by each of said discs, the dogs of each disc being adapted to engage the recesses in the respective gear wheels, alternately when the discs are moved in one direction and ride over them alternately when the discs are moved in the other direction, a pinion meshing with one of said loosely mounted gear wheels, an axle carrying a gear wheel with which said pinion meshes, and another gear wheel on said axle adapted to mesh with the other loosely mounted gear wheel, substantially as set forth.

No. 45,822. Wrench. (*Clef à écrou.*)

Edward B. Hyre, Elk Fork, West Virginia, U.S.A., 17th April, 1894; 6 years.

Claim.—1st. In a wrench, the combination with a rotary ratchet head, and means for operating the same, of jaws pivotally connected to said head, swinging nuts arranged upon and carried by the jaws, and an oppositely-threaded adjusting-screw engaging said nuts, substantially as specified. 2nd. In a wrench, the combination with a rotary ratchet head, and means for operating the same, of jaws

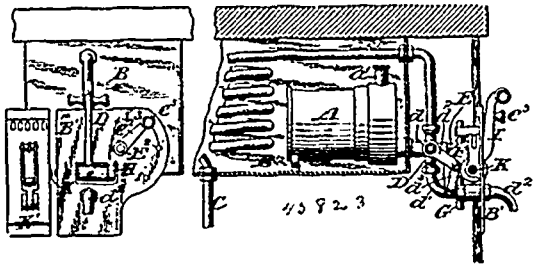
provided with stems fitting in recesses of said head, pivot pins engaging registering perforations in the head and shanks, swinging nuts carried by the jaws, and an oppositely-threaded adjusting-



screw engaging said nuts, substantially as specified. 3rd. In a wrench, the combination with a rotary head and means for operating the same, of jaws pivotally connected to said head and a right and left threaded adjusting screw connecting the jaws for simultaneously adjusting the same, substantially as specified. 4th. In a wrench, the combination with a handle provided with a terminal bearing or seat, a cavity or recess being formed in said handle adjacent to and communicating with such bearing or seat and having a reduced communicating compartment 12 between which and the main portion of the cavity are arranged the wedge-shaped fulcrum points 13, a rotary shouldered head mounted in said bearing or seat and carrying jaws and means for operating the same, of a removable cap covering said bearing or seat and the communicating cavity, a reversible pawl pivotally mounted in the cavity to engage the ratchet teeth of the rotary head, an actuating spring arranged at an intermediate point between the fulcrum points 14 and provided with a slotted rear end, a reversing spindle mounted in a suitable bearing in the handle and provided with an off-set or crank 19 carrying a stud or pin 17 to engage the slot of the actuating spring, and a block fixed to the under surface of the cap-plate and fitting in the compartment 12 of the cavity to bear upon the upper side of the actuating spring, and the extremity of the pin or stud 17 to hold the latter in operative relation, substantially as specified. 5th. In a wrench, the combination with a rotary head having a bit socket and means for operating the same, pivotal jaws, carried by the head, and swinging nuts on the jaws, of a right and left threaded screw ngaging the nuts, and lugs on the head engaging opposite sides of an enlargement on said screw, substantially as specified.

No. 45,823. Liquid Dispensing Apparatus.

(*Machine à débiter les liquides.*)

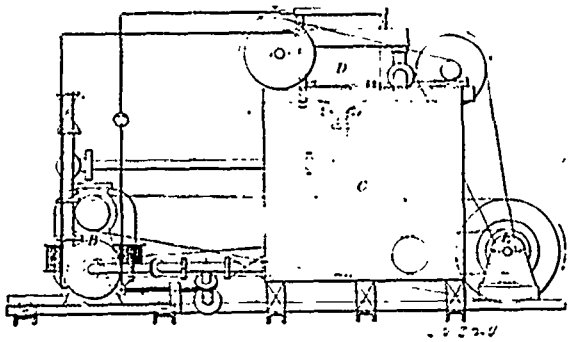


William M. Fowler, Milford, Connecticut, U.S.A., 17th April, 1894; 6 years.

Claim.—1st. Dispensing apparatus, comprising a liquid receptacle, an outletting device extending through the wall of the receptacle and having a movement within the receptacle to raise and lower the point at which the liquid is permitted to flow from the receptacle and means for operating the outletting device, substantially as set forth. 2nd. Dispensing apparatus, comprising a liquid receptacle, an outletting device having a movement within the receptacle to adjust the quantity of liquid to be dispensed, means for operating the outletting device, a device for permitting and arresting the flow of liquid from the receptacle, a registry operating shaft and mechanism intermediate the registry operating shaft and the device for regulating the flow and the means for operating the outletting device whereby the operating of the outletting device regulates the movement of the registry operating shaft under the control of the device for regulating the flow, substantially as set forth. 3rd. Dispensing apparatus, comprising a measuring receptacle, a general supply conduit leading thereto, an outletting device, means for operating the outletting device, a rotary registery shaft, an operating lever for permitting and arresting the flow into and out of the measuring receptacle, means for connecting the lever interruptedly with the shaft and a stop under the control of the outletting operating device to regulate the connection of the operating lever with the shaft, substantially as set forth. 4th. Dispensing apparatus, comprising a measuring receptacle, a general supply conduit leading thereto, an outletting device having a rocking movement within the receptacle, means for rocking the outletting device predetermined distances, means of permitting and arresting the flow of liquid to and from the measuring receptacle, an operating lever for said means, a registry operating shaft, a dog for interruptedly connecting the operating lever and the shaft, a sleeve for stopping the dog from engaging the shaft and a connection between the sleeve and the means for operating the outletting device, substantially as set forth. 5th. Dispensing apparatus, comprising a measuring receptacle, an outletting device, means for operating the outletting device, an operating lever for permitting and arresting the flow of liquid to and from the receptacle and a locking pin or bar adapted to engage the outletting operating means and the operating lever and mutually interlock them against movement except under predetermined conditions, substantially as set forth.

No. 45,824. Method of Disinfecting.

(*Méthode de désinfecter.*)

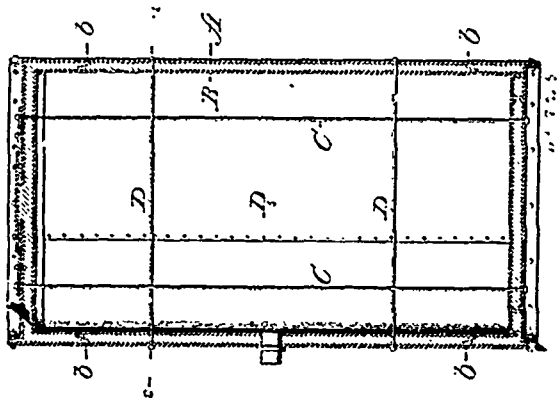


Eugene Hermite and Charles F. Cooper, both of Dalston, London County, England, 17th April, 1894; 6 years.

Claim. 1st. The herein described method of disinfecting by conducting electrolysed chloride solution by pipes from an electrolysing station to closets, urinals, drains and other places where there are noxious or impure matters. 2nd. In an electrolysing station much as is above referred to, the combination of a dynamo electric machine, electrolyser and conductors with suitable pumps, cisterns, pipes, cocks and valves arranged and operating substantially as and for the purpose set forth. 3rd. An electrolysing apparatus, substantially as described, having as negative electrodes, zinc discs, and as positive electrodes, platinum sheets or rods covered with platinum gauze. 4th. In an electrolysing apparatus negative electrodes consisting of zinc discs cast in one with a carrying shaft the ends of which shaft are jacketed with harder metal for the purpose set forth. 5th. In an electrolysing apparatus, a positive electrode consisting of a sheet of platinum or platinum gauze, clamped between two frames of non-conducting material and having large openings to expose the platinum, the upper edge of the sheet being cast into the lower end of a lead arm connected with the main conducting bar, as set forth.

No. 45,825. Tank for the Storage of Compressed Air.

(*Citerne pour l'emmagasinage de l'air comprisné.*)

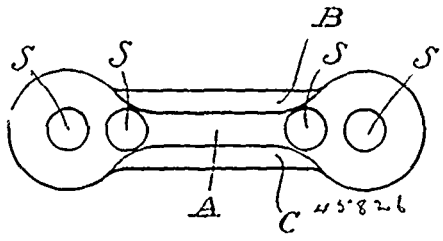


William Timmis, Pittsburgh, Pennsylvania, U.S.A., 17th April, 1894; 6 years.

Claim.—1st. A receptacle made up of inner and outer metallic casings placed one within the other so as to leave a space between them, the space being filled by a metal of greater density than the metal of which the casings are made. 2nd. As an improved article of manufacture, a tank or receptacle made up of two metallic casings of different sizes one placed within the other to leave a space between them, said space being filled with a ductile metal of greater density than the metal of which the casings are made so as to completely surround the inner casing and connect the same to the outer casing, substantially as shown and for the purpose set forth. 3rd. A method of manufacturing metallic receptacles consisting in placing one casing within another, heating the casings and while they are in a heated

condition filling the space between them with molten metal of greater density than the metal of which the casings are made, substantially as described.

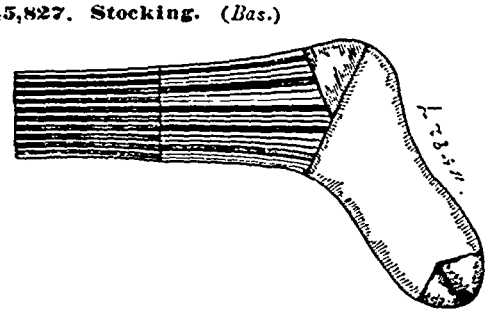
No. 45,826. Clasp. (*Agrafe.*)



Charles La Dow, Albany, New York, U.S.A., 17th April, 1894; 6 years.

Claim. 1st. The hereinbefore described spring clasp having an aperture adapted to interlock with an offset in a separate body. 2nd. A spring clasp having an aperture adapted to receive a separate body, in combination with an offset or bend in said body adapted to interlock with said aperture on opposite sides thereof, as at *d*, *c*. 3rd. A clasp having an aperture therein, in combination with a wire, band or other body adapted to be passed through said aperture at a right angle relatively to the clasp and then locked parallel therewith by means of elastic pressure causing said clasp and said body to grip together. 4th. A clasp elastic in cross section and having an aperture therein adapted to permit a separate body to enter said aperture at substantially a right angle relatively to the body of the clasp, said aperture and said body then coacting to form a hinge connection whereon the body may rock until it is located between the elastic portions of the clasp. 5th. A clasp having body A, movable portions B, C, and aperture S, in combination with a separate body having an offset, as at X, adapted to serve as a hinge for said body to locate it within the clasp and to also serve as a stop to prevent its withdrawal therefrom. 6th. An elastic clasp adapted to form a separate hinge connection between itself and a separate body by means of an offset in said body adapted to attachably and detachably join the clasp and body together. 7th. In a clasp, a separable hinge connection consisting of an offset for engaging said clasp with a separate body in such manner that the body and clasp may swing or partially rotate on said offset with reference to each other and be held from endwise movement by said offset, and also be held in engagement by elastic pressure between the body and clasp. 8th. A clasp consisting of a chamber having parallel grooves, and an aperture through the body of the clasp, in combination with a separate body adapted to have a portion thereof passed through said aperture and then be clasped between said grooves, substantially as described. 9th. A clasp having an aperture near each end of the clasp, said apertures being adapted to each receive and retain a separate body therein in such a manner that when said bodies are strained in opposite directions they may tighten to the edges of said apertures. 10th. A clasp adapted to grip a separate body on four sides thereof and at different longitudinal locations thereon, substantially as described. 11th. A body of metal having an aperture adapted to admit the passage of both ends of a loop or other fork at substantially a right angle through said body and to then permit said loop or fork to be folded parallel with said body in such a manner that both free ends of the metal forming said loop are equally supported against tensile strains. 12th. A body of metal having an aperture *g* adapted to receive a separate body D, to retain said body in said aperture against tensile strains by means of the bends in body D, substantially as shown in dotted lines in said figure. 13th. A body of metal having an aperture *s*, adapted to receive a separate straight body D to retain said body against tensile strains by contact between S and D at points *d* and *c* when bent, substantially as shown.

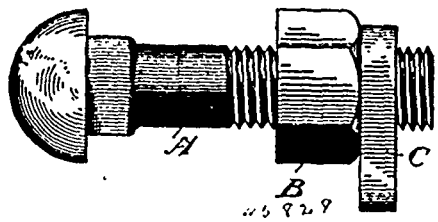
No. 45,827. Stocking. (*Bas.*)



Benjamin W. Clarke, Toronto, Ontario, Canada, 17th April, 1894; 6 years.

Claim.—1st. As an improved article of manufacture, a stocking, having the foot portion thereof woven with the inside turned to the outside of the leg and vice versa, substantially as and for the purpose set forth. 2nd. The combination of the leg portion, of hose worn and reversed, so that its inner side is outward, and the foot portion woven to the said leg portion, and having its inner side to that of the outer side of said leg portion, substantially as specified.

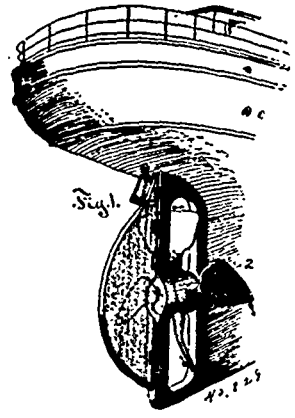
No. 45,828. Nut Lock. (*Arrête-écrou.*)



Leri Hildreth Young, St. John, New Brunswick, Canada, 18th April, 1894; 18 years. Re-issue for 15 years from 12th July, 1890.

Claim.—1st. A reversible lock-nut having flat or substantially flat faces, and a preponderance of weight at one edge, and of such thickness in relation to its thread that when screwed up to a given point on a bolt the heavy edge will fall on one side or other of the centre, according as one or the other of its faces is outermost, whereby it is adapted to securely lock a nut at any desired point upon a bolt, substantially as set forth. 2nd. The combination with a bolt, as A., and a main nut, as B, of the pendulously-acting locking nuts C, C, screwed upon the bolt and adapted to operate, substantially in the manner set forth.

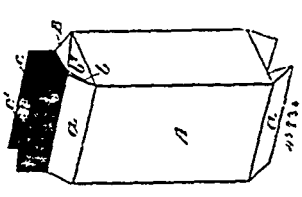
No. 45,829. Screw Propellor.
(*Hélice de propulsion.*)



Alfred Wells Case, Highland Park, Connecticut, U.S.A., 19th April, 1894; 6 years. Re-issue for 6 years from 9th August, 1893.

Claim. 1st. A screw propellor comprising a hub with projecting blades, each of which has its uninterrupted working surface developed by a straight generatrix and set on an angle across the axis of the hub and also inclined forwardly from the base of the working surface, whereby each blade operates to thrust outwardly as well as rearwardly when in motion, all substantially as described. 2nd. A screw propellor consisting of a hub with a plural number of projecting blades, each blade having a shank terminating in a lobe or fluke, said fluke having its working surface developed by a straight generatrix and set on an angle across the axis of the hub and also inclined forward from the base of the working surface, all substantially as described.

No. 45,830. Paper Box. (*Boîte en papier.*)

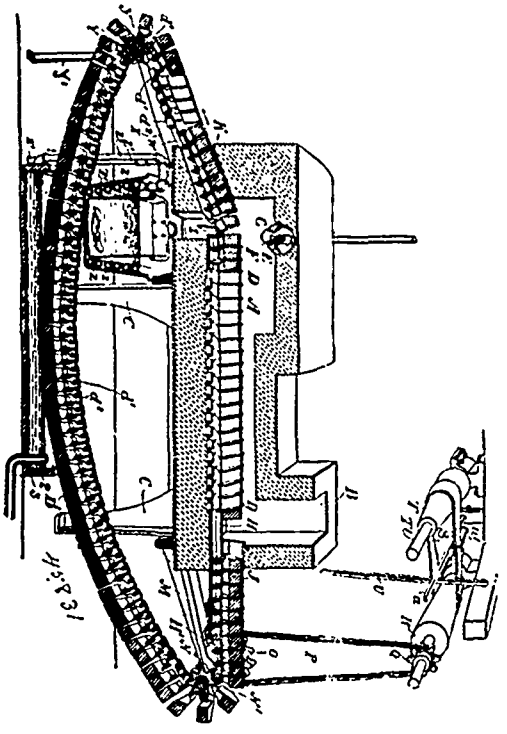


John Jacob Hoffman and Walter Edgar Durgea, both of Glen Cove, New York, U.S.A., 19th April, 1894; 6 years.

Claim.—The herein described box having its folding flaps at the ends united at the corners, and an extended lining portion project-

ing from the edge of the folding or flap portion, the flaps and lining being creased to fold with the lining portion exterior to the flap portion of the body when in folded adjustment, substantially as set forth.

No. 45,831. Method and Apparatus for Hardening Harvester Machine Knives, &c. (*Méthode et appareil pour durcir les couteaux de moissonneuses, etc.*)



The Massey-Harris Company, assignees of William F. Johnston, and James Gray, all of Toronto, Ontario, Canada, 19th April, 1894; 6 years.

Claim.—1st. The method of hardening the cutting edges or other desired portions of knife sections, ledger plates and similar articles, which consists in passing the sections or pieces to be heated and hardened, partially exposed, through the fire chamber of a furnace of suitable temperature and immediately afterwards submerging the sections or pieces in the hardening tank, as and for the purpose specified. 2nd. The method of hardening the cutting edges or other desired portions of knife sections, ledger plates and similar articles which consists in passing the sections or pieces to be heated and hardened partially exposed through a fire chamber of a furnace kept at a desired heat the speed at which the sections or pieces are passed through the fire being commensurate with the degree of hardness required and the teeth being arranged to be immediately submerged in the hardening tank after having left the fire chamber, as and for the purpose specified. 3rd. In an apparatus for hardening the edges or desired portions of knife sections and similar articles, the combination with a fire chamber of a furnace, of an endless chain consisting of a series of links suitably formed to receive the sections or pieces and expose the portions to be heated and hardened, as and for the purpose specified. 4th. In an apparatus for hardening the edges or desired portions of knife sections and similar articles, the combination with a fire chamber of a furnace, of an endless chain consisting of a series of links suitably formed to receive the sections or pieces and expose the portions to be heated and hardened and means for supporting the sections or pieces within or between the links of the chain as they pass to and through the fire chamber, as and for the purpose specified. 5th. In an apparatus for hardening the edges or desired portions of knife sections and similar articles, the combination with a fire chamber of a furnace, of an endless chain consisting of a series of links suitably formed to receive the sections or pieces and expose the portions to be heated and hardened, and means for supporting the sections or pieces within or between the links of the chain as they pass to and through the fire chamber, and for opening the links of the chain to free each section or piece and discharge it after having passed through the fire chamber into a hardening tank, as and for the purpose specified. 6th. In an apparatus for hardening the edges or desired portions of knife sections and similar articles, the combination with the fire chamber of a furnace, of an endless chain consisting of a series of links suitably formed to receive the sections or pieces and expose the portions to be heated and hardened and means for supporting the sections or pieces within or between the links of the chain as they pass to and through the fire chamber and for speeding the chain, as and for the purpose specified. 7th. The combination, with the fire chamber of a furnace and an endless chain consisting of a series of links with concave-tapered outer portion and parallel ends between which the sections fit so that their edges project, of a channel iron H, through which the teeth of the chain pass and the edges of which support the sections in position, as and for the purpose specified. 8th. The combination, with the fire chamber of a furnace and an endless chain consisting of a series of links suitably constructed to receive the sections or pieces and expose the desired portions of the same, of a channel iron H, and the forked brackets I, secured to the bottom of the rear end of the channel iron and to the bearing brackets M, as and for the purpose specified. 9th. The combination, with the fire chamber of a furnace and an endless chain consisting of a series of links suitably constructed to receive the sections or pieces and expose the desired portions of the same, of a channel iron H, and the forwardly extending curved extension bars H^1, forming a continuation of the edges of the channel iron and means for carrying the lugs or edges of the chain over the opening I, so that the chain will open above such opening as it is passing it, as and for the purpose specified. 10th. The combination, with the fire chamber of a furnace, and an endless chain consisting of a series of links suitably constructed to receive the sections or pieces and expose the desired portions of the same, of a channel iron H, and the forwardly extending curved extension bars H^1, forming a continuation of the edges of the channel iron and the side bars W, bent above the opening and situated at greater distance apart than the width of the channel iron and suitably connected to the channel iron and the bearing brackets, as and for the purpose specified. 11th. The combination, with the fire chamber of a furnace, and an endless chain consisting of a series of links suitably constructed to receive the sections or pieces and expose the desired portions of the same, of a channel iron H, and the forwardly extending curved extension bars H^1, forming a continuation of the edges of the channel iron and the side bars W, secured at the rear end above the opening, the bar V, extending underneath the channel iron and secured at the forward end by the bolts w to the bearing brackets X, as and for the purpose specified. 12th. The combination with the fire chamber, of an endless chain consisting of a series of links with concave-tapered outer portion and parallel ends between which the mower sections fit so that their side edges project, and having formed on them lugs d^1, and d^2, which are rivetted together, as specified, and central tooth d^3, situated between the forward pair of lugs and the sprocket wheel N and Y, secured on the end shafts and having suitable bearings, as and for the purpose specified. 13th. The combination with the fire chamber and an endless chain consisting of a series of links suitably constructed to receive the sections or pieces and expose the desired portions of the same and the sprocket wheels N, and Y, secured on the end shafts and having suitable bearings, of the sprocket wheel O, on the end of the shaft N^1, chain P, sprocket wheel O, tapered pulleys R and K, connected by the belt S, and means for shifting the belt S, upon such tapered pulleys, as and for the purpose specified. 14th. The combination with the fire chamber and oil burners E, emitting the flame into it from opposite sides of an endless chain D, suitably constructed and driven, the opening I, and means for opening the chain above such opening and the tank Z, situated beneath the opening, as and for the purpose specified. 15th. The combination with the fire chamber and oil burners E, emitting the flame into it from opposite sides, of an endless chain D, suitably constructed and driven, the opening I, and means for opening the chain above such opening and the tank Z, and open work basket Z^1, situated in the hardening tank beneath the opening, as and for the purpose specified 16th. The combination with the fire chamber and oil burners E, emitting the flame into it from opposite sides, of an endless chain D, suitably constructed and driven, the opening I, and means for opening the chain above such opening, tank Z, and the coil of pipes z, connected by the pipe z^1, to the main, as and for the purpose specified. 17th. The combination with the fire chamber and oil burners E, emitting the flame into it from opposite sides of the endless chain D, suitably constructed and driven, the opening I, and means for opening the chain above such opening and the tank 2, into which the outer points of the saging portion of the chain extend, the said tank being supplied with water and having an over flow pipe, as and for the purpose specified. 18th. The combination with the fire chamber and oil burners E, emitting the flame into it from opposite sides of the endless chain D, suitably constructed and driven, the opening I, and means for opening the chain above such opening and the oil tank Z, supplied with water from the main and connected by the pipe z^1, to the tank 2, which has an over flow pipe 3, as and for the purpose specified.

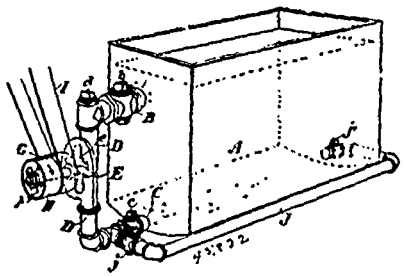
No. 45,832. Stirrer for Mixed Paint.

(*Agitateur pour peinture.*)

The Massey-Harris Company, assignee of Lyman Jones and William F. Johnston, all of Toronto, Ontario, Canada, 19th April, 1894; 6 years.

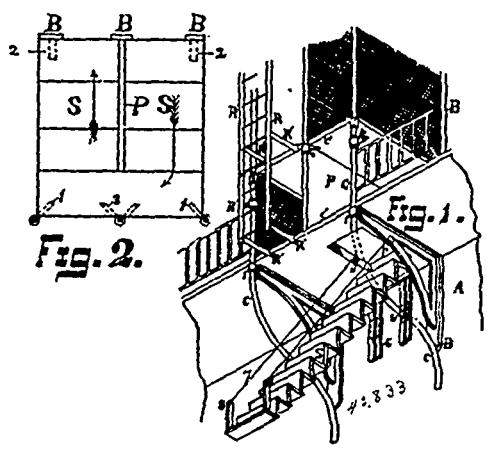
Claim.—1st. In a stirrer for mixed paint, the combination with the dipping tank A, of a pipe C extending through the end of the

tank in close proximity to the bottom, and a larger pipe B extending through the end of the tank in proximity to the top but beneath



the surface of the mixed paint so as to leave the interior of the tank entirely unobstructed, the pipes B and C being connected together by a pipe and means being provided whereby the mixed paint is drawn through the pipe B, from near the top of the tank and is again forced through the pipe C into and over the bottom of the tank continuously, as and for the purpose specified. 2nd. In a stirrer for mixed paint, the combination with the dipping tank A, having an arc-shaped bottom extending from side to side, of a pipe C extending centrally through the end of the tank in close proximity to the bottom, the pipes B and C being connected together by a pipe D, and means being provided whereby a circulation of the mixed paint is produced through the pipes and tank, as and for the purpose specified. 3rd. The combination with the dipping tank A, having an arc shaped bottom extending from side to side, of a pipe C extending centrally through the end of the tank in close proximity to the bottom, the pipes B and C being connected together by a pipe D, and a branch pipe J extending from the pipe C, along the outside of the tank into the opposite end, and means being provided whereby a circulation of the mixed paint is caused through the pipes and tank, as and for the purpose specified. 4th. The combination with the dipping tank A, having an arc-shaped bottom extending from side to side, of a pipe C extending centrally through the end of the tank in close proximity to the bottom, the pipes B and C connected together by a pipe D, and a rotary pump suitably driven whereby the mixed paint is drawn through the pipe B, from the top of the tank and forced through the smaller pipe C at the bottom of the tank, as and for the purpose specified. 5th. The combination with the dipping tank, of the upper and lower pipes extending into the ends of the tank, as specified, and provided with suitable cocks and means for pumping the mixed paint through the pipes and the removable plug *d* fitting into the top of the pipe D, as and for the purpose specified. 6th. The combination with the dipping tank A, having an arc-shaped bottom, of the pipes B and C connected by the pipe D, and means for causing the circulation through the pipes and tanks, the pipe C being bent downward so as to direct the stream of the mixed paint to follow the curve of the arc-shaped bottom, as and for the purpose specified.

No. 45,833. Fire Escape. (*Sauveteur d'incendie.*)

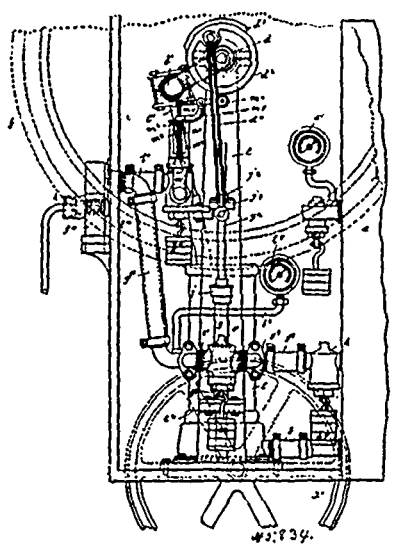


Frank J. Fairchild, Saginaw, Michigan, U.S.A., 19th April, 1894; 6 years.

Claim.—1st. A fire escape consisting of the pieces B, B secured to the wall, the hose pipes C, C provided with hose coupling at each storey and on top and bottom, braces C^1, C^1, staying pipes C, C, to wall pieces B, B, the partition P, the series of right and left stairs on each side of the partition, extending from and to the building, and the railing D, and a covering for the escape, substantially as described, and as and for the purpose set forth. 2nd. In a fire escape, the combination, with the frame of the escape consisting of wall pieces B, B, B, and hose pipes C, C, C, properly stayed and braced, of the stairs S, S, arranged in flights, each flight S comprising a series steps made in one piece, each flight being secured to the wall pieces and pipes by brackets, one flight being so secured as to extend from the wall outward, another from the outer wall of the escape inward, and located at the side of the first flight, the next flight secured at a proper distance under the first flight in the same manner, and so on from storey to storey, and the partitions P between the flights, with an opening at each landing, and the railing, substantially as described, and as and for the purpose set forth. 3rd. In a fire escape, the combination, with wall supports for the escape, of hose pipes forming outer corners of the frame work of the escape, clasps B provided with one or more lugs secured to the pipes and to which the stays and braces and stairs are secured, the braces, the series of stairs, and the railing, substantially as described, and as and for the purpose set forth. 4th. A clasp C^1, consisting of a piece of band iron bent into a band with ends bent outward and provided with corresponding holes for securing a bolt, and the bolt B^1 passing through the hole, and the nut whereby when the nut is tightened the band is tightened to the pipe, and one or more lugs extending horizontally forming a bracket, substantially as described, and as and for the purpose set forth. 5th. In a fire escape, the combination with the wall pieces B, B, the hose pipes C, C, the connecting braces B^1, B^1, brackets 1, 2, 3, couplings H, H, of series of flights of stairs, each series being in one piece and arranged as described, the partition P, the railing B, folding ladder S^1, from ground to top of first storey, and the fireman's ladder R, substantially as described, and as and for the purpose set forth.

No. 45,834. Milking Machine.

(*Machine pour traire les vaches.*)



Alexander Shiels, Glasgow, Scotland, 19th April, 1894; 6 years.

Claim.—1st. A milking machine having a vacuum reservoir *a* from which vacuum is supplied, through pipes g^8, g^9, g^{10}, and i^1, i^3, to the teat cups i^4, the vacuum being caused to rise and fall by the action of a piston g^1 in a casing *g*, having holes k^1, k^2, k^3 or equivalent in it, substantially as hereinbefore described and shown on the drawings annexed. 2nd. In a machine as set forth in claim 1, a valve, such as (o, o^2), which, automatically opens at certain times so as to supply vacuum to the teat cups whenever the vacuum at said cups falls below the minimum, substantially as hereinbefore described and shown on the annexed drawings. 3rd. In a milking machine as set forth in claim 1, valves, such as l^{10} and *m*, for automatically, at certain times, reducing the vacuum at the teat cups to the minimum, substantially as hereinbefore described and shown on the annexed drawings. 4th. In vacuum milking machines, the application and use of a controlling wheel (*i*), having a valve (such as p^6) therein, for automatically locking-up or conserving the vacuum pressure within the milk receptacle or pail, substantially as hereinbefore set forth. 5th. In a milking machine, a driving shaft *d*, having a disc wheel d^2 with cam d^3 on it, said cam at every revolution of the wheel, pressing down the lever m^{10}, and opening the valve *m* against the action of the spring m^6, substantially as hereinbefore described and shown on the drawings annexed. 6th. The india-rubber teat cup *i* made with a narrow internally roughened neck *t* with lip u^1, and channels t^1, substantially as hereinbefore described with reference to the drawings annexed.

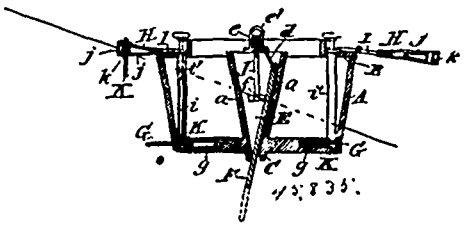
No. 45,835. Sailing Vessel. (*Batiment à voile.*)

Nathan C. Jessup, West Hampton Beach, New York, U.S.A., 19th April, 1894; 6 years.

Claim.—1st. In a sailing vessel, the hull constructed with a substantially horizontal recess at its outer side extending laterally in

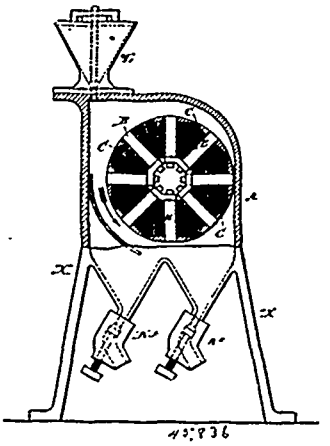
direction out of the perpendicular of the vessel, in combination with a board or plate pivotally mounted in said recess and constructed

FIG. 1.



to be adjusted outwardly from said recess and laterally from the outside of the hull, and when so adjusted to present its face exteriorly of the hull to the water during sailing in a plane out of the perpendicular of the vessel, and means, as the rack *h*, and pinion K, for adjusting said board or plate. 2nd. In a sailing vessel the hull, in combination with a substantially horizontal board or plate pivotally connected to the outside thereof, extending laterally in a plane angular to the perpendicular of the vessel, and constructed to be adjusted on its pivotal connection outwardly and laterally from the outside of the hull, and when so adjusted to present its face to the water during the sailing in the plane out of the perpendicular of the vessel. 3rd. In a sailing vessel, the hull, in combination with a board or plate extending longitudinally thereof and laterally at substantially right angles to the perpendicular of the vessel, pivoted to the outside of said hull on a substantially vertical axis, and constructed to be adjusted on its pivotal connection laterally of and outwardly from the outside of said hull. 4th. In a vessel, the combination, with the hull A, constructed with a guideway at its outside, of a board or plate G, arranged and operating in the latter, and constructed to be adjustable outwardly from said guideway, and when so adjusted to project exteriorly of the hull in a lateral plane angular to the perpendicular of the vessel. 5th. In a vessel, the hull A, having a longitudinal recess *g*, at its outside, extending laterally in a direction angular to the perpendicular of the vessel, in combination with a horizontal board or plate G, entering said recess, extending laterally in a plane angular to the perpendicular of the vessel, and adjustably outwardly therefrom outside of the hull, and means for so adjusting said board or plate

No. 45,836 Ore Separator. (*Séparateur de minerai.*)



Francis James Bell, Kingston on Thames, Surrey, England, 19th April, 1894; 6 years.

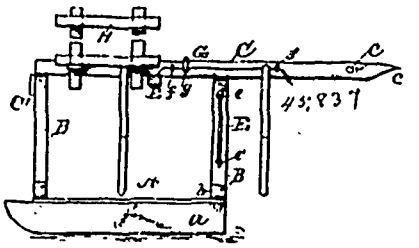
Claim.—Apparatus for separating magnetic ore from sand, consisting of an external casing A, having upper inlet L, and two lower right and left hand outlets K^1, K^2, a revolving drum arranged therein and a set of electro-magnets B carried by said drum, substantially as described, in combination with a commutator E, and operating connections and conductors as set forth.

No. 45,837. Corn Shocking Device.

(*Appareil pour mettre le blé d'inde en tas.*)

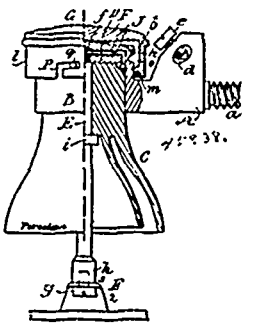
Albert N. Russell, Mount Valley, Kansas, U.S.A., 19th April, 1894; 6 years.

Claim.—1st. In a corn shocking device, the combination, with a platform of centrally located standards at opposite ends of said platform, a horizontal beam connected to the upper ends of said standards, and extending over the entire platform, said beam extending centrally rearward beyond the platform and formed with a pointed terminating end and a transverse opening in advance of said end, a



rest bar E removably held in connection with the rearmost standard and adapted to be withdrawn therefrom and inserted in the transverse opening of the beam, holding arms, a twine holder on the said beam, twine guides on the sides of said beam, and a knife sheath and knife also attached to said beam adjacent to the twine holder, substantially as described. 2nd. In a corn shocking device, the combination, with a platform of the standards and central beam, the holding arms and the rest bar adapted to be inserted in the central beam, substantially as shown and described. 3rd. In a corn shocking device, the combination, with a platform of the standard and central beam, the depending arms curved up at their lower ends, and the rest bar adapted to be passed through the central beam, substantially as described.

No. 45,838. Lightning Arrester. (*Paratonnerre.*)



Hermann O. Henneberg, Berlin, Germany, 19th April, 1894; 6 years.

Claim.—1st. In a lightning arrester for electric conductors, the combination of a plate and an inner cover adjacent to the same, the former being in electrical connection with a conductor and the latter adapted for ground connection, and an outer cover holding the inner cover in position and forming a moisture conducting chamber around the same. 2nd. In a lightning arrester for electric conductors, the combination of a discharge plate and an inner cover relatively separated, the latter having its upper face convexed to form a water shed, and an outer cover bearing on the central portion of said upper face and forming a moisture conducting chamber. 3rd. In a lightning arrester for electric conductors, the combination of a discharge plate and an inner cover relatively separated, and an outer cover having a depending rim provided with an inner closing rib perforated as described. 4th. In a lightning arrester, the combination, with a bracket having a perforation and binding screw for ground wire connection, a collar carried by said bracket and suspending an insulating bell, a discharge plate, an inner cover resting on the collar, and an outer cover holding the inner cover in position and forming a moisture conducting chamber, substantially as set forth.

No. 45,839. Lobster Trap. (*Parc à homards.*)

Walter G. Davis, Clinton L. Baxter and William N. Davis, all of Portland, assignees of Andrew P. Lewis, Deer Isle, all in Maine, U.S.A., 19th April, 1894; 6 years.

Claim.—1st. A lobster trap having within it a continuous longitudinally disposed partition or diaphragm, forming within the trap, a chamber underneath said partition or diaphragm, and a passage-way through said trap above said diaphragm, said diaphragm being provided with one or more trap openings or mouths, substantially as described. 2nd. In a lobster trap, a continuous partition or diaphragm extending within the trap from end to end thereof, forming a chamber underneath, and a passage-way through said trap above said diaphragm, said partition or diaphragm being provided with one or more trap openings or mouths, substantially as described. 3rd. In a lobster trap, a continuous partition or diaphragm within the trap, and so attached thereto, as to form a chamber underneath said diaphragm, and an opening or passage-way through said trap above said diaphragm, said diaphragm being provided with

one or more trap openings or mouths, substantially as described. 4th In a lobster trap, partition or diaphragms so attached to the

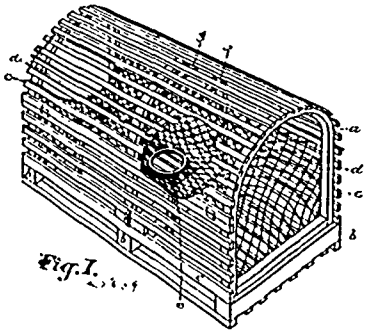
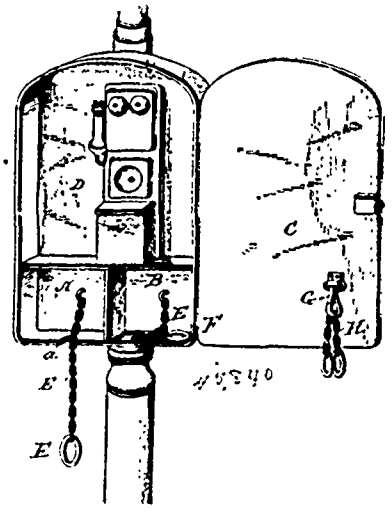


Fig. 1.

trap as to form within the trap, a chamber beneath them and a passage-way above them, and one or more mouths, or trap openings into said chamber.

No. 45,840. Police Patrol System.

(*Système de patrouille de police.*)

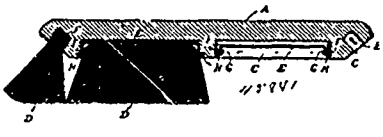


John Henry Ring and Michael Hilary Curry, all of Lowell, Massachuttes, U.S.A., 19th April, 1894; 6 years.

Claim.—1st. In a police patrol system, a signal box having compartments, and having each compartment provided with a chain and handcuff, said chain being firmly attached to the signal box, substantially as and for the purpose set forth. 2nd. In a police patrol system, a signal box having separate compartments, and having notches in the edge of the lower wall of said compartment, and having a chain and handcuff which is adapted to be stored in said compartments, substantially as described for the purpose set forth. 3rd. In a police patrol system, the combination with a signal box, of an attachment adapted to be firmly secured to said box, and having compartments which are adapted to be closed, and a chain and handcuff for each compartment, substantially as described for the purpose specified.

No. 45,841. Brush. (*Brosse*)

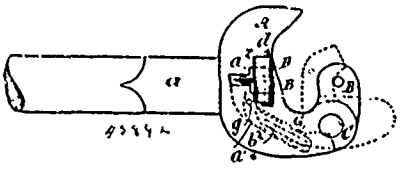
Fig. 1.



Joseph Bingeman, assignee of Oliver Martin, both of Berlin, Ontario, Canada, 19th April, 1894; 6 years

Claim. In a brush, the body A, having holes, a series of holes or grooves C, no particular order or size required, the bristles or fibre D, and the securing wire or metal fastener E, substantially as described. 2nd In a brush, the body A, the wire or metal fastener E, with ends bent and formed with shoulders G, with points H, forced horizontally or laterally into the block A, substantially as and for the purpose described.

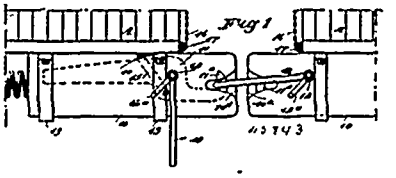
No. 45,842. Car Coupler. (*Attelage de chars.*)



Harold R. Hayden, Chicago, Illinois, U.S.A., 20th April, 1894 6 years.

Claim.—1st. The combination with a draw-head having a vertical recess extending downwardly from the top of the draw-head and another recess with which the said vertical recess, at its lower end, communicates, and in which works a knuckle or elbow lever, of a locking block or bar, having a flat main portion whose front and back are parallel and which works in said vertical recess, and an upper end which, above the said vertical recess, is bent forward and pivoted to lugs on the top of the draw-head, and a chain connected with the lower part of the locking block or bar and extending up through the said vertical recess, substantially as specified. 2nd. The combination with a draw-head, having a recess and a knuckle pivoted to said draw-head, of a lever fulcrumed within the recess, and a locking block or bar pivoted on a horizontal axis so as to swing forwardly and backwardly and having its lower end projected into a position to operate upon said lever to open the knuckle substantially as specified. 3rd. The combination with a draw-head having a recess and a knuckle pivoted to said draw-head, of a lever fulcrumed within the recess and pivotally connected to the knuckle and a locking block or bar pivoted on a horizontal axis so as to swing forwardly and backwardly and having its lower end projected into a position to operate upon said lever to open the knuckle, substantially as specified.

No. 45,843. Car Coupler. (*Attelage de chars.*)



Henry Vachon, Golden, British Columbia, Canada, 20th April, 1894; 6 years.

Claim.—1st. The combination with a serially and longitudinally slotted draw-head, transversely slotted at the front end, of a series of coupling hook bars pivoted in the draw-head slots, substantially as described. 2nd. The combination with a serially and longitudinally slotted draw-head, transversely slotted at the front end, of a series of similar coupling hook bars pivoted in the slots, and means to rock the hook bars, substantially as described. 3rd. The combination with an elongated rectangular draw head forwardly recessed in series from the lower side upwardly, rearwardly recessed from the top downwardly, and intermediately slotted in alignment with the forward and rearward recesses, and transversely slotted at the front end, of a series of coupling bars having upturned hooks at their front ends, and pivoted in the slots and recesses of the draw-head, and a device to rock the coupling bars, substantially as described. 4th. The combination, with an elongated rectangular draw-head longitudinally slotted and recessed in series, and transversely slotted at the front end near the vertical centre, of a series of coupling hook bars pivoted in the draw-heads lots and recesses by a transverse crank-handled shaft, a lifting device for the rear ends of the bars, a pendant weight thereon, and a bail looped link secured by its ends on the crank-handled shaft, substantially as described.

No. 45,844. Process of Colouring Stones.

(*Procédé pour colorer la pierre.*)

Pierre A. Moreau, Meung-sur-Loire, (Loiret), France, 20th April, 1894; 6 years.

Claim. 1st. The improved process of colouring natural or artificial porous stone, substantially as hereinbefore described. 2nd. The method of producing colour effects of the kind hereinbefore referred to in porous stone by a series of immersions in colour baths, whereby irregular layers or surfaces of colour are produced in the interior of the stone, substantially as described. 3rd. The regulation of the colour effects in the penetration of the colour into porous stones, by the use of a pattern of varnish or other protective coating suitable to prevent to a greater or less extent the penetration of the colour in the requisite portions, substantially as described. 4th. The method of producing ornamental slabs of artificially coloured stone, by

colouring the stone in blocks, substantially in the manner hereinbefore described and afterwards cutting the blocks into slabs. 5th. As a new product, a natural or artificial stone coloured not merely on the surface but also in the interior by means of the hereinbefore described process.

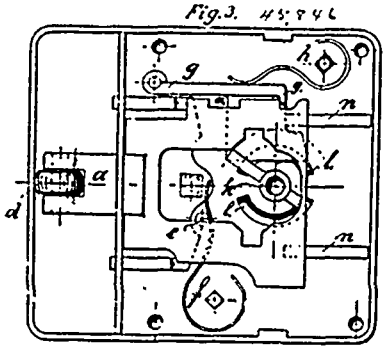
No. 45,845. Compound of Cellulose and Process of Preparing the Same. (*Composé de cellulose et procédé de préparation.*)

C. F. Cross, E. J. Bevan and C. Beadle, London, England, 20th April, 1894; 6 years.

Claim.—1st. The plastic compound of cellulose herein described which is soluble in water. 2nd. The process herein described of producing plastic compound from cellulose or equivalent substances, which consists in subjecting such substances to caustic alkali and carbon disulphide, substantially as set forth. 3rd. A soluble compound derived from cellulose, caustic alkali and carbon disulphide, substantially as set forth.

No. 45,846. Door Lock. (*Serrure de portes.*)

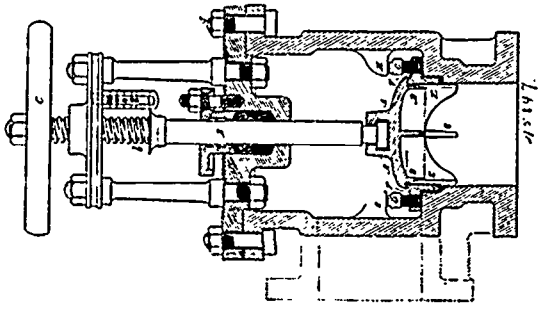
Fig. 3. 45,846



Wilhelm Jung, Karlsruhe, Baden, Germany, 20th April, 1894; 6 years.

Claim.—1st. In a door lock, the combination of a bolt resting in an elastic bearing, and provided with a roller at its top with an elastic boxed catch, having an adjustable rounded off edge, as and for the purpose set forth. 2nd. In a door lock, the combination of a bolt having two semi-circular incisions or slots which are arranged symmetrically around the key-hole and serve as guides for the key bit with an elastic boxed catch, having an adjustable rounded off edge, as and for the purpose set forth. 3rd. In a door lock, the combination of a bolt having two semi-circular incisions or slots, arranged symmetrically around the key-hole and serving as guides for movable piece, which performs the functions of a large key bit with an elastic box catch, having an adjustable rounded off edge, as and for the purpose set forth.

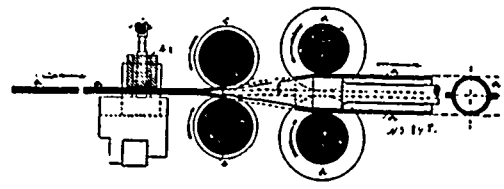
No. 45,847. Valve. (*Soupape.*)



Alexander Turnbull, Bishopbriggs, Lanark, Scotland, 20th April, 1894; 6 years.

Claim.—1st. In a valve of the character specified, the combination of the passage to be closed, the liner F fitting in said passage and forming a valve seat, the valve having suitable controlling means, and the connections for securing the liner in place consisting of the fixed lugs H, and the adjusting screws G, screwing in the liner F, and bearing against the lugs H, substantially as and for the purposes set forth. 2nd. In a valve of the character specified, the combination of the passage to be closed, the liner F fitting in said passage and having a vertical wall and lateral flange, the valve A provided with the sloping or coned ring D and seating in said liner, the fixed lugs H, and the adjusting screws G, having bearing against the lugs H, and threaded into the lateral flange of the liner F, substantially as and for the purposes set forth.

No. 45,848. Method of Manufacturing Seamless Metal Tubes, &c. (*Méthode de fabrication de tubes en métal, etc., sans soudure.*)

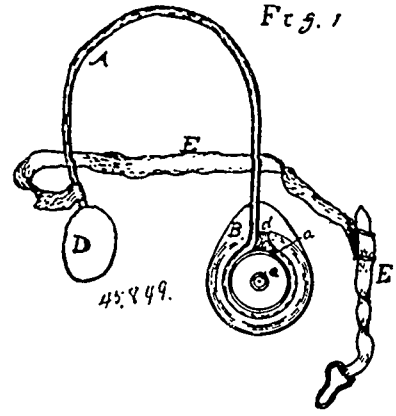


Oscar Friedrich and Wilhelm Schulte, both of Dinsburger Eisen- und Stahlwerke, Duisberg, Prussia, Germany, 20th April, 1894; 12 years.

Claim.—The new or improved process of manufacturing seamless tubes and tubular bodies with or without longitudinal ribs from annular metal bodies of any required section produced by casting or otherwise which in order to get the required dimensions are rolled out or forged into a long double ribbon or band which is slidden or drawn over a mandrel either by means of rollers or in a draw bench, substantially as herein shown and described.

No. 45,849. Hernia Truss. (*Bandage herniaire.*)

Fig. 1



45,849.

James McTavish Smith, Galt, Ontario, Canada, 20th April, 1894; 6 years.

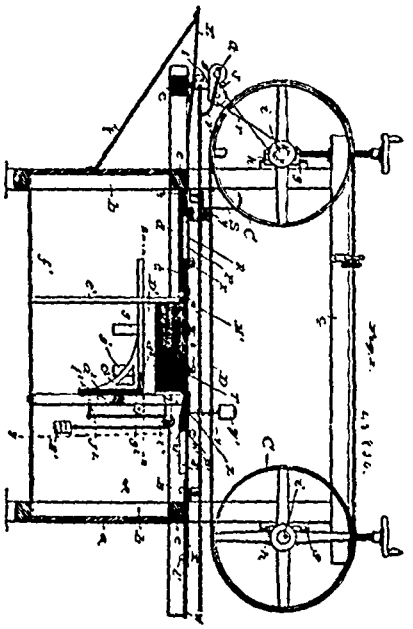
Claim.—1st. A truss consisting of a wire or bow, provided wit) open circular loops at opposite ends, a front pad and a back pad, both arranged with grooves to receive the circular loops of the wire or bow, substantially as specified. 2nd. The combination with the bow, provided with open circular loops at opposite ends, of the front and back pads both provided with circular grooves and the front pad provided with a button, and the waist belt E, as and for the purpose set forth. 3rd. A pad for a truss, having on the back a circular undercut groove adapted to unite and hold together a spring bow and said pad, as and for the purpose specified.

No. 45,850. Can Labelling Machine.
(*Machine à étiqueter les pots.*)

William G. Trethewey, Mission, British Columbia, Canada, 23rd April, 1894; 6 years.

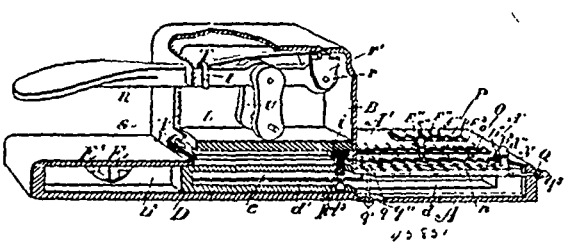
Claim.—1st. In a can-labelling machine, the combination of a bed, an endless corrugated band arranged above the bed and taking around band wheels, an inclined platform connected to the bed, an arm F arranged above the inclined platform, and mechanism intermediate of one of the band wheels and the arm F, adapted to raise said arm at intervals, substantially as specified. 2nd. In a can-labelling machine, the combination of a bed, standards or uprights extending above the bed, slidable blocks arranged upon standards or uprights, shafts journalled in said slidable blocks and carrying band wheels, an endless corrugated band taking around the said wheels, and screw shafts for adjusting the slidable blocks so as to carry the band toward and from the bed, substantially as and for the purpose set forth. 3rd. In a can-labelling machine, the combination of a bed, standards or uprights extending above the bed, slidable blocks arranged upon the standards or uprights, shafts journalled in said slidable blocks and carrying band wheels, an endless corrugated band taking around the said wheels, screw shafts for adjusting the slidable blocks so as to carry the band toward and from the bed, an inclined platform connected to the bed, a shaft arranged above the platform and carrying an arm F, and mechanism intermediate of one of the corrugated band wheels and said shaft adapted to turn the same and raise the arm F at intervals, substan-

tially as specified. 4th. In a can labelling machine, the combination of a bed, a longitudinal guide H^1 arranged above the bed, a longitudinal guide I^1, also arranged above the bed and having lateral



slotted straps, and a suitable means for adjustably connecting said straps to the bed, substantially as specified. 5th. In a machine for labelling cans, the combination of a bed, and an endless corrugated band arranged above the bed and taking around band wheels and having the ribs or corrugations upon its face, substantially as specified. 6th. In a machine for labelling cans, the combination, with a bed having an open space for the passage of labels, of a movable label support, a suitable weight, and a cord taking over a sheave and connected to the movable support and the weight, substantially as specified. 7th. In a machine for labelling cans, the combination, with a bed having an open space for the passage of labels and a vertical rack-bar disposed below the bed, of a vertical movable label support carrying a pawl in engagement with the vertical rack-bar, and a suitable means for moving said label support up, substantially as specified. 8th. In a can-labelling machine, the combination with a bed having an open space for the passage of labels, and label retaining devices connected with the bed and arranged in the open space thereof, of a vertically movable label support, a suitable weight and cord connecting the weight and support so as to enable the weight to press the labels against the retaining devices, substantially as specified. 9th. In a can-labelling machine, the combination with a bed and a platform connected thereto, of a vertically adjustable frame H, an arm carried by said frame and arranged above the platform, and a suitable means for raising said arm at intervals, substantially as specified. 10th. In a can-labelling machine, the combination with a bed and a platform connected thereto, of a shaft as C, an arm F, carried by said shaft and arranged above the platform, a wheel L, fixed on the shaft G, and having a peripheral projection, a second shaft N, carrying a wheel M, having a projection adapted to engage that of the wheel L, a suitable means for rotating the shaft N, and a spring adapted to return the arm F, to its normal position after it has been raised, substantially as specified. 11th. In a can-labelling machine, the combination of a bed, band wheels mounted upon shafts arranged in vertically adjustable bearings above the bed, a corrugated band taking around said wheels, a platform connected to the bed, an arm F, carried by a vertically adjustable frame and arranged above the platform, and mechanism intermediate of the shaft of one of the band wheels and the arm F, adapted to raise said arm at regular intervals. 12th. In a can-labelling machine, the combination of a vertical rack-bar, and a vertically movable support carrying a plurality of pawls of different sizes, adapted to engage the rack-bar, substantially as specified. 13th. In a can-labelling machine, the combination of a bed having an open space for the passage of labels, an adjustable label-gumming device arranged at one side of said open space, vertical and adjustable guide-bars connected with the label-gumming device, and a label support movable on said vertical guides, substantially as and for the purpose set forth. 14th. In a can-labelling machine, the combination of a bed having an open space for the passage of labels, label guide and retaining devices connected with the bed and adapted to be adjusted longitudinally and transversely with respect thereto, an adjustable label-gumming device arranged at one side of said open space, vertical guide bars connected with the label-gumming device and adapted to be adjusted with the same, and a label support movable on said vertical guides, substantially as and for the purpose set forth. 15th. In a can-labelling machine, the combination with a bed having an open space for the passage of labels and a vertically movable label support, of the angle irons T, adjustably connected with the bed, and having depending portions adapted to guide the labels, and also, having tips adapted to engage and retain the labels in position, substantially as and for the purpose set forth. 16th. In a can labelling machine, the combination with a bed having an open space for the passage of labels and a vertically movable label support, of elastic tips supported in the open space of the bed, and adapted to engage the labels in such a manner as to permit of the uppermost label being taken off by a gummed can, substantially as specified. 17th. In a can-labelling machine, the combination of a bed having an open space for the passage of labels, the frame S, arranged in said bed and comprising the cross bar a^1, and the longitudinal bars b^1, having slots e^1, a label-gumming device arranged at one side of the open space in the bed, and adapted to be adjusted in the direction of the length of said bed, of an adjustable plate having lugs in engagement with the side edges of the plate W, guide-bars c^1, connected to and depending from the bar a^1, of the frame S, vertical guide-bars connected with the label gumming device, and adapted to be adjusted therewith, a vertically movable label support guided by the vertical guide-bars, the angle irons comprising the depending branches and the horizontal branches having longitudinal slots, label engaging tips connected with the angle irons, bolts taking through the slots in the horizonal branches of the angle irons, and the slots in the bars b^1, of the frame S, and thumb nuts mounted on said bolts, all substantially as specified. 18th. In a can-labelling machine, the combination with a bed having an open space for the passage of labels, and a plate W, connected to the bed, of an adjustable plate having lugs in engagement with the side edges of the plate W, and carrying a label-gumming device, substantially as specified. 19th. In a machine for labelling cans, the combination with a suitable bracket Y, having a loop s^1, and also, having a vertical portion v^1, of a wedge-shaped adhesive box, arranged in the loop s^1, of the bracket, and a block interposed between said box, and the vertical portion v^1, substantially as specified. 20th. In a can-labelling machine, the combination of a bed having an open space for the passage of labels, a removable can-gumming pan arranged in the bed in advance of the open space thereof, and transverse blocks arranged in the bed on opposite sides of the can-gumming pan, the said block being adapted to be removed to afford space for a large pan, substantially as specified. 21st. In a can-labelling machine, the combination with a can-gumming pan having a guide strip as R, of an adjustable guide strip Q, and a suitable means for adjustably fixing the said strip Q, substantially as and for the purpose set forth. 22nd. In a can-labelling machine, a can-gumming pan, having a series of strips t, arranged at intervals therein, a cloth arranged upon the said strips t, and a suitable means for holding said cloth in position, substantially as specified. 23rd. In a can-labelling machine, the combination of a bed having an open space for the passage of labels, a vertically movable label support, a suitable means for raising said support, a can-gumming pan arranged on one side of the label spaces, a label-gumming device arranged on the opposite side of the space, and a suitable means for rolling cans over the can-gumming pan, the labels, and the label-gumming device in succession, substantially as specified.

No. 45,851. Ticket Punch. (*Emporte-pièce pour billets.*)

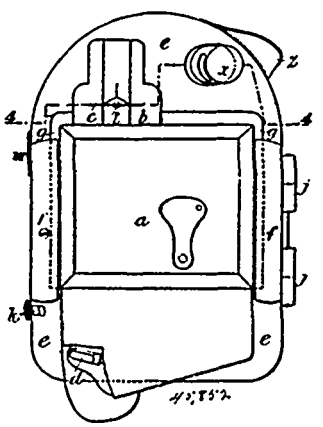


Job Dudley and Ralph E. Gibson, both of Toronto, Ontario, Canada, 23rd April, 1894; 6 years.

Claim.—1st. In a ticket punch, a series of longitudinally movable slides slotted transversely to receive the ticket a reciprocating plunger having a longitudinally grooved under face and punches movably seated in said grooves and passing through openings in the slide, substantially as described. 2nd. In combination, the series of reciprocating slides slotted transversely to receive the ticket and having each a vertical opening, a reciprocating plunger having a series of grooves in its under face, punches movably supported in said grooves with their lower ends projecting into the vertical openings in the slides, and means for reciprocating the slides to adjust the punches longitudinally of the plunger, substantially as described. 3rd. The combination, with the case A, B, provided with a slot C, the slides C, D, E and F, provided with the slots c, d, e and f, from end to end corresponding in depth to the slot G, and plunger frame L, the punches H, I, J and K, having their heads supported in the grooves h^1, i^1, j^1 and k^1, in the plunger frame L, extending through holes in the slides C, D, E and F, and designed to be brought down

into the holes h^3, i^3, j^3 and k^3 made in the slides, the spring pointers C^{11}, D^{11}, E^{11} and F^{11} connected to the outer ends of the slides, and designed to be adjusted in the teeth or notches in the slots M, N, O and P, and means whereby the punches are brought down simultaneously, as and for the purpose specified. 4th. In combination, the casing consisting of an elongated portion A, and the upwardly extending portion B, the slotted sides reciprocating in said portion A, and having vertical openings, the vertically reciprocating plunger guided by the walls of the portion B, and having a series of T-shaped grooves in its under face, T shaped punches having their heads located in said grooves and their lower ends projecting into the openings in the slides and means for reciprocating the plunger, substantially as described. 5th. The combination, with the longitudinal horizontally slotted slides D and E, provided with punches I and J, extending through the slides into the slot corresponding dies or holes situated in the slides beneath the plungers and means for normally holding up the punches, of the racks D^1, E^1, formed on the outer ends of the slides and adjusting rod Q, provided with a laterally extending dog q, and hanger q^1, movable within the slot q^{11} at the bottom of the case, and the spring pointers D^{11} and E^{11}, designed to engage with the ratchet teeth made in the side of the slots N and O, in the top plate A, and means for bringing down the punches simultaneously, as and for the purpose specified.

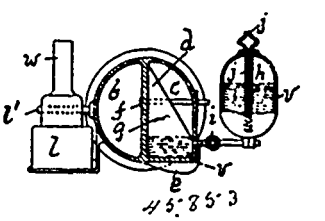
No. 45,852. Electric Lamp Attachment for Ticket Punches. (*Attache de lampe électrique pour emporte-pièce de billets.*)



John Melton Black, London, England, 23rd April, 1894; 6 years.

Claim. 1st. The combination with a ticket-punching apparatus of an electric lamp and an accumulator carried in a casing adapted to be connected with and disconnected from the casing of the punching apparatus, and a spring-rod projecting into the ticket-slot of the punching apparatus and adapted, when pressed by the introduction of a ticket into the said slot, to complete the circuit of the lamp, substantially as described. 2nd. In combination with a ticket-punching apparatus provided with means for illuminating the ticket by electricity, an accumulator having contact studs adapted when the accumulator is placed in position to make contact with contact springs connected to the circuit of the lamp, substantially as described.

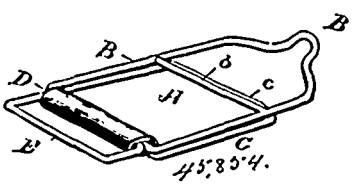
No. 45,853. Explosion Engine. (*Machine à explosion.*)



James E. Weyman, George Hitchcock and James A. Drake, all of Guildford, Surrey, England, 23rd April, 1894; 6 years.

Claim.—1st. In explosion-engines, an oil-vaporizing chamber or two or more such chambers, provided with heat-conducting gills, inlets for air and for oil, and means for maintaining oil at a constant level in the said chamber or chambers, substantially as set forth, for the purposes specified. 2nd. In explosion engines, the combination with the combustion chamber, cylinder, exhaust-conduit, or other part of the engine heated by the gaseous product of the explosion, of an oil vaporizing chamber or two or more such chambers, provided with heat conducting gills, inlets for air and for oil, and means for maintaining oil at a constant level in said chamber or chambers, substantially as set forth, for the purposes specified. 3rd. In explosion engines, the combination with the oil vaporizing chamber or chambers, provided with heat-conducting gills and inlets for air and for oil, of an automatic oil-feeding device of the bird fountain type, substantially as set forth, for the purposes specified. 4th. In explosion-engines, the combination with an oil burner contained in a perforated guard chamber, of a blow-pipe extenning into the chamber at an angle with the burner, a chimney having a refractory lining and containing an ignition tube, and an orifice in line with the blow-pipe nozzle and burner to connect the guard chamber and chimney, substantially as set forth for the purpose specified. 5th. In explosion-engines, the combination with the vaporizer, of an external ignition tube so arranged relatively to the vaporizer that heat supplied to the exterior of the vaporizer is applied simultaneously to the said ignition tube, substantially as set forth for the purposes specified. 6th. In explosion engines, the combination with the vaporizer and an igniting tube arranged and operating in the usual or any suitable manner, of an auxiliary ignition tube so arranged relatively and exteriorly to the vaporizer that heat applied to the exterior of the vaporizer is applied simultaneously to the auxiliary ignition-tube, substantially as set forth, for the purposes specified. 7th. In explosion engines, the combination with the cylinder and the vaporizer, of the ordinary exhaust passage, an additional exhaust passage to the vaporizer, a valve or valves to regulate the passage of exhaust gases through the two exhausts, and a thermal device operated by variations of temperature in the vaporizer, in operative connection with the said valve or valves, substantially as set forth, for the purposes specified. 8th. In explosion engines, the combination with the cylinder and the vaporizer of the ordinary exhaust passage, an additional exhaust passage to the vaporizer, a valve or valves to regulate the passage of exhaust gasses through the two exhausts, a pivoted bar adjustable lengthwise, and provided with cam projections to operate the said valve or valves, mechanism operated by the engine to impart a motion of vibration to the said bar, and a thermal device operated by variations of temperature in the vaporizer, in operative connection with the bar to shift the same lengthwise, substantially as described.

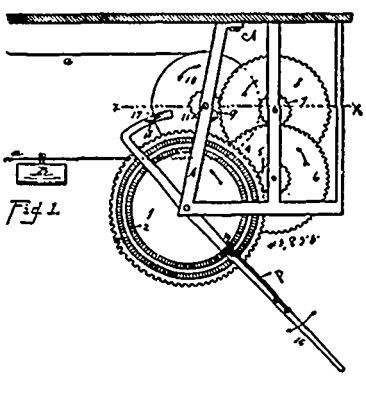
No. 45,854. Buckle. (*Boucle.*)



Albert Eayers McClure, Sedalia, Missouri, U.S.A., 23rd April, 1894; 6 years.

Claim. As an improved article of manufacture, a buckle comprising an under link or ring member, an upper link or ring member having a cross-bar and a portion projecting beyond said cross-bar and forming a free lifting end, the said members being pivotally connected so that the cross-bar of the outer member comes adjacent to the outer end of the inner member and operates in conjunction therewith, substantially as set forth.

No. 45,855. Cash Carrier. (*Chien de magasin.*)



George Peter Kenney, Watertown, New York, U.S.A., 23rd April, 1894; 6 years.

Claim. 1st. A cash carrier comprising a frame, drums mounted upon arbours, a cord supported upon and passing around said drums, a pinion upon said arbours, a driving gear provided with ratchets upon its face and a train of multiple gears between the driving gear and said pinion, and a ratchet lever provided with a dog adapted to engage with either of said ratchets, all in combination, substantially as set forth. 2nd. A cash-carrier comprising a frame, drums

mounted upon arbours, a core supported upon and passing around said drums, a pinion upon said arbours, a driving gear provided with ratchets upon its face, and a train of multiple gears between the driving gears and said pinion, a ratchet lever provided with a dog adapted to engage with either of said ratchets, and an arm extensibly connected to the top of said lever and adapated to engage with said pinion to throw it out of its engagement with the adjacent gears, all in combination as set forth.

No. 45,856. Safety Paper for Checks, etc.
(*Papier de sûreté pour chèques, etc.*)

William Hoskins, La Grange, and Joseph B. Weis, Chicago, both in Illinois, U.S.A., 23rd April, 1891; 6 years.

Claim.—1st. A safety paper having added thereto a soluble ferrocyanide and a per-salt of iron insoluble in water but decomposable by a weak acid in the presence of a soluble ferrocyanide, as and for the purpose described. 2nd. A safety paper having added thereto a ferrocyanide soluble in water, a per-salt of iron insoluble in water but easily decomposed by weak acids in the presence of a ferrocyanide soluble in water, and a salt of manganese easily decomposed by alkalies or bleaching agents, substantially as described.

No. 45,857. Self-Sealing Bottle.
(*Bouteille fermant automatiquement.*)

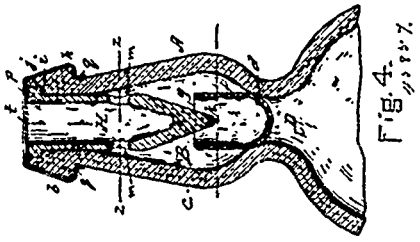
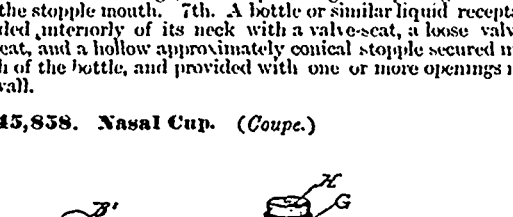


Fig. 4.

Henry P. Roberts and William Hayes, both of Boston, Massachusetts, U.S.A., 23rd April, 1894; 6 years.

Claim.—1st. A bottle or similar liquid receptacle provided interiorly of its neck with a valve-seat, a loose cup-shaped valve on said seat, and a hollow stopple seemed in the neck and projecting into the mouth of said valve, substantially as described. 2nd. A bottle or similar liquid receptacle provided interiorly of its neck with a valve-seat, a loose cup-shaped having a conical end projecting into said valve, and one or more openings in its side wall, substantially as and for the purpose set forth. 3rd. A bottle or similar liquid receptacle provided interiorly of its neck with a valve-seat, a loose valve on said seat, a hollow stopple in the mouth of said neck having a closed inner end and one or more perforations in its side wall, and a metallic cap overlapping the outer end of said stopple and secured to the outer face of the neck. 4th. In a bottle or similar liquid receptacle, the neck A, in combination with the hollow stopple H, therein and the cap B, secured to said neck and overlapping said stopple. 5th. In a bottle or similar liquid receptacle, the neck provided with the valve-seat, in combination with the cup valve D, and the approximately conical hollow stopple secured in said neck and projecting into said valve, said stopple being provided with one or more openings *m*. 6th. In a bottle or similar liquid receptacle, an exteriorly flanged neck in combination with a hollow stopple, and a metallic locking cap overlapping said stopple and secured under said flange, said cap having an opening coinciding with the stopple mouth. 7th. A bottle or similar liquid receptacle, provided interiorly of its neck with a valve-seat, a loose valve on said seat, and a hollow approximately conical stopple secured in the mouth of the bottle, and provided with one or more openings in its side wall.

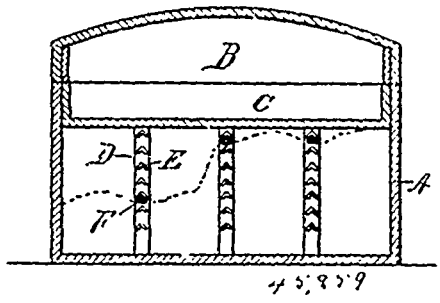
No. 45,858. Nasal Cup. (*Coupe.*)



Benjamin Stern, New York, State of New York, U.S.A., 23rd April, 1894; 6 years.

Claim.—1st. A nasal cup having a bulbous nozzle with a longitudinal groove on the exterior thereof, at or near its end, substantially as set forth. 2nd. A nasal cup having corrugations or roughnesses in its bottom, substantially as set forth. 3rd. A nasal cup having a corrugated or roughened bottom, and a bulbous nozzle having a groove at or near its end, substantially as set forth. 4th. A nasal cup having a corrugated or roughened bottom and means to exclude dirt or foreign matter, substantially as set forth. 5th. A nasal cup having a bottom corrugated or roughened on its interior, means to exclude dirt or foreign matter, and a bulbous nozzle, having grooves at or near its end, substantially as set forth. 6th. A nasal cup, the base whereof has an under-cut or outwardly flaring interior portion, whereby the medicated material, when in the form of a cake, will be held in place in the bottom of the cup, substantially as set forth.

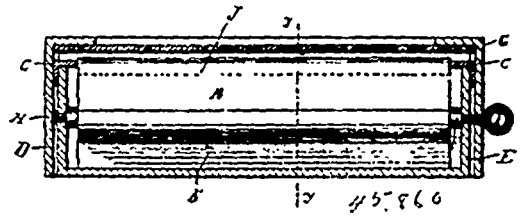
No. 45,859. Trunk. (*Coffre.*)



George L. Walker, Detroit, Michigan, U.S.A., 23rd April, 1891; 6 years.

Claim.—1st. In a trunk, the combination of the body, a series of oppositely arranged pairs of vertical strips within, a series of lugs on said strips and two or more separate single piece cross-bars adapted to engage beneath said lug, substantially as described. 2nd. In a trunk, the combination of the body, oppositely arranged pairs of vertical strips, a series of inverted V-shaped lugs on said strips and separate cross-bars having corresponding inverted V-shaped tips adapted to engage beneath the opposite lugs, substantially as described.

No. 45,860. Educational Cabinet. (*Cabinet d'étude.*)

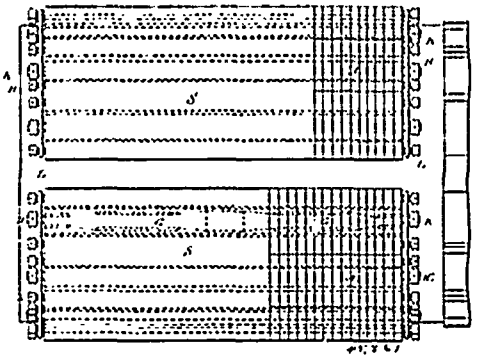


Charles L. Ellis, San Francisco, California, U.S.A., 23rd April, 1891; 6 years.

Claim.—1st. An educational cabinet consisting of a box having a sight aperture in its top, and divided longitudinally into compartments having a top communication, a top support within the upper portion of the box under its sight aperture, a free roll of paper lying in one of the compartments to rotate about an unfixed axis and having its end passing over the top support into the other compartment, and a winding shaft in said compartment upon which the paper is wound, substantially as herein described. 2nd. An educational cabinet consisting of a box having a sight aperture in its top, a plate extending horizontally under the sight aperture, the sides of said plate being bent downwardly into the box and forming two longitudinal communicating compartments therein, the free paper roll lying in one of said compartments to rotate about an unfixed axis and having its ends passing upwardly and over the top of the plate and down into the other compartment, and a winding shaft in said other compartment to which the end of the paper is attached, substantially as herein described. 3rd. An educational cabinet consisting of a box having a sight aperture in its top, a longitudinal partition in the upper portion of said box, a plate supported upon said partition under the sight aperture, said plate having its sides bent downwardly into the box and forming two longitudinal communicating compartments therein, the free paper roll lying in one of said compartments to rotate about an unfixed axis and having its end passing upwardly and over the top of the plate and down into the other compartment, and a winding shaft in said other compartment to which the end of the paper is attached, substantially as herein described. 4th. An educational cabinet consisting of a box formed of sections, the outer section having a sight aperture in its top, the top partition C supported by the ends of the inner section,

the plate B lying upon the partition under the sight aperture, and having its sides bent downwardly into the inner box section and dividing it into two longitudinal communicating compartments, the free paper roll lying in one of said compartments and having its end passing upwardly and over the top of the plate and down into the other compartment, and a winding shaft in said other compartment to which the end of the paper is attached, substantially as specified.

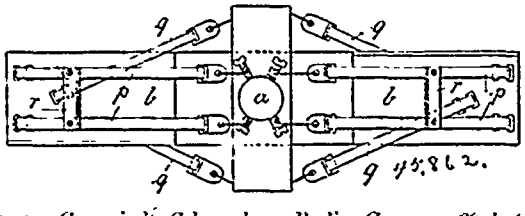
No. 45,861. Construction and fixing of Linotypes for Cylinder Formes. (*Arrangement des linotypes pour recevoir des formes cylindriques.*)



Georges Albert Dubeux, Torriano Avenue, London, England, 23rd April, 1894; 6 years.

Claim.—1st. In combination with a number of linotypes made of shape adapted to a cylinder forme, and having dove-tail notches on their undersides, a pair of laterally movable pieces having dove-tails on their outer sides and inclined on their inner faces, and between these a longitudinally movable bar, having corresponding inclines on its sides, and having a screw-threaded end fitted with a nut, substantially as described. 2nd. The combination with a number of linotypes made of shape adapted to a cylinder forme, and with such cylinder forme and retaining parts, of the said linotypes having dove-tailed notches on their undersides, a pair of laterally movable pieces having dove-tail outer sides and inclines on their inner faces, and an intermediate longitudinally movable wedge-shaped bar, with *means for operating same, for the purpose set* forth. 3rd. The combination with the cylinder forme provided with overlapping retaining parts, of the pieces B, B, having wings D, D, and inclined faces F, F, the wedge-shaped bar G, having screw-threaded end, and a rotatable nut threaded on same, adapted to impart longitudinal movement thereto, but held against movement therewith. 4th. In combination with a number of linotypes made of shape adapted to a cylinder forme and having dove-tail notches on their undersides, a pair of pieces having dove-tail outer sides with guided wings, and having inclines on their inner faces, and a wedge-bar with nut arranged to force them apart, substantially as described.

No. 45,862. Flat Metal Strips. (*Bande métallique.*)



Hermann Ganswindt, Schoeneberg, Berlin, Germany, 23rd April, 1891; 6 years.

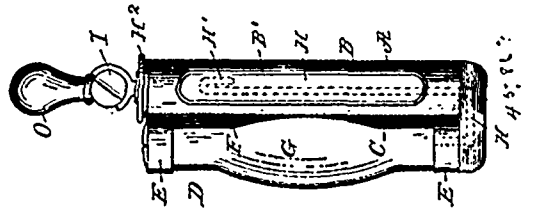
Claim.—In combination with the axle *a*, and wings *b*, *b*, the flat metal braces *p*, connecting said wings and axle, the transverse strips *r*, connecting the braces *p*, and the diagonally arranged bracing strips *q*, also of flat metal, substantially as described. 2nd. In combination with the axle *a*, and wings *b*, the parallel flat metal strips passing through the extremities of the wings and having their ends secured to the axle above and below the wings, and cross-connecting said strips, substantially as described.

No. 45,863. Powder Blower, Atomizer, &c.

(*Souffleur de poudre, pulvérisateur, etc.*)

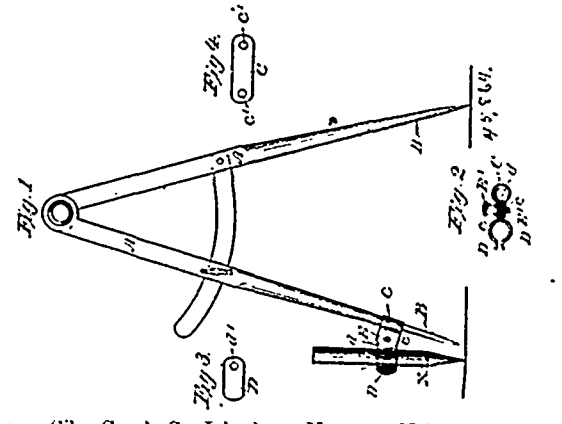
Benjamin Stern, New York, State of New York, U.S.A., 23rd April, 1891; 6 years.

Claim.—1st. The combination of a tubular section and a frame for supporting the bulb, placed longitudinally side by side, a compressible elastic bulb having a passage connecting it with the interior of the receptacle, a tube within the receptacle connecting with the said passage, and extending to the upper part of the receptacle, a nozzle also connected with the receptacle and an opening into the receptacle for the introduction of the material, substantially as set forth. 2nd. The combination of a tubular receptacle and a compressible elastic bulb placed longitudinally side by side and having a passage connecting their respective interiors, a tube within the receptacle connecting with said passage and extending to the upper part of the receptacle, a stop-cock section connecting with the receptacle and a nozzle upon the stop-cock section, substantially as set forth. 3rd. The combination of a tubular receptacle and a compressible elastic bulb placed longitudinally side by side and having a passage connecting their interiors respectively, a tube within the receptacle connecting said passage and extending to the upper part of the receptacle, a cap for the receptacle, provided with a stop-cock and means whereby different nozzles may be connected with the stop-cock, substantially as set forth. 4th. The combination of a longitudinal chamber for holding the material and a frame placed longitudinally side by side and an elastic compressible bulb supported by the frame, and means connecting the bulb and chamber, for ejecting the contents of the chamber and a nozzle attached to the chamber, substantially as set forth.



No. 45,864. Attachment for Dividers.

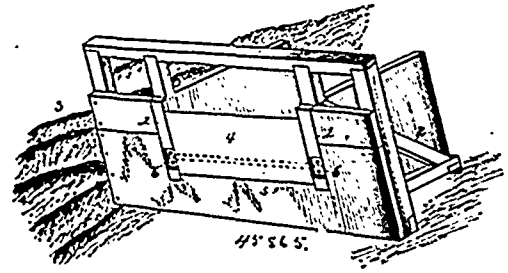
(*Attache pour diviseur*)



Warren Silas Smith, St. Johnsburg, Vermont, U.S.A., 23rd April, 1894; 6 years.

Claim. 1st. In a divider attachment, a pair of sockets formed of sheet metal and pivotally connected one to the other, one socket adapted to be placed upon one leg of a pair of dividers and the other adapted to carry a lead pencil at any desired angle with said dividers. 2nd. In a pencil holding device, a pencil socket adjustably connected to a socket for attachment to a pair of dividers, both sockets being made of sheet metal and bent into the desired form, substantially for the purpose set forth.

No. 45,865. Flood Gate. (*Porte d'amont.*)

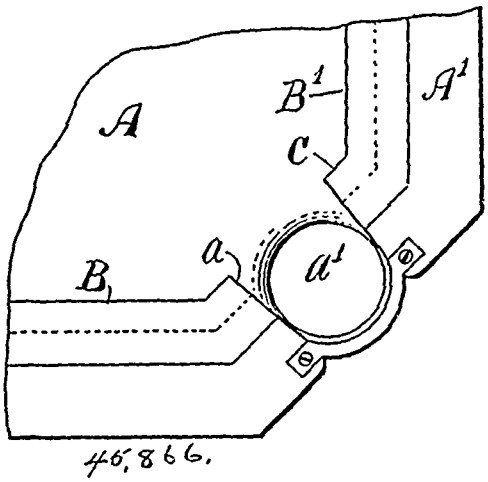


Asa Dean, Willis, Texas, U.S.A., 23rd April, 1891; 6 years.

Claim. In a flood gate, the combination with a suitable supporting framework, of a horizontally pivoted gate 4 having a transverse pivot 5, which is arranged at an intermediate point of the height of the gate to form upper and lower wings, the upper wing being about double the width of the lower wing and the gate being increased in

thickness from its upper to its lower edge, whereby the preponderance of weight is in the lower wing, a horizontal stop 8, arranged substantially in the plane of the pivot 5, and a stop 7 to engage the lower wing when the gate is in an upright position, substantially as specified

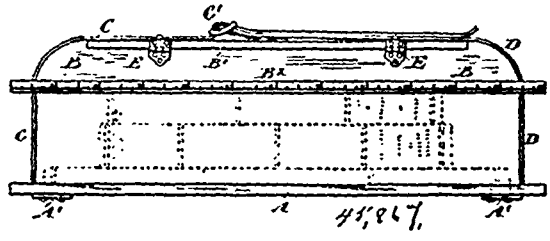
No. 45,866. Game Table. (*Table de jeu.*)



William E. Andrew, Atlantic Highlands, New Jersey, U.S.A., 24th April, 1894; 6 years.

Claim.—In a game table the combination with the bed, the side cushions, and the end cushions, of corner cushions arranged at an angle relatively to the side and end cushions, and having the cut away portions, and the pockets, substantially as specified.

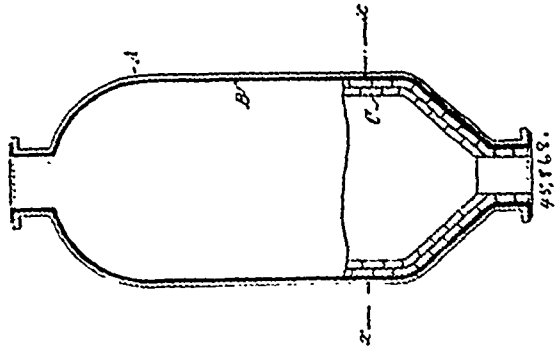
No. 45,867. Book Carrier. (*Porte-livre.*)



Hugo Tollner, Brooklyn, New York, U.S.A., 24th April, 1894; 6 years.

Claim.—1st. The combination with the bottom board A, straps C, D, and adjustable fastenings C1, of a rigid top B, having an open slot *b* at each end, and adapted to serve the triple function of a top clamp, a pencil box and a ruler and measure, as herein specified. 2nd. The combination with the bottom board A, straps C, D, and adjustable fastening C1, of a rigid top B, having an open slot *b* at each end, a box along its mid-length adapted for holding pencils, pens, etc., and a movable but permanently fastened cover with hinges and spring snap, all arranged to serve substantially as herein specified.

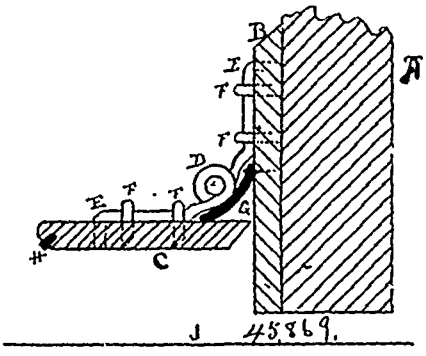
No. 45,868. Digester. (*Pourrissoir.*)



Eugene Meurer, Palmer Falls, New York, U.S.A., 24th April, 1894; 6 years.

Claim.—1st. A digester coated upon its inner surface with a cement composed of litharge and glycerine, substantially as described. 2nd. The combination, in a pulp digester, of a cement lining, composed of litharge and glycerine and an inner protective wall built up of brick or stone laid in a cement of the same material, substantially as described.

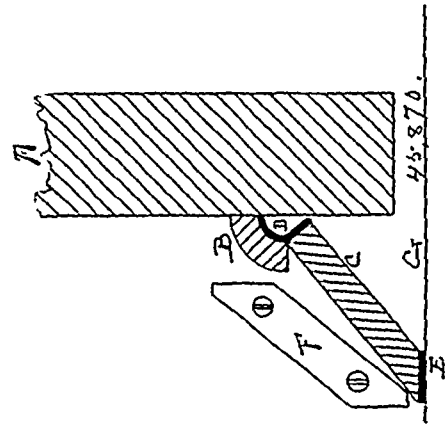
No. 45,869. Weather Strip. (*Bourrelet de porte.*)



Ephraim Dunsmore, St. Paul, Ontario, Canada, 24th April, 1894; 6 years.

Claim.—1st. The combination of the storm guard strip C, and the fixed strip B, substantially as and for the purpose hereinbefore set forth. 2nd. The combination of the fixed strip B, and the storm guard strip C, with the rubber strip G, substantially as and for the purpose hereinbefore set forth. 3rd. The combination of the storm guard strip C, and the brass spring K, substantially as and for the purpose hereinbefore set forth.

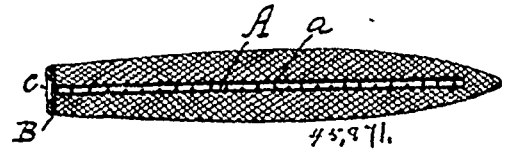
No. 45,870. Weather Strip. (*Bourrelet de porte.*)



Samuel Dunseith, Jeannette, Pennsylvania, U.S.A., 24th April, 1894; 6 years.

Claim.—1st. The combination of the strips C and B, with the hinge D, substantially as and for the purpose hereinbefore set forth. 2nd. The combination of the strip C, with the block F, substantially as and for the purpose hereinbefore set forth.

No. 45,871. Cigar. (*Cigare.*)



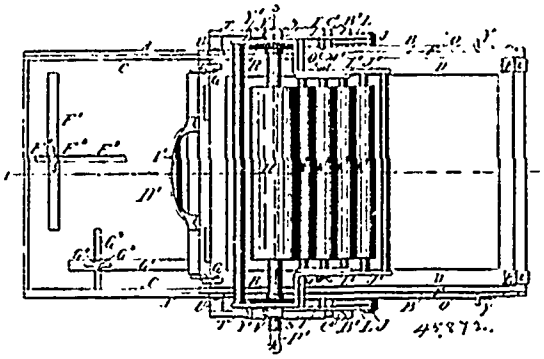
Luther M. Harris, Summerville, Massachusetts, U. S. A., 24th April, 1894; 6 years.

Claim.—1st. A cigar provided with an internal tube of combustible material longitudinally placed therein, said tube provided with perforations in its walls and extending from the lighting end of the cigar nearly to its closed end, substantially as described. 2nd. A cigar provided with an internal tube of combustible material longitudinally placed therein, said tube extending from the lighting end of the cigar nearly to its closed end and provided at its front end with a flange as B, overlapping the lighting end of the cigar and smeared with a substance ignitible by friction, substantially as described. 3rd. A cigar provided with an internal tube of combustible material longitudinally placed therein, said tube extending from the lighting end of the cigar nearly to its closed end, and said

tube being provided at its rear end with the flaring flange E, substantially as set forth.

No. 45,872. Stencil Printing Machine.

(*Machine à poncer.*)

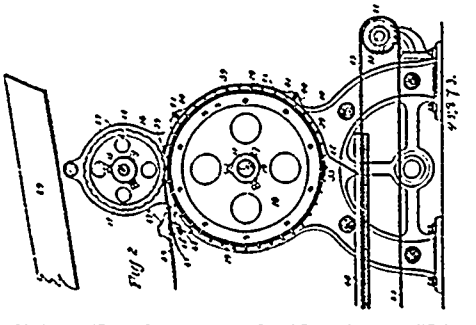


Thomas Headly Stackhouse, Philadelphia, Pennsylvania, U.S.A., 24th April, 1894; 6 years.

Claim.—1st. In a stencilling machine, in combination, an inking roll, a platen, a stencil adapted to be reciprocated and mechanism whereby said inking roll and platen are caused to move at the same speed as that of said stencil. 2nd. In a stencilling machine, in combination, a stencil adapted to be reciprocated, means for supporting the same, an inking roll adapted to bear against one side of said stencil, a cylindrical platen adapted to hold the paper against the other side of said stencil and mechanism for positively driving said inking roll and platen at the same speed as that of said stencil. 3rd. In a stencilling machine, in combination, an inking roll, a cylindrical platen, and a stencil adapted to be reciprocated, means for supporting said devices and positive gearing by which said devices are caused to move at a uniform speed. 4th. In a stencilling machine, in combination, a stencil adapted to be reciprocated, an inking roll located upon one side of said stencil, a rolling platen located upon the other side of said stencil and adapted to hold the paper up against the same, means for driving said inking roll and platen, means for bringing the inking roll in the movement of the stencil in one direction, into contact with the stencil, and means for throwing the inking roll, in the movement of the stencil in the opposite direction out of contact with the stencil. 5th. In a stencilling machine, in combination, a stencil adapted to be reciprocated, an inking roll located upon one side of said stencil, a rolling platen located upon the other side of said stencil and adapted to hold the paper against the same, means for driving the inking roll and platen, means for bringing the inking roll in the movement of the stencil in one direction, into contact with the stencil and the rolling platen into contact with the paper beneath the stencil, and means for throwing the inking roll and platen in the movement of the stencil in the opposite direction out of contact with said stencil and paper respectively. 6th. In a stencilling machine, in combination, a stencil adapted to be reciprocated, an inking roll located upon one side of said stencil, a rolling platen located upon the other side of said stencil and adapted to hold the paper against the same, mechanism for driving the inking roll and platen at the same speed as that of the stencil, means for bringing the inking roll in the movement of the stencil in one direction into contact with the stencil and means for throwing the inking roll in the movement of the stencil in the opposite direction, out of contact with said stencil. 7th. In a stencilling machine, in combination a stencil adapted to be reciprocated, an inking roll located upon one side of said stencil, a rolling planten located upon the other side of said stencil and adapted to hold the paper against the same, mechanism for driving the inking roll and platen at the same speed as that of the stencil, means for bringing the inking roll in the movement of the stencil in one direction, into contact with the stencil and the rolling platen into contact with the paper beneath the stencil, and means for throwing the inking roll and platen, in the movement of the stencil in the opposite direction, out of contact with said stencil and paper respectively. 8th. In a stencilling machine, in combination, an inking roll, a platen, and a stencil holder adapted to be moved between said roll and platen, means for automatically throwing the inking roll into and out of contact with the stencil at predetermined points of the travel of the latter, substantially as set forth. 9th. In a stencilling machine, in combination, an inking roll, a rolling platen, and a stencil holder adapted to be moved between said roll and platen, and means for automatically throwing the inking roll and rolling platen into and out of contact with the stencil at predetermined points of the travel of the latter, substantially as set forth. 10th. The combination, with the reciprocating carriage and means for supporting and reciprocating the same, a stencil carried by this carriage, a platen and an inking roll, of a rack or racks carried by said carriage, a gear-wheel or wheels carried by shaft of said inking roll, and an intermediate gear-wheel or wheels gearing into said racks and gear wheel on said inking roll. 11th. The combination in a stencilling machine of a reciprocating carriage, means for supporting said carriage, a stencil carried by said carriage, an inking roll and cylindrical platen and means for separating said inking roll and platen from contact with the stencil during the non-printing movement of the machine. 12th. The combination in a stencilling machine, of a reciprocating carriage and means for supporting the same, a stencil frame and stencil carried by the carriage, an inking roll, a cylindrical platen, a rack carried by said carriage, a gear on the shaft of said platen engaging said rack, and a gear on the shaft of said inking roll engaging the gear on the shaft of said platen. 13th. The combination in a stencilling machine, of a reciprocating carriage, a bed plate upon which said carriage works, a stencil frame and a stencil carried by said carriage, an inking roll and a cylindrical platen, arms pivoted to said bed plate, and upon which the shaft of said roll and platen are carried, and means substantially as described, for moving said roll and platen into contact with said stencil during the forward or printing movement of the latter, and for moving them out of contact with said stencil during its backward or non-printing movement. 14th. The combination, with the bed plate, the reciprocating carriage mounted upon the bed plate, and the stencil carrying frame and stencil carried by said carriage, of the inking roll and cylindrical platen, arms pivoted to said bed plate and carrying said roll and platen, springs for supporting the arms carrying said platen, guides carried by said bed plate, double-faced cams sliding on said guides, tappets carried by said carriage and adapted to move said cams, and adjustable contact pieces carried by said arms and engaging the faces of said cams, all substantially as and for the purposes set forth. 15th. The combination with the inking roll and platen, and the arms which carry them, of adjustable contact pieces carried by said arms, cams adapted to engage said contact pieces, guides upon which said cams slide, a reciprocating carriage, and devices carried by said carriage and adapted to actuate said cams. 16th. The combination with the inking roll and the arms which carry it, of a frame attached to or forming part of said arms, two or more ink distributing rolls journalled in bearings in said frame, and two or more ink distributing rolls journalled in bearings in bars adjustably attached to said frames, and adapted to engage said lower ink distributing rolls and the main inking roll. 17th. The combination with the bed plate, a reciprocating carriage and stencil carried on said bed plate, an inking roll and arms one end of which carry said inking roll, and the other end of which are pivotally attached to said bed plate, of springs one end of which are attached to said arms, and the other to said bed plate. 18th. The combination with the ink roll, platen, and reciprocating stencil of a stencilling machine, of an adjustable feeding table, and adjustable paper guides carried by said table. 19th. The combination in a stencilling machine, of a bed plate, a carriage having an open centre carried by and adapted to be reciprocated upon said bed plate, a stencil carrying frame, and a stencil carried by said carriage, an ink roller adapted to ink the top of said stencil, a platen adapted to hold the paper to be printed against the bottom of said stencil, and mechanism, substantially as described, for driving said inking roll and platen at the same speed and in the same direction as said stencil.

No. 45,873. Wood Cutting Machine.

(*Machine à découper le bois.*)



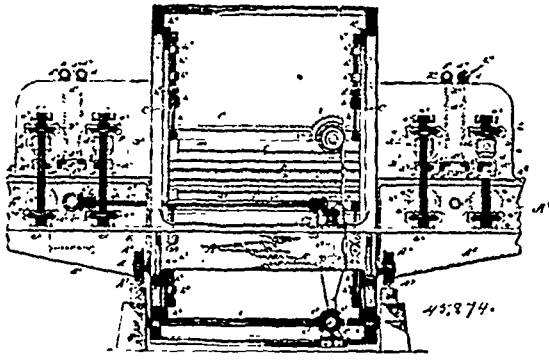
William Fulton Hutchinson, Passaic, New Jersey, U.S.A., 24th April, 1894; 6 years.

Claim.—1st. A wood cutting machine, comprising a revoluble cutting drum having projecting peripheral fixed knives, a revoluble bearing drum having grooves to register with the knives of the cutting-drum, and a plurality of ejectors held between each pair of knives, and arranged to move outwardly at a certain place during the revolution of the cutting-drum, substantially as shown and described. 2nd. A wood cutting machine, comprising a revoluble cutting-drum having projecting knives arranged around its circumference, a revolving drum serving as a bearing for the knives, ejecting rods held between each pair of knives and having their ends held to run in adjacent grooves, and bearing rollers pivoted adjacent to the drum, and arranged to engage the end portions of the ejecting rods, and push the rods outward to the edges of the knives, substantially as shown and described. 3rd. In a wood cutting

machine, the combination with the revoluble cutting-drum having projecting knives around its circumference, of a plurality of ejecting rods arranged between each pair of knives, and mechanism for pushing the ejecting rods outward towards the edges of the knives, substantially as shown and described. 4th. The combination with the revoluble cutting drum and the projecting knives arranged around its circumference, of a plurality of ejecting rods held between each pair of knives and extending from the ends of the cutting drum, circular tracks arranged to receive the ends of the rods, said tracks having outward bends therein, and bearing rollers journalled opposite the bends in the tracks, and adapted to press upon the end portions of the ejecting rods, substantially as shown and described 5th In a wood cutting machine, the combination with the revoluble cutting drum and its bearing roller, of a carrier arranged beneath the cutting drum and extending to one side of the same, ejecting mechanism for throwing the material from between the knives of the cutting drum, and straightening bands arranged at one side of the cutting drum, the bands having their lower ends bent downward to form a chute, which delivers upon the carrier, substantially as shown and described. 6th. In a wood cutting machine, the combination with the cutting-drum having a flat bearing face, of knives arranged with their backs to the bearing face, spacers arranged between the knives and having a dove-tail or tongue-and-groove connection therewith, and clamping rings secured to the sides of the drum and held to embrace the ends of the spacers and knives, substantially as shown and described.

No. 45,874. Machine for Rolling Glass.

(*Machine à laminer le verre.*)

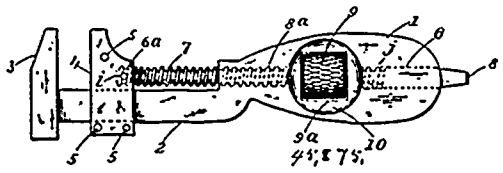


Niles Manchester Miller, Philadelphia, Pennsylvania, U.S.A., 24th April, 1891; 6 years.

Claim 1st A machine for rolling glass having rolls and turning device interposed between the rolls, said turning device operating in a plane at right angles to the travel of the glass when moving in contact with the rolls, whereby the rolling is from the same edge in every instance, substantially as set forth. 2nd. The combination with two rolls, and a turning device interposed between the rolls, and turning device operating in planes at right angles to each other whereby a plate of glass is rolled successively on opposite sides beginning in each instance at the same edge, substantially as set forth. 3rd. The combination, with mechanism for turning a plate of glass, and means for automatically operating said devices, of a series of rolls located forward and rearward of the turning mechanism, one series adapted to roll one side of the glass and the other series the other side of the glass, the turning mechanism revolving in a plane at right angles to the plane in which the rolls turn whereby the glass is rolled from the same edge first by each series of rolls, substantially as set forth. 4th. The combination, with devices for turning a plate glass, of rolls at each side of the turning devices operating in planes at right angles to the plane of movement of the turning devices whereby the same edge is operated upon first by each series of rolls, and means for varying the pressure of the rolls, substantially as set forth. 5th. The combination, with two series of rolls of varying pressure, of a turning device located between the two series of rolls, said turning device operating in a plane at right angles to the plane in which the rolls turn, substantially as set forth. 6th. The combination, with two series of rolls adapted to roll a plate of glass successively and at varying pressure, and device for raising and lowering the rolls, of a turning device located between the two series of rolls, said turning device operating in a plane at right angles to the planes in which the rolls turn whereby the plate of glass operated upon is operated upon from the same edge first by each series of rolls, substantially as set forth. 7th. In a glass rolling machine, the combination, with suitable framework, of rolls mounted therein in sliding bearings, screw threaded shafts adapted to enter similarly threaded sockets in said bearings, pinions carried by said shafts, shafts carrying pinions at one end adapted to mesh with said first mentioned pinions and carrying pinions at the other end adapted to mesh with pinions on other shafts, and means adapted to be attached to said last mentioned shafts whereby to turn the same to raise or lower the bearings of the rolls, substantially as set forth. 8th. A table for a glass rolling machine having chambers or compartments for the reception of heat-retaining material, substantially as set forth. 9th. A table for a glass rolling machine comprising a series of sections, each having a compartment or chamber for the reception of heat-retaining material, and plates for retaining said heat-retaining material in said compartments or chambers, substantially as set forth. 10th. In a glass rolling machine, the combination with a table made in sections secured together and adapted to receive heat-retaining material, of face plate removably secured thereto, substantially as set forth. 11th. In a glass rolling machine, the combination with a table having dove tailed grooves in its face, of a face plate having dove-tailed ribs or flanges adapted to enter said dove-tailed grooves in the face of the table, substantially as set forth. 12th. In a glass rolling machine, the combination with a table and a face plate thereon, of yielding devices projecting from said face plate to prevent the glass from running over the edges of the table or face plate, substantially as set forth. 13th. In a glass rolling machine, the combination with a table and a face plate thereon, said face plate having grooves in proximity to its edges, of a strip in said grooves, and springs in said grooves under said strips to maintain the latter normally beyond the face of the face plate, substantially as set forth. 14th. In a glass rolling machine, the combination with a table and face plate thereon having grooves in proximity to its edges, of strips loosely located in said grooves springs under said strips and having elongated slots in their ends and pins passing through said elongated slots, substantially as set forth. 15th. In a glass rolling machine, the combination with a frame and T shaped ways therein, of a table and T-shaped brackets projecting from said table and adapted to enter the T-shaped ways in the frame, substantially as set forth. 16th. In a glass rolling machine, the combination with a revoluble frame or cylinder having elongated openings in the heads thereof, and two sets of T-shaped ways in said frame or cylinder, one set above and the other below the said elongated openings, of a table, and T-shaped brackets adapted to enter and be sustained in either set of said ways, substantially as set forth. 17th. In a machine for rolling glass, the combination with the main frame, and a semi circular series of wheels carried thereby, of a frame or cylinder mounted to turn on said wheels, and devices carried by said frame or cylinder for holding two tables and a plate of glass between them, while the frame or cylinder is turning, substantially as set forth. 18th. In a machine for rolling glass, the combination with the main frame and platform projecting therefrom in opposite directions, of a revoluble frame or cylinder adapted to receive two tables and a plate or glass between them, and rolls at each end of said revoluble frame or cylinder, substantially as set forth. 19th. In a glass rolling machine, the combination with the main frame, and platforms projecting in opposite directions therefrom, of a revoluble frame or cylinder mounted on said main frame, a table for supporting the glass to be rolled, a rack-bar carried by said table, rolls at each end of said revoluble frame or cylinder, a shaft in proximity to each end of said revoluble frame or cylinder, a pinion carried by each of said shafts and adapted to mesh with the rack bars on the table, and a shaft mounted in the revoluble frame or cylinder and carrying a pinion to mesh with said rack bar, and means for transmitting motion to said pinions to cause the table and its contents to be passed under said rolls and through the revoluble frame or cylinder, substantially as set forth. 20th. In a glass rolling machine, the combination with the main frame, platforms projecting therefrom in opposite directions, and a revoluble frame or cylinder, of rolls mounted in suitable housings in proximity to the ends of said revoluble frame or cylinder, tables having brackets whereby to support two of them in the revoluble frame or cylinder in position to face each other, a rack-bar on the bottom of each table, pinions in proximity to the ends of the revoluble frame or cylinder and adapted to mesh with said rack-bars to feed the table and contents under the rolls, two shafts carried by the revoluble frame or cylinder, a pinion on each shaft to mesh with the rack-bars of the respective tables, a gear on each of said shafts, a shaft carried by the main frame of the machine, and a gear carried by said shaft, with which the gears carried by the shafts mounted in the revoluble frame or cylinder, are adapted to alternately mesh, substantially as and for the purpose set forth. 21st. In a machine for rolling glass, the combination with a main frame, of a revoluble frame or cylinder mounted thereon, and having elongated openings in its heads, movable guides or ways supported in said frame or cylinder above and below the elongated openings, links connected with said sliding guides or ways, levers pivoted between their ends and connected at their outer ends to said links, sliding bars to which the inner ends of each pair of levers are connected, and a cam plate, with which the free ends of said sliding bars engage, whereby when the revoluble frame or cylinder carrying the two tables and a plate of glass between them begins to turn, one of said tables will be moved toward the other and clamp the glass plate between them, and when said frame or cylinder shall have made a half revolution, said tables will be separated and the glass plate thus turned left on the lower table, substantially as set forth 22. In a machine for rolling glass, the combination with a main frame, of a revoluble frame or cylinder mounted thereon, and having elongated openings in its heads for the accommodation of tables carrying glass, movable guides supported in said frame or cylinder above and below said elongated openings, links connected to said sliding guides or ways, levers pivoted between their outer ends and connected at their ends to said links, sliding bars to which the inner

ends of each pair of levers are connected, a plate secured to the main frame, said plate having a groove therein, a cam at diametrically opposite points of the groove, and rollers carried by the sliding bars and adapted to run in said cam groove, substantially as set forth. 3rd. The combination with a revoluble cylinder constructed to receive a pair of platens between which a plate of glass is held, of sliding devices and toggle joint mechanism for operating the slides and force the platens toward each other, substantially as set forth. 24th. The combination with a revoluble cylinder, constructed to receive a pair of platens between which glass is adapted to be held, of clamp mechanism and cams for operating the clamp to force the platens toward each other, substantially as set forth. 25th. The combination with a revoluble cylinder, a pair of platens adapted to enter the cylinder, and means for turning the cylinder, of sides adapted to be connected with the platens, toggle joint mechanism, and cams for operating the toggle joint mechanism to force the platens toward each other and hold them there, substantially as set forth. 26th. In a machine for rolling glass, the combination with a main frame, of a revoluble frame or cylinder mounted thereon, movable guides in said revoluble frame or cylinder, tables having brackets to enter and be supported by said movable guides, and means for moving said guides whereby to cause said tables to clamp a plate of glass between them while said frame or cylinder is turning, substantially as and for the purpose set forth. 27th. In a machine for rolling glass, the combination with a main frame and pressing rolls, of a revoluble cylinder or frame, gear teeth on the periphery of each head of said cylinder or frame, a shaft carrying gear wheels to mesh with said gear teeth whereby to positively propel said cylinder or frame at each end thereof, and gearing for imparting motion to said shaft, substantially as set forth. 28th. In a machine for rolling glass, the combination with a main frame, and platforms projecting therefrom in opposite directions, of a revoluble frame or cylinder, tables for supporting the glass to be rolled, rack bars carried by said tables, pinions for engaging said rack bars to propel the tables, rolls for pressing the glass supported by said tables, gearing for imparting positive motion to each end of said roll, a shaft from which motion is imparted to all of said devices to feed the tables through the machine, to rotate the rolls and to turn the frame or cylinder, and a motor adapted to transmit motion to said shaft, substantially as set forth. 29th. In a machine for rolling glass, the combination with a table and rolls, of a face plate made in sections and having a figured surface, substantially as set forth. 30th. In a glass rolling machine, the combination with rolls and a table, of a face plate on the table, and yielding strips or guards in proximity to all the edges thereof, substantially as set forth. 31st. In a machine for rolling glass, the combination with two tables, of a face plate, yielding strips in proximity to all the edges of said face plate, and devices for forcing said tables together to compress a sheet of glass between them, substantially as set forth. 32nd. A face plate for a glass machine having a figured surface, substantially as set forth. 33rd. A face plate for a glass machine made in sections, substantially as set forth. 34th. A face plate made in sections, the faces of said sections being arranged in the same plane, substantially as set forth.

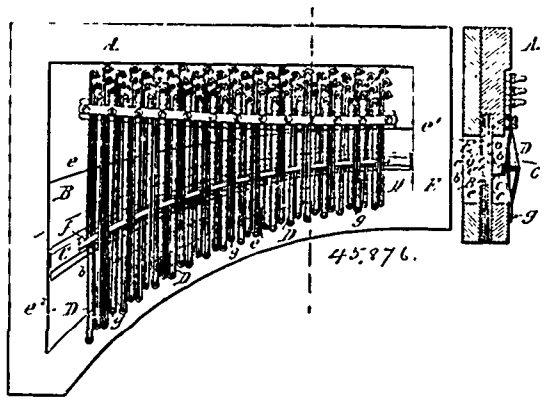
No. 45,875. Wrench. (*Clé à écrou.*)



William Dicks, Buffalo, New York, U.S.A., 24th April, 1894; 6 years.

Claim.- 1st. In a screw-wrench, a handle, a slideway portion and fixed or stationary jaw all formed in one piece, the handle being set partly to one side of the slideway portion, in combination with a movable jaw mounted on the slideway portion, a screw bar passing longitudinally above the slideway portion and through the handle, a screw-driver portion at the free end of the screw-bar having its opposite end secured rigidly to the movable jaw, a milled nut mounted on the screw portion of the screw-bar within an opening through the handle, for operating the screw-bar, the movable jaw and the screw-driver, whereby the screw-driver is exposed when the jaws of the wrench are separated, and is drawn in place within the handle when the jaws are together, substantially as described. 2nd. In a screw wrench, a stationary or fixed jaw, a slideway portion and a handle all formed in one piece, in combination with a movable jaw formed in two parts adapted to be united on the slideway portion and riveted together, a screw-bar rigidly secured to the movable jaw and a nut mounted on said screw-bar within an opening in the handle, substantially as and for the purposes described. 3rd. A screw-wrench consisting of a handle, a slideway portion and a fixed jaw, all formed in one piece, the handle being to one side of the slideway portion, a screw-bar passing longitudinally through the handle and rigidly connecting with the movable jaw, an opening through the handle, a depression surrounding said opening and a cylindrical nut mounted on the screw bar within the opening in the handle, substantially as and for the purpose described.

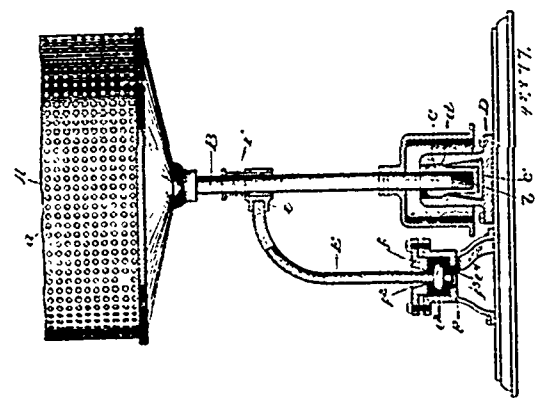
No. 45,876. Piano. (*Piano.*)



Lorenz Matt and Joseph F. Matt, both of Buffalo, New York, U.S.A., 24th April, 1891; 6 years.

Claim.—1st. A sounding-board for pianos, made of increasing thickness from the treble toward the bass strings of the instrument, in accordance with the increasing size of the strings, substantially as set forth. 2nd. A sounding-board for musical instruments, made of increasing width and thickness from the treble toward the bass strings of the instrument, substantially as set forth. 3rd. The combination with the main frame and the sounding-board composed of a number of layers, of a thin support extending inwardly beyond the main frame and bearing only against the marginal portions of the sounding-board, substantially as set forth. 4th. The combination with the main frame and a sounding-board composed of a number of layers, of an open supporting frame extending inwardly beyond the main frame and composed of thin members bearing only against the marginal portions of the sounding-board, substantially as set forth. 5th. The combination with the sounding-board composed of a number of layers and constructed of gradually increasing *dimensions from the treble toward the bass strings of the instrument*, of an open supporting frame composed of thin layers bearing only against the marginal portions of the sounding-board, and made of correspondingly increasing dimensions, substantially as set forth. 6th. The combination with a sounding-board made of gradually increasing dimensions from the treble toward the bass strings of the instrument, of a bridge made of correspondingly increasing dimensions, substantially as set forth. 7th. The combination with the sounding-board and the bridge resting thereon, of a bearing bar arranged on top of the bridge and strings arranged in two series, impinging against the front and rear sides of said bar, respectively, substantially as set forth.

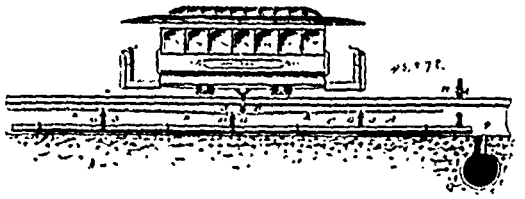
No. 45,877. Centrifugal Extractor.
(*Extracteur centrifuge.*)



John C. Poland and Edward F. Poland, both of Boston, Massachusetts, U.S.A., 24th April, 1894; 6 years.

Claim. -A centrifugal machine comprising in its construction, a vertical rotary shaft supporting a suitable receptacle, a universal step bearing supporting said shaft and permitting its limited oscillation in all directions, an upright brace or support having a lateral portion carrying a bearing which embraces the said rotary shaft, and a step-bearing supporting said brace and permitting limited oscillation of the latter in all directions and located at one side of the step-bearing for the shaft, the centre of oscillation of the shaft and brace being in the same horizontal plane.

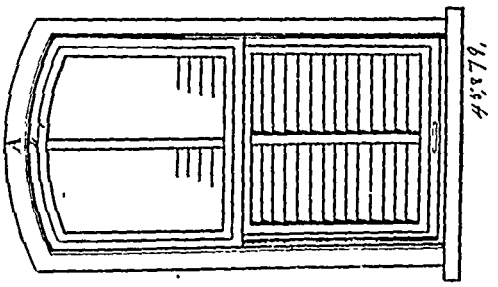
No. 45,878. Underground Conduit for Electric Conductors. (*Conduit Souterrain pour conducteurs électriques.*)



James B. Brand, Claude L. Franklyn, Elésha P. Henika and Isaac G. Brader, all of Milwaukee, Wisconsin, U.S.A., 24th April, 1894; 6 years.

Claim.—1st. A conduit for electric conductors, comprising a closed tube or pipe, a conductor extending longitudinally therethrough, but insulated therefrom, a contact or service rail extending longitudinally adjacent to the outside of said tube or pipe, and comprising a plurality of flexibly connected insulated sections, and a plurality of movable contact devices extending through the side of said tube or pipe and adapted for electrical contact with the conductor therein, and permanently in electrical engagement with said sections. 2nd An underground conduit for electric conductors, comprising a closed tube or pipe, a conductor extending longitudinally therethrough, but insulated therefrom, a plurality of contact devices movably engaged within bearings in the side wall of said tube or pipe and adapted for electrical contact with said conductor, means for normally holding said contact devices out of contact with said conductor, and a service rail comprising a plurality of sections flexibly engaged with each other and with said contact devices, but adjacent sections of said rail being insulated from each other. 3rd. An underground conduit for electric conductors comprising a closed tube or pipe, a conductor extending longitudinally therethrough, but insulated therefrom, a plurality of tubular extensions in the upper side of said tube or pipe, contact devices movably engaged within said extensions, and adapted for electrical contact with said conductor, means for normally holding said contact devices out of contact and a service rail comprising a plurality of sections insulated from each other, but flexibly connected at their adjacent ends with said contact devices, and adapted for successive engagement with a contact device carried by a car. 4th. An underground conduit for electric conductors comprising a closed tube or pipe, a conductor extending longitudinally therethrough, but insulated therefrom, tubular connections located at intervals in the upper side of said pipe, plungers vertically movable therein and adapted for engagement at their inner ends with said conductor, springs for normally holding said conductors out of contact with the conductor, shields for protecting said plungers and their bearings from dirt and dust, and a service rail comprising a plurality of sections flexibly engaged at their adjacent ends with said plungers, but insulated from each other and adapted to be depressed by engagement with a contact device carried by a car. 5th. An underground conduit for electric conductors comprising a closed tube or pipe, a conductor extending longitudinally therethrough, but insulated therefrom tubular extensions located at intervals in the upper side of said tube or pipe, vertically movable plungers engaged in air and water tight bearings in said extensions and carrying contact shoes at their lower ends for engagement with said conductor, springs for normally holding said plungers out of contact, suitable shields for protecting said plungers and their bearings from dirt, and a service rail for engagement with a contact device carried by a car, and comprising a plurality of sections insulated from each other and flexibly connected with the upper ends of said plungers. 6th. The combination in an underground conduit with the closed tube and its contained conductor, of vertically movable plungers extending to the inside of the tube and adapted for electrical contact with said conductor, and a service rail comprising a plurality of sections insulated from each other and flexibly engaged at their adjacent ends with said plungers, and each of said sections being provided with an extension adjacent to its pivotal connection with the adjacent section and arranged to project past said connection, and adapted for engagement by and advancing contact device, before said device reaches said connection. 7th An underground conduit for electric conductors comprising a main casing provided in its upper side with a longitudinal slot, a closed tube or pipe located within said casing, and provided in its upper side with a plurality of tubular extensions, a conductor extending longitudinally through said pipe, but insulated therefrom, vertically movable plungers engaged with air and water-tight bearings in said tubular extension, and carrying at their lower ends suitable contact shoes for electrical engagement with said conductor, springs for normally holding said plungers out of contact, and a contact or service rail comprising a plurality of sections pivotally secured at their adjacent ends to said plungers, but insulated from each other, and adapted for engagement by an advancing contact device carried by a car, and to be successively depressed thereby, so as to bring the plungers successively into electrical contact with said conductor 8th. The combination with closed tube C, conductor D extending therethrough, the vertically movable contact devices adapted for independent electrical contact with said conductors, and the service rail comprising the insulated pivotally connected sections, of a blast pipe communicating with the interior of said tube and adapted to deliver a blast of air therethrough.

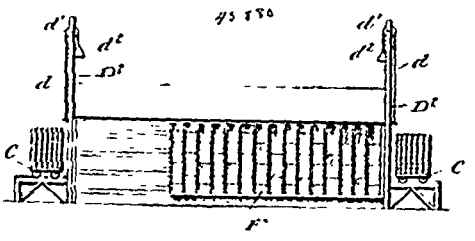
No. 45,879. Window Sash. (*Cadre de châssis.*)



Napoléon Matte, Quebec, Province of Quebec, Canada, 24th April, 1894; 6 years.

Résumé.—Un cadre de châssis composé d'un cadre extérieur P et d'un cadre intérieur C s'adaptant au cadre B, le dit cadre C pouvant être mun soit d'une vitre, d'une jalousie ou d'une toile tel que décrit et pour les fins indiquées.

No. 45,880. Kiln. (*Four.*)



Walter P. Murphy, Ridgway, Pennsylvania, U.S.A., 24th April, 1894; 6 years.

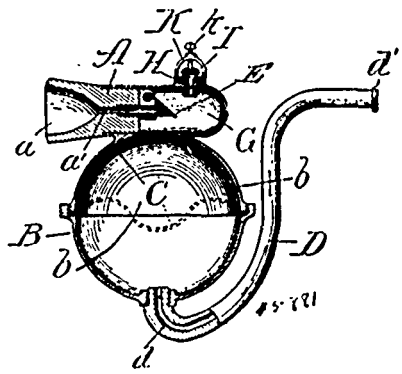
Claim. 1st. A drying kiln for lumber and the like, having one end constructed principally of glass, with adjacent air spaces, the other end constructed of other material and having at the latter end means for admitting heat into the kiln, substantially as specified. 2nd. A drying kiln having a wall consisting of a glazed and air chambered portion for a part of its length and unglazed air chambered portion for the remainder of its length, substantially as specified. 3rd. In a drying kiln, a wall formed of a glazed portion, a vertically disposed air chamber and an intermediate air chamber or space whereby direct contact of radiant heat with the glazed portion is materially prevented, substantially as specified. 4th. In a drying kiln, the combination with the kiln proper, of doors at opposite ends thereof, exterior walls of glass forming condensing chambers, extending for a portion of the length of the side walls and vertical partitions in said kiln proper, and condensing chambers sub-dividing said condensing chambers into independent vertical unobstructed passages with communication at the top with the interior of the kiln and near the bottom with a space beneath the floor thereof, the bottom of said passages having openings, beneath the horizontal passages into the space beneath the floor, for the automatic egress of the water of condensation.

No. 45,881. Cigar Holder. (*Porte-cigare.*)

Ryerson D. Gates, Oak Park, Illinois, U.S.A., 24th April, 1894; 6 years.

Claim. 1st. In a cigar holder, the combination of a cigar holder adapted to be held in the mouth provided with a cigar chamber to receive a cigar, a smoke chamber, a channel connecting the tobacco and smoke chambers and an opening communicating with the smoke chambers and the outer air, a valve located in the channel between the smoke chamber and the cigar chamber, a valve located in the opening between the smoke chamber and the outer air, and an elastic diaphragm located in the smoke chamber and vibrated by atmospheric pressure for the purpose of drawing the smoke from the cigar into the smoke chamber and expelling it therefrom into the outer air, substantially as described. 2nd In a cigar holder, the combination of a holder adapted to be held in the mouth provided with a cigar chamber to receive a cigar, a smoke chamber, a channel connecting the tobacco and smoke chambers and an opening communicating with the smoke chamber and outer air, a valve located in the channel between the smoke chamber and the cigar chamber, a valve located in the opening between the smoke chamber and the outer air, an elastic diaphragm in the smoke chamber, and a spring to assist in returning the elastic diaphragm to its normal working position, substantially as described. 3rd. In a cigar holder, the

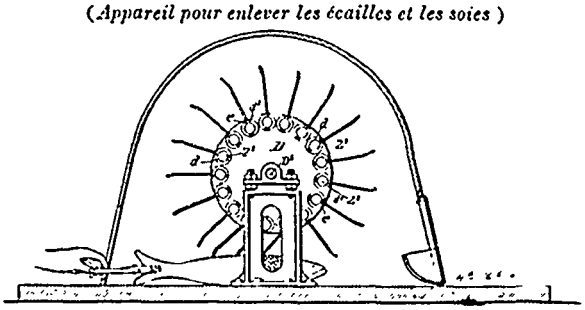
combination of a cigar holder adapted to be held in the mouth provided with a cigar chamber to receive the cigar, a smoke chamber, a channel connecting the tobacco and smoke chambers, an opening



communicating with the smoke chamber and the outer air, and an elastic diaphragm located in the smoke chamber and vibrated by atmospheric pressure for the purpose of drawing the smoke from the cigar into the smoke chamber and expelling it therefrom into the outer air, substantially as described. 4th. In a cigar holder, the combination of a holder adapted to be held in the mouth provided with a cigar chamber to receive the cigar, a smoke chamber, a channel connecting the tobacco and smoke chamber, an opening communicating with the smoke chamber and the outer air, a valve located in the opening between the smoke chamber and the outer air, and an elastic diaphragm located in the smoke chamber and vibrated by atmospheric pressure for the purpose of drawing the smoke from the cigar into the smoke chamber and expelling it therefrom into the outer air, substantially as described. 5th. In a cigar holder, the combination of a cigar holder adapted to be held in the mouth provided with a cigar chamber to receive a cigar, a smoke chamber, a channel connecting the smoke and tobacco chambers, an opening communicating with the smoke chamber and the outer air, a valve located in the channel between the smoke chamber and the cigar chamber, and an elastic diaphragm located in the smoke chamber and vibrated by atmospheric pressure for the purpose of drawing the smoke from the cigar into the smoke chamber and expelling it therefrom into the outer air, substantially as described.

No. 45,882. Scale and Bristle Detaching Machine.

(*Appareil pour enlever les écailles et les soies*)

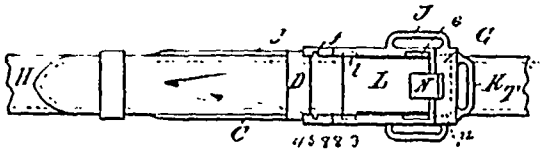


John Tobin and Paul J. Daemicke, both of Chicago, Illinois, U.S.A., 24th April, 1894; 6 years.

Claim.—1st. In a bristle or scale detaching machine, the scraping combs comprising a flexibly and torsionally elastic back or rib, and rigid teeth projecting therefrom, substantially as set forth. 2nd. In a bristle or scale detaching machine, a rotary brush consisting of a series of scraping combs arranged in cylindrical order about the axis of the brush, and comprising each a flexibly and torsionally elastic back or rib and rigid teeth projecting therefrom, substantially as set forth. 3rd. In a scale or bristle detaching machine, a rotary brush consisting of scraping combs arranged in cylindrial order about the axis of the brush, and consisting each of a rubber rod or bar and wire teeth embedded therein, and projecting therefrom approximately radially with respect to the brush, substantially as set forth. 4th. In a bristle or scale detaching machine, a rotary brush comprising combs arranged in cylindrical order about the axis of the brush, and consisting each of a flexible back and rigid teeth being bent at the ends and serrated on the outer side of the bend, substantially as set forth. 5th. In a scale or bristle detaching machine, in combination with a supporting frame, two rotary brushes having their axes parallel and provided with means for rotating them simultaneously in their bearings, each brush comprising a series of scraping combs arranged in cylindrical order about the axis of the brush, and consisting each of a torsionally and flexibly elastic back, the teeth projecting from the back approximately radially with respect to the brush, substantially as set forth. 6th. In a scale or bristle detaching machine, in combination with the frame, a rotary brush journalled in horizontal bearings thereon and adapted to scrape the object subjected to its action, a draft band or chain operating vertically in a plane substantially tangential to the brush, and a gripper at the lower end of such draft chain whereby the object may be impelled tangentially with respect to the brush in contact therewith, substantially as set forth. 7th. In a scale and bristle detaching machine, in combination with a frame, a pair of rotary brushes journalled thereon in parallel horizontal bearings, having scraping teeth or fingers, and a draft band or chain depending vertically between the brushes, and the gripper at the lower end of such draft chain and suitable means for actuating the chain longitudinally upward, whereby an object held between the grippers may be impelled tangentially with respect to the brushes between the same and exposed to them respectively at opposite sides simultaneously, substantially as set forth. 8th. In a bristle or scale detaching machine, a rotary brush consisting of a series of scraping combs arranged in cylindrical order about the axis of the brush, comprising each a flexibly and torsionally elastic back or rib and rigid teeth projecting therefrom, in combination with a suitable support or backing for the object to be operated upon, the brush being movable bodily at will toward and from the support or backing, substantially as set forth. 9th. In a scale or bristle detaching machine, in combination with the rotary brushes of the character set forth, one of said brushes having its bearings movable toward and from the first, the horizontal rock shaft on the frame and suitable connections from the same to the movable bearings, said rock shaft having two lever arms extending in opposite directions and adapted to receive the stress of weight or spring connected to either of them at preference, whereby the movable brush may normally be held away from or toward the other brush at the will of the operator, substantially as set forth. 10th. In a bristle or scale detaching machine, in combination with the frame, a pair of rotary brushes journalled thereon in parallel horizontal bearings, the bearings of one of said brushes being fixed and the bearings of the other brush being movable toward and from the first brush, a horizontal rock shaft on the frame and suitable connections from the same to the movable journal boxes respectively, whereby the rocking of the shaft slides the boxes, said rock shaft being subject to a continuous stress tending to rock it in a direction to force the movable brush toward the fixed brush, and provided with a handle by which it may be operated at will, substantially as set forth. 11th. In combination with the frame and the brushes journalled thereon in horizontal parallel bearings, the bearings of one brush being fixed and the other movable toward and from the fixed brush, the bevelled gears on the shafts of the brushes respectively, the horizontal shaft F, journalled on the frame and having on it the bevelled gears which mesh with and drive the gears on the shafts and brushes respectively, the gear which drives the movable brush being feathered on the shaft, and one journal bearing of the movable brush having stops which engage said feathered gear to slide it on its shaft, substantially as set forth. 12th. In combination, substantially as set forth, the two parallel rotary brushes, the journal bearings of the one being fixed and of the other being movable, the gears on their shafts respectively, and the counter-shaft from which they derive motion, the bearing of the movable brush at the geared end of the counter-shaft at the corresponding end being obtained in one rigid yoke or frame, and the gear on the counter-shaft which drives the movable brush being feathered on said shaft and stopped endwise between the bearings of the shaft on said yoke or frame, substantially as set forth. 13th. In combination, with the two parallel rotary brushes, the counter-shaft and intermeshing bevelled gear by which they are driven, the shaft k at right angles to said counter-shaft, the wheel thereon adapted to operate the feeding device, a bevelled gear at the end of said shaft, a pair of bevelled gears loose on the counter-shaft meshing with the gear on the shaft k, and provided on the facing ends of their hubs, respectively, with clutch teeth, a double clutch feathered on the shaft between said toothed hubs, and suitable shipping devices for throwing it into engagement with either of said gears, whereby the feed shaft k is rotated in one direction or the other, according to the engagement of said clutch, without change in the rotation of said brushes, substantially as set forth. 14th. In combination, with the parallel rotary brushes, the draft chain or strap J and the guide over which it passes, located above the interval between the brushes, a shaft k journalled on the frame parallel to the brushes, and a sprocket wheel therein adapted to engage the draft chain, the counter shaft and the bevelled gears by which it drives the brushes, the bevelled gears on the counter shaft and the bevelled gear on the shaft k which meshes with them, and the clutch feathered on the counter shaft between them, the shifting lever or fork for shifting the clutch, and the horizontal rods L^4, extending therefrom and provided with the abutment $L^{4\circ}$, the vertically operated rods R^1 and R^2, having cams adapted to engage said abutment, the levers P^1 and P^2, which operate said rods respectively, having loops or eyes through which the two ply of the draft chain pass respectively, and the adjustable knots on said chain, whereby the movement of the chain to either limit determined by the knots operates the clutch to disengage it from its driving gear, substantially as set forth. 15th. In combination, with the parallel rotary brushes, the hoisting or draft chain and the grippers swivelled to the end of the same, the swivel head and the handle of the gripper to which it is connected having respectively grooves and projections adapted to become engaged by

the downward stress of the gripper at either of the two positions which are ninety degrees apart about the swivel axis, substantially as and for the purpose set forth.

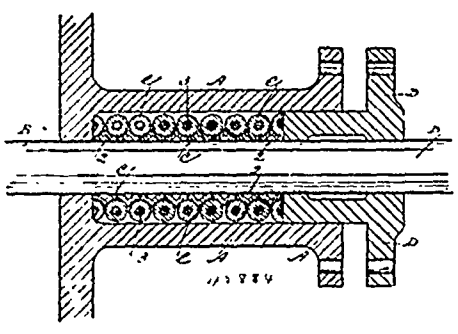
No. 45,883. Buckle. (*Boucle.*)



Jean B. Girard, St. Anne, Quebec, Canada, 24th April, 1894; 6 years.

Claim.—1st. In a buckle, the combination with a back plate adapted to be secured to a hame or other strap and having side pieces, grooves formed in the said side pieces on their inner sides, cross pieces joining the said side pieces at either end of the said grooves, of a tongue plate, having lugs adapted to slide in the said grooves, pins on the underside of the said plate, a catch on the upper side of the said plate adapted to engage one of the said cross pieces and openings communicating with the said grooves, whereby the said tongue-plate may be raised, substantially as set forth. 2nd. In a buckle, the combination with a tongue-plate, having lugs at each corner pins on the under side and a catch on the upper surface, of the grooves E and F formed in the sides C of the plate A, openings *e*, the chambers F^1, openings *f* formed in the said chambers and the cross piece G, substantially as set forth.

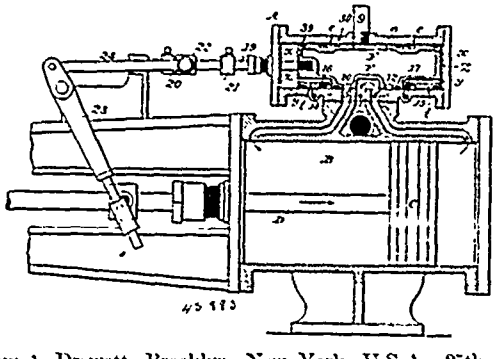
No. 45,884. Metallic and Elastic Packing.
(*Garniture métallique et élastique.*)



John M. Ellicot, Hamilton, Ontario, Canada, 24th April, 1894; 6 years.

Claim.—In a metallic and elastic packing the combination of a series of metallic rings C, the interior of which have circular water packing, V shaped grooves 2, and their outer part designed to receive and form two sides and inner bearings for the series of fabric rings E, having rubber coves 3, said rings C and E, parted or cut through as at 4 and 5 to enable the same to spread out, substantially as and for the purpose hereinbefore set forth.

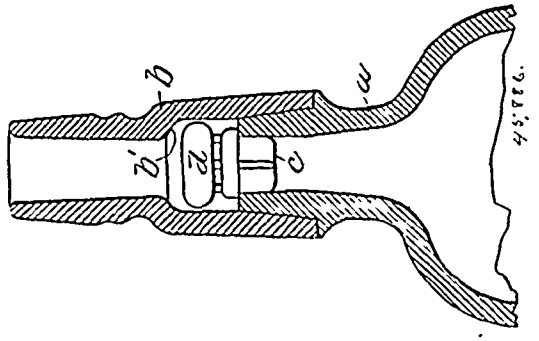
No. 45,885. Valve. (*Soupape.*)



William A. Drewett, Brooklyn, New York, U.S.A., 25th April, 1894; 6 years.

Claim.—1st. The combination with the piston and cylinder of a steam engine having inlet and exhaust ports and passages, a main valve controlling the same, and a valve controlling piston in a valve casing, and means for moving said piston from the engine to a limited extent from each end of the casing, of a contracted steam inlet channel or port communicating with each end of the casing, an exhaust channel leading from the main exhaust port to a supplemental exhaust port between the main exhaust port and each end of the casing, a channel leading from each end of the valve operating piston to the supplemental exhaust port, and a supplemental valve controlling the channel between each supplement- port and the main exhaust port, and means for shifting said supplemental valve by the valve operating piston, substantially as set forth. 2nd. The combination with a valve casing, having main ports communicating with the ends of the cylinder, an exhaust port, and supplemental ports communicating with the exhaust, valves sliding over said supplemental ports, and a piston having shoulders arranged to make contact with and move said valves while permitting a limited independent movement of the piston, substantially as described. 3rd. The combination in a valve device, of a casing having ports 5, 6 and 7, and a valve controlling the same, and supplemental exhaust ports 14, 15, communicating with the port 7, a piston operating the main valve and provided with chambers *c*, containing supplemental valves controlling the supplemental ports, and channels between the ends of the piston and the chambers *c*, substantially as set forth. 4th. In a direct acting duplex engine, the combination, with the main valve of each engine, piston for actuating the same, means for imparting initial movements to said piston, and exhaust valves and ports for exhausting the pressure at the ends of said piston, of a valve device having an exhaust port, passages communicating with the ports of said exhaust valves, and a valve controlling said exhaust port and devices for operating said valve, connected with a moving part of the other engine, substantially as set forth. 5th. The combination in a direct acting duplex engine, of the main valve of one engine, the operating piston of said valve and means for actuating the same, supplemental exhaust ports, and means whereby said supplemental ports are controlled, and a casing with which said exhaust ports communicate, and provided with an exhaust port, as 31, a valve controlling the exhaust port 31, and connections between said valve and a moving part of the other engine, substantially as set forth. 6th. The combination, with the main valve, valve operating piston, and means for actuating the same, and supplemental valves and ports of an engine, of a casing having a chamber, communicating with said supplemental ports and provided with an exhaust port and valve, and a by-pass channel as *d*, extending from said chamber to the exhaust port of the engine, and provided with a valve, substantially as and for the purpose set forth.

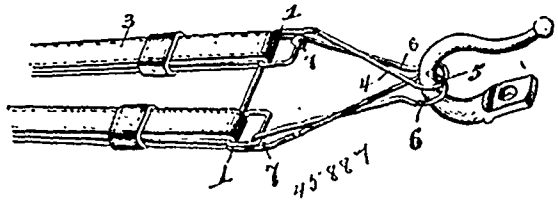
No. 45,886. Valve Stopper for Bottles.
(*Soupape pour bouteilles.*)



Nathaniel F. T. Hunt, Braintree, Massachusetts, U.S.A., 25th April, 1894; 6 years.

Claim.—1st. In combination, a vessel, a tube having an interior shoulder, a valve, and a flattened sphere forming a tumbler, the valve and the tumbler being confined in a chamber formed by securing the tube upon the vessel, substantially as shown and described. 2nd. In combination, a valve with wing guides and a flattened sphere forming a tumbler, both in a chamber at the mouth of a vessel, an interior shoulder in the chamber placed opposite to the mouth of the vessel to act as a stop for one edge of the tumbler, and the wings of the valve in the mouth of the vessel, all substantially as set forth.

No. 45,887. Check Hook Eye. (*Œillet de crochet de sellette.*)

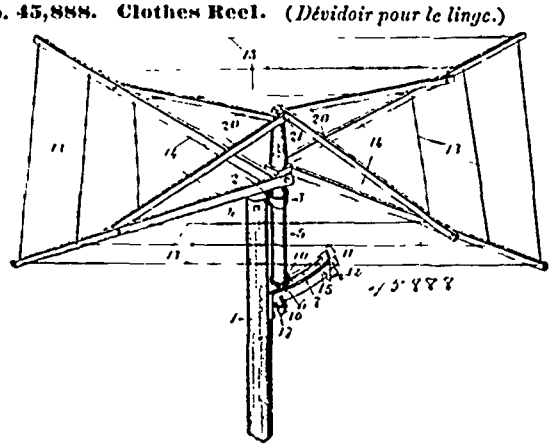


Charles H. Shultz, Ainsworth, Nebraska, U.S.A., 25th April, 1894; 6 years.

Claim.—1st. The herein described hook made of wire coiled at one end, having the opposite terminals extended outward but disposed inwardly so as to cross each other at a predetermined point, then formed into loops which are interlocked, then extended back to the starting point and having the ends of the terminals engaging with

the coil, thereby forming two looped interlocking members, each of which is composed of two bars, the bars of each member crossing one another, and the inner bar of both members likewise crossing and interlocking, substantially as specified. 2nd. The herein described check-hook coupler, the same formed of spring-wire blank bent to form coils at its front end, and having its opposite terminals rearwardly disposed and bent to form interlocking loops, the ends of the terminals being forwardly disposed and terminating in hooks engaging the coils, substantially as specified. 3rd. The herein described check-hook coupler, the same consisting of a blank of spring-wire bent at each side of its centre to produce the coils 1, and the intermediate cross-bar 2 for engaging the overdraw-strap, the opposite terminals 4 being converged to a common point in rear of the bar 2 and bent to form the opposite loops 6 which interlock, and the ends of the terminals forwardly disposed as at 7 and terminating in hooks 8 engaging the coils 1, substantially as specified.

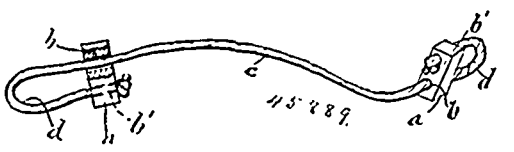
No. 45,888. Clothes Reel. (*Dévidoir pour le linge.*)



John Brown, Weston, Ontario, Canada, 25th April, 1894; 6 years.

Claim.- 1st. In a clothes reel, the revolving post supported on a fixed post to incline as specified, and having thereon radial arms carrying lines, specified. 2nd. In a clothes reel, the combination of a fixed post, and the revolving post supported by said fixed post and movable from the vertical to an inclining position, substantially as and for the purpose set forth. 3rd. In a clothes reel, the combination of a fixed post, a revolving post secured to the top of said fixed post to incline as specified, and the curved support at the bottom of said revolving to limit the inclinations of said revolving post, substantially as specified. 4th. In a clothes reel, the combination of the fixed post, the revolving post having radial arms and supports to said arms as specified, the band securing the revolving post medially to the top of said fixed post, to incline as specified, the curved support on the fixed post, the sliding block on said curved support, the ratchet-wheel on the lower end of the revolving post and supported by said sliding block, and a lever on said curved support to engage said ratchet-wheel when the revolving post is inclined, substantially as and for the purpose specified.

No. 45,889. Device for Attaching Clothes to Clothes Lines. (*Appareil pour attacher le linge aux cordes.*)



Owen McShane, Montreal, Quebec, Canada, 25th April, 1894; 6 6 years.

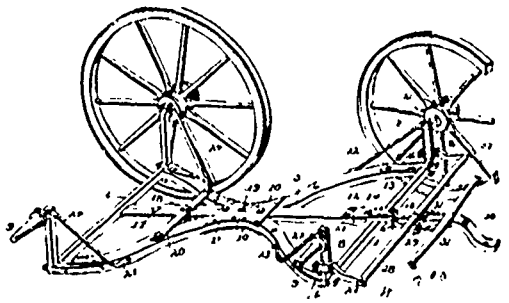
Claim.—1st. A holdfast for the purpose set forth comprising a pair of perforated blocks and a flexible connection passed through same and secured to form retaining loops. 2nd. A holdfast, for the purpose set forth comprising a pair of blocks perforated at two points and a flexible connection with its ends passed through the perforations to form loops on one side of each block, and secured at the opposite side. 3rd. The combination of the perforated blocks *a a*, and the flexible connection *c*, passed through such perforations in the manner and for the purpose set forth.

No. 45,890. Vehicle Running Gear.

(*Train de voiture.*)

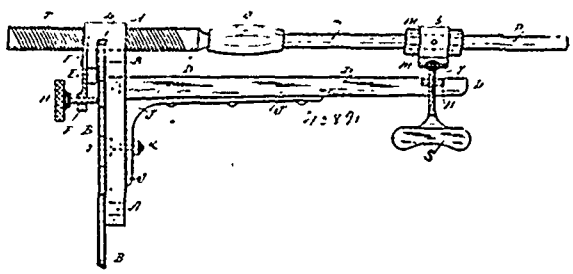
Clarence C. Holley, Presque Isle, Maine, U.S.A., 25th April, 1894; 6 years.

Claim.—1st. In a drop or crank axle farm or truck wagon, the combination of front and rear axles, the front and rear hounds, upper and lower plates secured to the adjacent ends of the hounds, a reach secured to the front axle, and having its rear portion tapered toward its edges and provided with transversely enlarged perfora



tions, whereby the rear axle is permitted a limited rocking movement, and a bolt passing through the plates of the rear hounds and arranged in one of the perforations of the reach, substantially as and for the purpose described. 2nd. In a drop or crank axle farm or truck wagon, the combination of the front and rear axles, the front and rear hounds secured to the axle, the upper and lower plates connecting the adjacent ends of the hounds, cross bars connecting the rear hounds, the reach connected with the front axle, and having its rear portion tapered toward its longitudinal edges and provided with enlarged perforations having tapering or countersunk ends, whereby a limited rocking movement is permitted, and bolts passing through the cross-bars and the plates of the rear hounds, and arranged in perforations of the reach, substantially as and for the purpose described. 3rd. In a drop or crank axle farm or truck wagon, the combination of the front and rear crank axles, wheels, a removable platform mounted on the axles and provided at its rear end with keepers, a brake-bar arranged in the keepers and terminating short of the wheels, rearwardly and outwardly curved arms secured to the ends of the brake-bar and carrying brake-shoes arranged in rear of the hind wheels, and means for actuating the brake-bar for applying the brake, substantially as described. 4th. In a drop or crank axle farm or truck wagon, the combination of the front and rear crank axles, wheels, the removable platfrom mounted on the axles and provided near their rear ends at opposite sides with plates having shoulders fitting against the front faces of the rear axle, keepers arranged on the platform at the rear end thereof, a brake-bar arranged in the keepers and terminating short of the wheels, the rearwardly and outwardly curved arms secured to the brake-bar and carrying brake-shoes arranged in rear of the hind wheels, and a rock-shaft arranged at the front of the platform and provided with a handle or lever and connected with the brake-bar, substantially as described. 5th. In a drop or crank axle farm or truck wagon, the combination of the front and rear crank axles, the front axle being provided with vertical spindles and having horizontal wheels spindles with sleeves arranged on the vertical spindles, front and rear hounds, a reach, the inclined braces extending from the hounds to the top of the axles, ears arranged on the outer face of said sleeves, forwardly extending angle arms secured to the sleeves by bolts passing through the ears thereof, a casing secured to the front axle and receiving the front end of the reach, a shifting cross-bar pivotally connected to the front ends of the angle arms, a swinging draft-iron pivoted in the casing and connected with the cross-bar and provided with forwardly extending eyes, and a tongue having a horizontal pin arranged in said eyes and provided with divergent arms supporting the pin, substantially as described. 6th. In a drop or crank axle farm or truck wagon, the combination of the front and rear drop axles, wheels, and a removable platform mounted on the axles and extending forward beyond the front axle and provided with stops to engage the rear axle, substantially as described.

No. 45,891. Saw Filer. (*Machine à limer les scies.*)

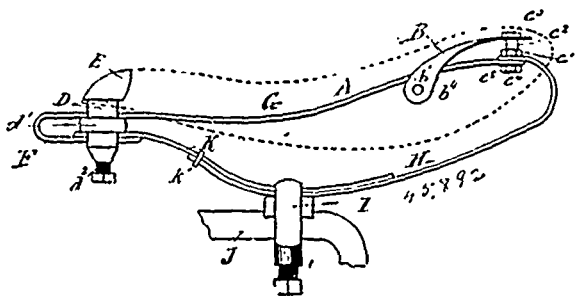


Marshall L. Smith, Hamilton, Ontario, Canada, 25th April, 1894; 6 years.

Claim. 1st. In an adjustable saw filer, the frame plate A, having overlaps E, forming opening C, the metallic plates F, having hand screws H, in combination with the projecting right angled arm or

table D, provided with bearing *m*, horizontal rod P, and file T, substantially as described and set forth. 2nd The combination of the bearing *m*, the adjusting hand screw S, attached to arm D, by nut N, the pivoted connection 7, and the swivel connection 6, the rod P, with handle O, and the file T, inserted in the handle, substantially as described and set forth. 3rd. The arm or table D, provided with adjustable swivel, bearing *m*, and secured to the adjustable bracket J, having horizontal slotted holes for bolts K, the horizontal rod P, with handle and file in combination with the overlapping framework, substantially as described and set forth. 4th. The combination of a circular saw with the plate or frame A, having overlaps E, with the metallic plates F, having hand screws H, the adjustable bracket J, having arms D, with adjustable and pivoted bearing *m*, and the horizontal sliding rod P, provided with handle and file, substantially as described and set forth.

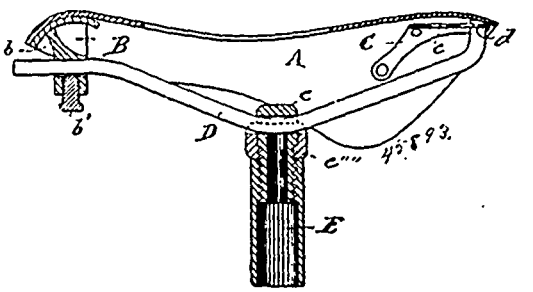
No. 45,892. Bicycle Saddle. (*Selle de bicycle.*)



James H. Sager, Rochester, New York, U. S. A., 25th April, 1894; 6 years.

Claim.—1st. In a bicycle saddle, a metallic pommel plate fastened to the saddle leather and provided with one or more perforations arranged longitudinally, and a notched stud or pin adapted to fit each of the perforations and rigidly connected to the saddle spring or saddle frame of a bicycle, substantially as described. 2nd. In a bicycle saddle, the combination of a pommel plate having a series of longitudinally arranged perforations therein each of which perforations has a notch in the forward side thereof and a stud or pin rigidly fastened to the saddle spring or saddle frame having a stem fitting said notch and an expended head of suitable size to pass through the main part of said perforations, substantially as described. 3rd. In a bicycle saddle, the combination of a pommel plate fastened to the saddle leather and provided with one or more longitudinally arranged perforations therein, a stud adapted to be rigidly fastened to the saddle spring or saddle frame of a bicycle and having a screw threaded portion c, an expended middle portion c^1, a stem c^2 smaller than the expended portion, an expended head c^3, and a nut c^4, substantially as shown and described. 4th. In a bicycle saddle, a saddle leather, a saddle spring or saddle frame connected at one end to the cantle end of said leather and having a notched stud rigidly fixed thereto at the pommel end thereof, and a pommel plate fastened to said leather and engaging said notched stud, substantially as described. 5th. In a bicycle saddle, a saddle leather, a pommel plate fastened to said leather and provided with one or more perforations arranged in the medial longitudinal line thereof, a saddle spring or saddle frame connected at one end to the cantle end of said saddle leather, and provided at the other end with a stud rigidly fixed thereto and adapted to engage in any such perforation in said pommel plate, substantially as described 6th. In a bicycle saddle, a saddle leather, a pommel plate fastened to said leather and provided with one or more perforations arranged in the medial longitudinal line thereof, a saddle spring or saddle frame connected with the cantle end of said leather and having a notched stud rigidly fixed thereto at the pommel end and adapted to fit into and engage in such perforations in said pommel plate, substantially as described 7th. In a bicycle saddle, the combination of a saddle leather, a tension bar attached to said saddle leather at the pommel and cantle ends thereof, springs connected to said pommel and cantle and independent of said tension bar, said springs extending forward from the pommel connection and curving away from said tension bar and extending backward and then upward to the cantle connection, and a clamp for fastening said springs to a bicycle, substantially as described. 8th. In bicycle saddle, the combination of a saddle leather, a tension bar attached to said saddle leather at the pommel and cantle ends thereof and otherwise unattached between its ends, a spring fastened to said cantle and independent of said tension bar and extending forward and curving away from said tension bar underneath the same, a spring fastened to the pommel and independent of said tension bar and extending forward from said pommel, then curving downward and backward and lying upon said first mentioned spring, and a clamp for fastening said springs together and to a bicycle, substantially as described. 9th. In a bicycle saddle, the combination of the saddle leather A, the tension bar as G, adjustable connected to the pommel and cantle ends of said saddle leather and otherwise unattached between its ends, the separate thrust members as H H, longitudinally disposed under said tension bar or c f said saddle leather, said thrust members being longer than said tension bar and at a greater distance therefrom at the middle than at the ends, and a clamp I for fastening said thrust members in line with each other and to a bicycle, whereby pressure at said clamp causes a longitudinal thrust through said thrust members to the point of connection thereof with said tension bar or with said saddle leather, substantially as described. 10th. In a bicycle saddle, the combination of a saddle leather, a flat spring tension bar attached to the saddle leather at the cantle and having a stud at the pommel end, a pommel plate fastened to the saddle leather and having a row of longitudinal perforations adapted to be connected to said stud, flat springs disposed under said tension bar and fastened, one to the cantle connection and extending forward therefrom, and one fastened to said stud and extending forward, downward and backward therefrom to meet said first spring, and a clamp for fastening said two springs together and to a bicycle, substantially as described.

No. 45,893. Bicycle. (*Bicycle.*)

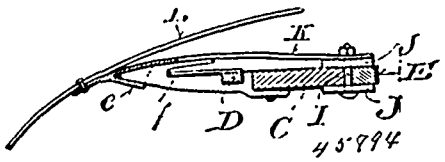


James H. Sager, Rochester, New York, U.S.A., 25th April, 1894; 6 years.

Claim.—1st. In a bicycle, a saddle post adapted to be fastened in the usual post socket of a bicycle and composed of two parts only, one having a transverse slot therethrough near the upper end adapted to receive the saddle-bar and provided with screw threads adjacent to or near said slot, the other part screw-threaded and fitting and travelling upon the said screw-threads and longitudinally along the other part and adapted to clamp the saddle-bar within the slot by the pressure of the unslotted part against the saddle-bar substantially as described. 2nd. In a bicycle, a saddle post adapted to be fastened in the usual post socket of a bicycle and having a transverse slot therethrough near the upper end adapted to receive a saddle bar and provided with screw threads adjacent to or near said slot, in combination with a nut travelling upon said screw-threads longitudinally along said post and adapted to clamp the saddle-bar within the slot, substantially as described. 3rd. In a bicycle, a saddle post adapted to be fastened in the usual post socket of a bicycle and having a transverse slot therethrough near the upper end adapted to receive the saddle-bar and provided with external screw-threads adjacent to or near said slot, in combination with a nut travelling upon said screw-threads longitudinally along said post, and adapted to clamp the saddle-bar within the slot, substantially as described. 4th. In a bicycle, a saddle post adapted to be fastened in the usual post socket of a bicycle and having a transverse slot therethrough near the upper end adapted to receive the saddle-bar and provided with screw threads adjacent to or near said slot, in combination with a collar sliding freely upon said post and a nut travelling upon said screw threads longitudinally along said post, and adapted to clamp the saddle-bar within the slot, substantially as described. 5th. In a bicycle, the saddle post adapted to be fastened in the usual post socket of a bicycle and having a transverse slot therethrough near the upper end adapted to receive a saddle bar and provided with screw-threads below said slot and adjacent thereto in combination with a collar sliding longitudinally upon said post and a nut travelling upon said threads longitudinally along said post to press said collar against said saddle-bar and to clamp said saddle bar against the upper inner side of the slot, substantially as described. 6th. In a bicycle, the saddle post E^2, adapted to be fastened in the usual post socket of a bicycle and having a tranverse slot or perforation therethrough near the upper end adapted for the insertion of the saddle-bar D of a bicycle and provided with screw-threads adjacent to or near said slot in combination with a collar c^3, sliding freely longitudinally upon said post and a nut c^2 travelling on said screw threads longitudinally along said post and adapted to press the collar against the saddle-bar D, and to fasten the latter within said slot, substantially as described. 7th. In a bicycle saddle, the combination of a saddle leather, a cantle-bar, a pommel plate fitting the contour of the under side of the saddle leather at the pommel end and fastened to said leather and having a perforation therethrough on the medial longitudinal line thereof, a saddle-bar having a vertical end provided with a notch therein near the end into which the edge of the perforation in the pommel plate is adapted to fit, said saddle-bar extending backward to and beyond the cantle plate, and an adjustable device for fastening said saddle-bar to the cantle plate whereby the saddle leather may be adjusted as to tension, and means for fastening said saddle-bar to a bicycle, substantially as described. 8th. In a bicycle saddle, the combination of the perforated pommel plate C, having one or more perforations c therethrough, the cantle-bar B provided with

the adjustable clamping devices as the lug b, and set screw b^1, the saddle leather A, permanently fastened to said pommel plate and to said cantle-bar, the saddle-bar D having a vertical end provided with a button d, on one end fitting into any perforation c, said bar D extending from the pommel plate backward under the saddle leather to and through the clamping device of the cantle-bar and thereby adjustably fastened thereto and a separate clamp for fastening said bar D to a bicycle, substantially as described.

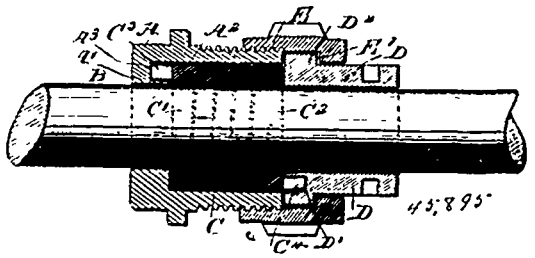
No. 45,894. Mower. (*Faucheuse.*)



Marian Szukalski, Newton, Wisconsin, U.S.A., 25th April, 1894; 6 years.

Claim.—1st. An attachment for mowers, the same being a forwardly extended plate that connects at its rear with the cutting apparatus of such a machine, a thimble on the underside of the plate for the reception of the point of a finger forming part of said apparatus, and a spring-metal rod on the plate, the front portion of the rod being turned downward and its rear portion inclined upward, substantially as set forth. 2nd. A mower combined with a bar having an angular outer end, clamp-plates and bolts connecting the bar with the rear portion of the cutter-bar of the mower, a swath separating device connected to the outer end of the former bar and the outer mower-shoe in advance of said cutter-bar, a series of vine-lifters connected to the clamp-bolts and guard-fingers of said mower also in advance of the aforesaid cutter-bar, and a series of fingers extended rearward from the rear bar, these fingers being of variable length, curvature and elevation, substantially as set forth.

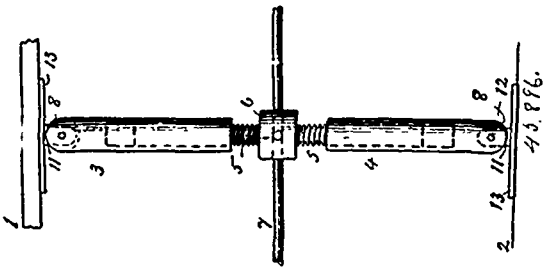
No. 45,895. Metallic Packing. (*Garniture métallique.*)



Frederick Arthur Ives, Grant's Pass, Oregon, U.S.A., 25th April, 1894; 6 years.

Claim.—1st. A metallic packing provided with a coil having uncut ends forming steam tight bearing faces, substantially as described. 2nd. A metallic packing provided with a coil having uncut ends forming bearing faces, and pins extending from the faces of the said ends, substantially as described. 3rd A metallic packing, comprising a coil having uncut ends provided with pins, of which the pins at one end engage recesses in the fixed casing, a gland having recesses engaged by the pins in the outer ends of the coil, and a nut screwing on the casing and engaging the said gland to hold the latter in place, substantially as described. 4th. A metallic packing, comprising a casing, a coil held in the said casing and provided with pins engaging recesses in the bottom of the casing, a gland abutting on the said casing, a nut for holding the gland in place, and a yieldingly mounted collar in the said gland and connected with the said coil, substantially as shown and described.

No. 45,896. Street Car Jack. (*Cric pour chars de rue.*)

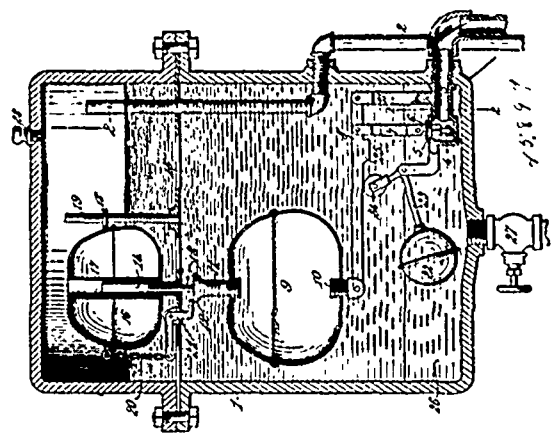


George F. Pearson, Lowell, Massachusetts, U.S.A., 26th April, 1894; 6 years.

Claim.—A screw-jack, having a screw turning internally and oppositely threaded upper and lower members having slotted curved outer ends, a base and a head, each provided with a tongue for entering the appropriate end slot, and pins pivoting the tongues in place while permitting them to bear against the heads of the slots, substantially as set forth. 2nd. In a screw jack, an upper and a lower member having internal screw threads in opposite courses, a screw adapted to work in the same and having a nut at its middle whereby both end members may be simultaneously moved in opposite directions, a base and a head, each having a tongue pivoted in an end slot in its appropriate member, whereby objects may be lifted and the jack swung laterally in a vertical plane only, substantially as set forth.

No. 45,897. Steam Trap.

(*Purge de tuyau de vapeur.*)

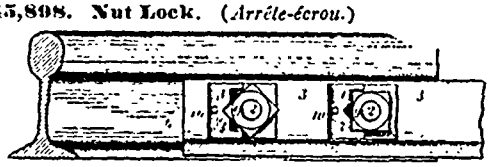


John Q. C. Searle, Chicago, Illinois, U.S.A. 26th April, 1894; 6 years.

Claim.—1st. The combination of a casing or tank, a valve, a float connected with and adapted to open said valve periodically, an automatic locking mechanism to restrain the movement of said float and keep the valve closed until the trap is ready for discharge, and an automatic locking mechanism adapted and arranged to hold the valve open until the trap is discharged and then permit the closing of the valve. 2nd. In an automatic and periodically discharging trap, the combination of a valve for controlling an eduction pipe, a float connected with and adapted to open said valve periodically, means for automatically locking and releasing said float, whereby the valve is kept closed until the trap is ready for automatic discharge, and a locking mechanism for holding the valve open until the trap is discharged. 3rd. In an automatic and periodically discharging trap, the combination of a valve, a lever through which said valve is operated, a float connected with said lever in position to be normally submerged and adapted to operate said lever to open the valve periodically, an automatic locking mechanism adapted to restrain the movement of said float to keep the valve closed until the trap is ready for automatic discharge, and an automatic locking device adapted and arranged to act on the valve lever to prevent the valve from closing until the trap is discharged and then permit the closing of the valve. 4th. In an automatic and periodically discharging trap, the combination of a valve for controlling an eduction pipe, a float connected with said valve in position to be normally submerged and adapted to open the valve periodically, means for automatically locking and releasing said float, whereby the valve is kept closed until the trap is ready for automatic discharge, a guide for said float, and an automatic locking mechanism adapted and arranged to hold the valve open until the trap is discharged and then permit the closing of the valve. 5th. In an automatic and periodically discharging trap, the combination of a valve for controlling an eduction pipe, a float connected with and adapted to open said valve periodically, a locking mechanism adapted and arranged to engage said float and keep the valve closed until the trap is ready for automatic discharge, a float for automatically actuating said locking mechanism to open the valve, guides for said floats, and means for holding the valve open until the trap is discharged. 6th. In an automatic and periodically discharging trap, the combination of a balanced valve for controlling an eduction pipe, a valve lever connected with said valve, a float connected with said lever for operating the same to open the valve, an automatic locking mechanism connected with the float and adapted to keep the valve closed until the trap is ready for a complete automatic discharge, and an automatic locking mechanism adapted and arranged to act on the valve lever to prevent the valve from closing until the trap is discharged and then release said lever and permit the closing of the valve. 7th. In an automatic and periodically discharging trap, the combination of a balanced valve, a valve lever, a float connected with said lever in position to be normally submerged before the trap is discharged and adapted to raise said lever to open the valve periodically, an automatic locking lever connected with and actuated by said float to keep the valve closed until the trap is ready for a complete automatic discharge, and a float provided with an auto-

matic locking mechanism adapted and arranged to act on the valve lever to prevent the valve from closing until the trap is discharged and then release said lever and permit the closing of the valve 8th. In an automatic and periodically discharging trap, the combination of a balanced valve for controlling an eduction pipe, a valve lever fulcrumed at one end and having a link connected with said valve, a rod pivotally connected with one end of said valve lever and carrying a float, an automatic locking mechanism connected with the float and adapted to keep the valve closed until the trap is ready for a complete automatic discharge, and a float provided with an automatic locking device adapted and arranged to act on the valve lever to prevent the valve from closing until the trap is discharged and then release said lever and permit the closing of the valve. 9th. In an automatic and periodically discharging trap, the combination of a balanced valve for controlling an eduction pipe, a valve lever fulcrumed at one end and having a link connected with said valve, a rod pivotally connected with one end of said valve lever, one or more floats attached to said rod, an automatic locking lever connected with and actuated by one of said floats and adapted to keep the valve closed until the trap is ready to be discharged at one operation, and a two armed lever having a float on one arm and provided on its other arm with a locking device adapted to engage the under side of the valve lever and keep the valve open until the trap is discharged. 10th. In an automatic and periodically discharging trap, the combination of a balanced valve for controlling an eduction pipe, a valve lever fulcrumed at one end and connected with said valve, a rod pivotally connected to one end of said valve lever, a float attached to the upper portion of said rod and adapted to open the valve, a float mounted on the lower portion of said rod in position to be normally submerged before the trap is discharged, an automatic locking lever connected with and actuated by the upper float, and adapted to keep the valve closed until the trap is ready to be discharged at one operation, a two-armed lever, a float attached to one arm of said lever, and a friction wheel carried by the other arm of said lever, and adapted to engage the under side of the valve lever to keep the same raised and prevent closing of the valve until the trap is discharged.

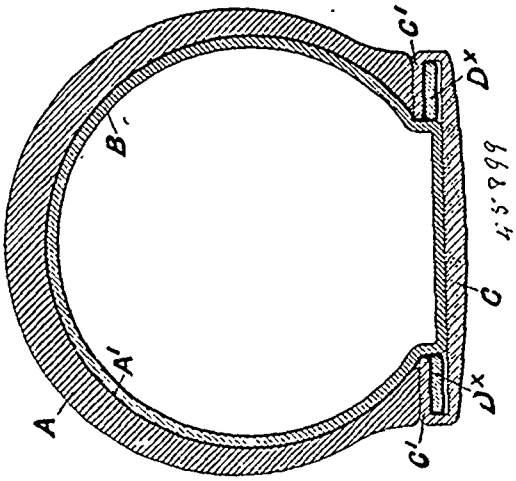
No. 45,898. Nut Lock. (*Arrête-écrou.*)



William W. Owens, Peterboro', Ontario, Canada, 26th April, 1894; 6 years.

Claim. 1st. A nut lock constructed preferably of a rectangular plate of mild steel, and having a bolt-hole near one extremity located at unequal distances from the end and side limits, an increment to engage a nut to secure it from turning, and increments formed transversely opposite in the longer sides, substantially as shown and described. 2nd. A nut-lock constructed preferably of a plate of tough steel and having a bolt-hole near one end located at unequal distances from the end and side limits, an increment to fit a nut at the opposite end, curved increments opposite one another on the longer sides as described, and a hole near the increment in the end to provide for turning a portion round to engage a nut over said hole at unequal distances from the limits, substantially as shown and described.

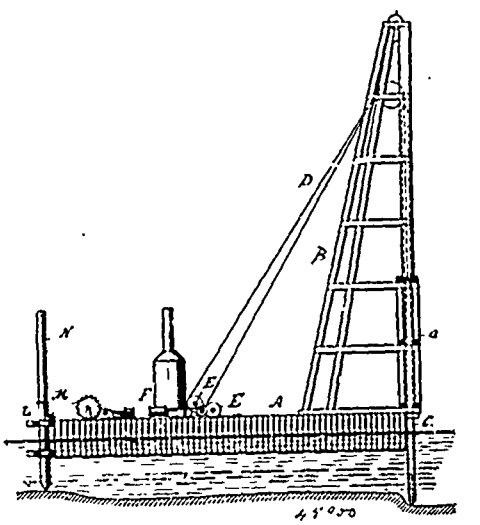
No. 45,899. Pneumatic Tire. (*Bandage pneumatique.*)



James W. Smallman, 61 Chancery Lane, Middlesex, England, 26th April, 1894; 6 years.

Claim 1st A pneumatic tire secured to a rim, substantially as described with reference to the accompanying drawings. 2nd. A pneumatic tire and rim constructed, substantially as herein described, the same comprising a cover, an expansible metallic fastening ring attached to one of the edges of the cover, an air-tube lying within the cover, a groove or recess beneath a turned-over edge of the rim, such groove or recess being adapted for the reception of and corresponding in shape with the fastening ring, which is prevented from expanding by the turned over edge, and means for locking said fastening ring to the rim in order to avoid creeping of the tire. 3rd. An improved pneumatic tire and rim constructed substantially as herein described, the same comprising a cover, a fastening ring attached to one of the edges of the cover and made from a length of metal or other material, the ends whereof are brought close together but left unjoined, an air tube lying within the cover, a groove or recess beneath a turned over edge of the rim, and a flat piece of metal secured in the rim across the groove or recess, so as to occupy the space between the unjoined ends of the fastening ring, the fastening ring being prevented from expanding or creeping by moving it under the turned-over edge.

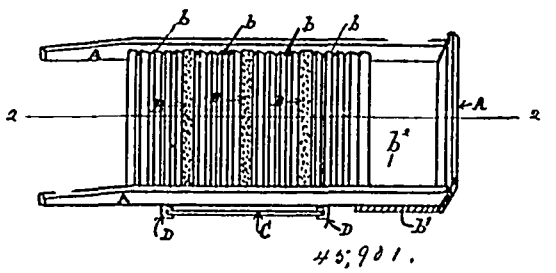
No. 45,900. Sub-Aqueous Rock Breaker.
(*Brise-roche subaquatique.*)



Peter S. Ross, Newark, New Jersey, U.S.A., 26th April, 1894; 6 years.

Claim.—1st. The combination of a boat, a winding drum and a derrick carried by the boat, and a pounding weight permanently connected to the drum by means of a cable, the cable and weight being connected together through the intermediation of a cushion connection, substantially as set forth. 2nd. The combination of a boat, a spud carried by the boat, a drum shaft mounted on the boat and carrying a rotatable hoisting drum connected to the spud, a second independently rotatable drum carried by said shaft, an anchor connected to said second drum, said drums being adapted to be independently connected to the drum shaft, and mechanism for driving the shaft, substantially as set forth. 3rd. A rock-breaking chisel having a wedge-shaped end made of iron, and provided with a flat core of steel welded into the iron and extending laterally through the chisel and upward from the edge of the wedge, substantially as set forth. 4th. The combination of a pounding weight, and a cable permanently attached to the weight through the intermediation of a cushioned connection, substantially as set forth. 5th. The combination of a pounding weight provideed with a slot, a bolt passing through the slot and engaging therein a link, a link-ring engaging the upper end of the link, a bolster passing through the link and resting upon the weight and beath the link-ring, and a cable permanently connected to the link-ring, substantially as set forth. 6th. The combination of a pounding weight provided with a slot, a counter-sunk sealed bolt passing through the slot threading a thimble in the slot and engaging a link therein, a link-ring engaging the upper end of the link, a wooden bolster passing through the link and resting upon the weight and beneath the link-ring, substantially as set forth. 7th. An iron tubular spud-well provided with a longitudinal gutter and with an aperture in the gutter, and carrying a pulley arranged in line with said aperture, substantially as set forth. 8th. A spud comprising a long iron body porcion tubular throughout its length, and an iron shoe having a circumferential shoulder, the tubular body overlapping the shoe and resting upon the shoulder, substantially as set forth. 9th. A spud comprising a long iron body portion tubular throughout its length, and an iron shoe carrying an eyebolt and having a circumferential shoulder, the tubular body overlapping the shoe and resting upon the shoulder, and a chain attached to the eyebolt, substantially as set forth.

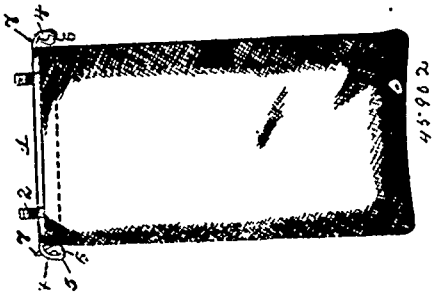
No. 45,901. Wash Board. (*Planche à laver.*)



David C. Juleson, Chicago, Illinois, U.S.A., 26th April, 1894; 6 years.

Claim. The combination of zinc sections *b* and the brushes B in a wash board, substantially as and for the purposes hereinbefore set forth.

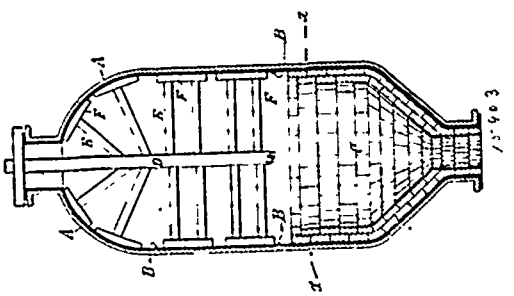
No. 45,902. Bag Holder. (*Accroche-sac.*)



Finley G. Wade, Holly, Michigan, U.S.A., 26th April, 1894; 6 years.

Claim.—In a bag holder, the combination with a bowed frame having fastening devices secured within the bowed portions, of the bifurcated brackets, secured to the extreme ends of the frame, the catches with operating handles pivoted in the bifurcated portions of the brackets, and the limiting pins, for said operating handles, substantially as and for the purposes specified.

No. 45,903. Digester. (*Pourissoir.*)

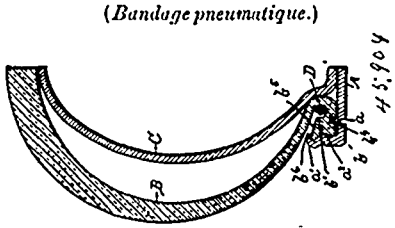


Eugene Meurer, Palmer Falls, New York, U.S.A., 26th April, 1894; 6 years.

Claim.—The combination with the outer shell of a bulb digester or similar vessel of a lead lining fitted as a continuous sheet against the inner face of the shell, but not secured thereto, and an inner lining of acid-proof blocks fitted against the lead lining.

No. 45,904. Pneumatic Tire.

(*Bandage pneumatique.*)

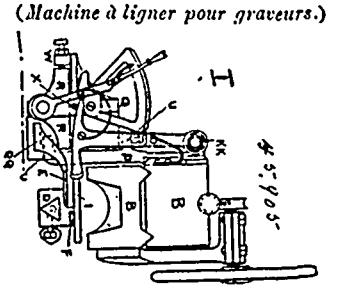


Joseph G. Mooney, Erie, Pennsylvania, U.S.A., 26th April, 1894; 6 years.

Claim. - 1st. In a pneumatic tire, the combination with the casing thereof, of a stiffened binder flap that normally turns back in close proximity to said casing to substantially the same position when off said rim as assumed by said flap when in place upon said rim. 2nd. In a pneumatic tire, the combination with the rim of the wheel, of the tire having an outwardly turned flap on its inner periphery, a binder in the space between the tire and said flap, and a frictional fastener for holding said binder circumferentially. 3rd. In a pneumatic tire, the combination with the rim of the wheel, of the tire having outwardly turned flaps on its inner periphery, binders in the spaces between the tire and said flaps that are wound around said wheel upon said flaps a plurality of times, and frictional fasteners for holding said binders circumferentially. 4th. In a pneumatic tire, the combination with the rim of the wheel, of the tire having outwardly turned flaps on its inner periphery, binders in the spaces between the tire and said flaps and frictional fasteners for holding said binders circumferentially, the grip of which is increased by the inflation of the tire. 5th. In a pneumatic tire, the combination with the rim of the wheel, of the tire having an outwardly turned flap on its inner periphery in which is a binder recess, and a binder on said flap in said recess of greater length than the circumference of the wheel that is held circumferentially by the frictional contact of said binder with the walls of said recess. 6th. In a pneumatic tire, the combination with the rim of the tire, an outwardly turned flap on said tire, and a string binder wound or coiled several times around said rim within the space between the flap and the tire. 7th. In a pneumatic tire, the combination with the rim of the tire, an outwardly turned flap on said tire, and a binder wound or coiled several times around said rim within the space between the flap and the tire.

No. 45,905. Ruling Machine for Engravers Use.

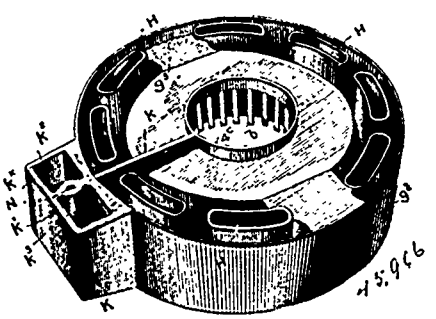
(*Machine à ligner pour graveurs.*)



Edwin Fanshaw, Sheffield, York, England, 26th April, 1894; 6 years.

Claim.—1st. In an engravers ruling machine, the triangular bar C, fitted with rest D, templet-curve E, slide F, rule I, and clamping screw H, constructed and arranged as hereinbefore described. 2nd. In an engravers ruling machine, the mechanism for producing perspective effects, being the combination with the worm shaft A^1, of a bar C^1, a ratchet wheel, and loose disc F, provided with a pawl to engage with teeth of said ratchet wheel, disc G^1, traverse screw D^1, connecting rod H^1 pivoted upon the disc F^1, a bar J^1, screw K^1, and slide L^1, with stops M^1, all arranged and working together, substantially as hereinbefore described and as illustrated. 3rd. In an engravers ruling machine, the rule I, and its regulating mechanism consisting of its toothed segment J, worm M, and movable carrier N, as described. 4th. In an engravers ruling mechine, the improved tool carrier R, the arm E E, with eccentric Y, and lever L L and the projection S with retaining groove and pin V and X, constructed and arranged as hereinbefore described.

No. 45,906. Furnace. (*Fournaise.*)

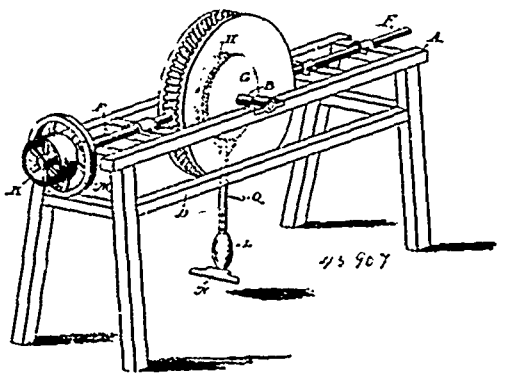


George A. Watson, Toronto, Ontario, Canada, 26th April, 1894; 6 years.

Claim.—1st. In a sectional boiler, the fire-pot section having double walls whereby a fire-pot and a surrounding water space are formed therein, said fire-pot having a contracted upper portion forming the mouth of the fuel magazine, a partition extending across said annular water space from the outer to the inner wall and to the mouth of the fuel magazine, and inlet and outlet ports arranged on opposite sides of said partition, substantially as set forth. 2nd. The combination in a furnace of a casing, a grate arranged therein, a hollow fire pot section having its lower portion arranged

above said grate whereby an annular gas-space is formed between said grate and fire-pot section, said fire-pot section being provided with a series of depending fingers separating said gas space from the combustion-chamber, and a series of draft flues extending through the hollow of the fire-pot section and connecting at the lower ends with the said gas-space, substantially as set forth. 3th. The combination in a furnace of a fire-pot section having double walls whereby an annular water-space is formed therein, a grate below the same whereby an annular gas-space is formed between said grate and fire pot section, a series of gas-flues extending through said water-space and connecting at their lower ends with said gas-space, and a series of air-flues extending horizontally across said water space and connecting at their inner ends with the interior of the fire-pot above said gas-space, substantially as described. 4th. The combination in a furnace, or a grate, a fire pot section arranged above said grate and having double walls whereby a central fire-pot and a surrounding water-space are formed therein, a series of glass flues extending vertically through said water space, and a series of air-flues extending horizontally through said water space and connecting at their inner ends with the interior of the fire pot section above the lower ends of the gas-flues, substantially as set forth. 5th. In a boiler furnace the combination of the grate, the fire pot section above the same having an annular water chamber surrounding the fire pot, upwardly leading gas-flues or tubes ,passing through the water-chamber, and the draft-tubes external to the fire-pot section and communicating with the upper part of the fire pot, so that the currents of air pass upwardly outside of the walls of the furnace, inwardly into the upper part of the fire pot, downwardly through the same, and then upwardly through the internal gas flues of the fire pot section, substantially as set forth.

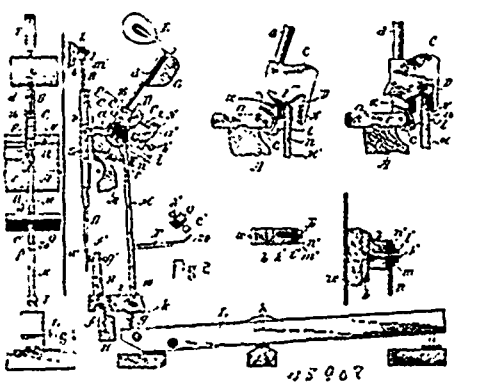
No. 45,907. Propelling Machine. (*Machine de propulsion.*)



Samuel Russell and Robert C. Russell, both of Dundalk, Ontario, Canada, 26th April, 1894; 6 years.

Claim.- 1st. The combination in a propelling machine of a suspended vibrating pendulum-lever D, with a movable weight L attached to said pendulum-lever for the purpose of producing power by the vibrations of the said pendulum lever, substantially as described. 2nd. The combination of two similar wheels C, C each of which is a pulley and gear wheel combined, being upon the same axle B, and meshing simultaneously into the same pinions E, E, are kept in constant revolution by the oscillations of the pendulum lever D, shown by the drawing.

No. 45,908. Upright Piano Action.
(*Action de piano droit.*)

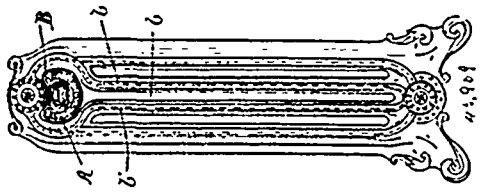


Louise Adams Guild assignee of George Morse Guild, both of Boston, Massachusetts, U.S.A., 28th April, 1894; 6 years.

Claim.—1st. In an upright-piano action, the combination of the hammer, the lifter-rod and jack and the jack-butt co-operating therewith, said jack-butt forming a portion of the hammer-heel, a back-stop projecting from the hammer-heel and adapted to contact with the free end of the lifter-rod and jack when the latter is thrown off its seat on the jack-butt, and a back catch arm or rod projecting from the lifter rod and jack and having an upward incline at its outer end adapted to catch or nook under a rail or a button or projection secured thereto, substantially as set forth. 2nd. In an upright-piano action, the combination of the hammer, the lifter-rod and jack, and the jack-butt co-operating therewith, said jack butt forming a portion of the hammer heel, a back-stop projecting from the hammer-heel and adapted to contact with the free end of the lifter rod and jack when the latter is thrown off its seat on the jack-butt, the rail A having the incline *s*, the adjustable throwoff-button *q* projecting from the lift-rod and jack and co operating with said incline, and back-catch-arm or rod projecting from the lifter-rod and jack and having an upward incline at its outer end adapted to catch or hook under a rail or a button or projection secured thereto, substantially as set forth. 3rd In an upright piano action, the combination of the lever I, pivoted to the flange of the rail H, the lifter-rod and jack pivoted to the lever I, and provided with the throw-off button *q*, the rail A, with its incline *s*, the hammer and hammer-heel, the latter having the jack butt formed thereon, the back-stop projecting from the hammer heel, the back catch arm or rod P, projecting from the lifter-rod and jack and having the upward incline 20, at its outer end, and the rail Q, provided with a stop under which the outer end of the rod P, is adapted to hook or catch on the ascent of the lifter rod and jack, substantially as and for the purpose described. 4th. In an upright-piano action, the combination of the lever I, pivoted to the flange of the rail H, and actuated by the key L, the lifter rod and jack pivoted to said lever I, and provided with the throw-off button *q*, and the slot *n*, the rail A, with its incline *s*, the hammer and hammer-heel, the latter having the jack-butt formed thereon, the guide pin 1, projecting through the slot *n*, and the spring *p*, the latter connected at one end with the lifter-rod and jack, and at the opposite end with the hammer-heel, all operating substantially as set forth. 5th. In an upright-piano action, the combination of the lever I, pivoted to the flange of the rail H, and actuated by the key L, the lifter-rod and jack pivoted to said lever I, and provided with the throw-off button *q*, and slot *n*, the rail A, with its incline *s*, the hammer and hammer-heel, the latter having the jack-butt formed thereon, the guide-pin 1, projecting through the slot *n*, and the spring *p*, the latter connected at one end with the lifter-rod and jack and at the opposite end with the hammer-heel, the back-stop N, projecting from the hammer-heel, the back-catch arm P, having the upward incline 20, at its outer end, and the rail Q, provided with a stop under which the outer end of said rod P, is adapted to hook or catch on the ascent of the lifter-rod, substantially as described. 6th. In an upright-piano action, the combination of the damper-lever, the latter pivoted to the flange of the rail A, the hammer and hammer-heel, the latter having the jack-butt formed thereon, the lifter-rod and jack, the lever I, pivoted to the rail H, and having the lower end of the lifter-rod and jack pivoted thereto, and the arm R, projecting upward from the rear end of the lever I, and adapted to act directly on the damper-lever to actuate the same on the depression of the key, substantially as set forth. 7th. In an upright piano action, the combination of the damper and damper-lever, the latter pivoted to the flange of the rail A, the hammer and hammer-heel, the latter having the jack-butt formed thereon, the lifter-rod and jack, the lever I, pivoted to the rail H, and having the lower end of the lifter-rod and jack pivoted thereto, and the arm R, projecting upward from the rear end of the lever I, and provided with an adjustable button f^1, adapted to act directly on the damper-lever to actuate the same on the depression of the key, substantially as set forth. 8th. In an upright-piano action, the combination of the damper and damper-lever, the latter pivoted to the flange of the rail A, the hammer and hammer-heel, the latter having the jack-butt formed thereon, the lifter-rod and jack provided with the throw-off button *q*, the rail A with its incline *s*, the lever I pivoted to the flange of the rail H, and having the lower end of the lifter-rod and jack pivoted thereto, the back-stop N projecting from the hammer-heel, the back-catch rod or bar P projecting from the lifter-rod and jack and having its outer end inclined upward as shown, the rail Q co-operating with said bar P, and the arm R projecting upward from the rear end of the lever I, and adapted to act directly on the damper-lever to actuate the same, substantially as set forth. 9th. In an upright-piano action, the combination of the rail A, with its incline *s*, the flange *a*, the hammer E, hammer-heel C, having the jack-butt D formed thereon, the lifter-rod and jack M provided at its free end with the slot *n*, and having the adjustable button *q* co-operating with the incline *s*, the spring *p* having one end connected with the hammer-heel, and the other end with with the lifter-rod and jack, the guide-pin *l* projecting from the hammer-heel and engaging the slot *n*, the lever I pivoted to the flange of the rail H, and having the lifter-rod and jack pivoted thereto, said lever I being provided with the upwardly-projecting arm R adapted to act directly on the damper-lever to actuate the same, the key L provided with the adjusting-screw *g*, the back-stop N projecting from the hammer-heel, the back-catch rod or bar P projecting out from the lifter-rod and jack, and having its outer end inclined upward as shown, and the rail Q provided with a stop under which said bar P

is adapted to catch on the ascent of the lifter-rod, all constructed and arranged to operate, substantially as set forth. 10th. An action for upright-pianos, substantially as described, the same consisting of *the rail A with its incline s*, the flange *a*, hammer E, hammer-heel C, having the jack-butt D formed thereon, the lifter-rod and jack M provided at its free end with the slot *n*, and having the adjustable throw-off button *q* co-operating with the incline *s*, the spring *p* having one end connected with the hammer heel, and the other end with the lifter-rod and jack, the guide-pin *l* projecting from the hammer-heel and engaging the slot *n*, the lever I pivoted to the flange of the rail H, and having the lifter-rod and jack pivoted thereto, said lever I being provided with the upwardly projecting arm R, having the adjustable button f^1, the key L provided with the adjusting screw *g*, the back-stop N projecting from the hammer-heel, and having the adjustable button a^1, the back-catch rod or bar P projecting out from the lifter-rod and jack, and having its outer end inclined upward as shown, the co-operating rail Q provided with a stop under which the bar P is adapted to catch on the ascent of the lifter-rod and jack, the damper *b*, damper-lever B pivoted to the flange *a*, and adapted to be actuated by the arm R of the lever I, and the damper-spring *c*, all constructed and arranged to operate, substantially as described. 11th. In an upright-piano action, the damper-block having a projecting screw provided with a clamping nut or head, in combination with the damper-lever adapted to be clamped by said nut or head against the face of the damper-block, substantially as set forth. 12th. In an upright-piano action, the combination, with the damper lever, of the damper-block *b* provided on one side with a vertical groove i^1, for the reception of the upper end of said damper-lever, the screw k^1 projecting from the damper-block and provided with a nut or head adapted to clamp the damper in place upon the damper-lever, substantially as set forth. 13th. In an upright-piano action, the combination of the damper-lever B, the damper-block *b*, with its vertical groove i^1, the screw k^1 with its clamping-nut or head, and the washer m^1, having the groove n^1, all constructed and operating, substantially in the manner and for the purpose set forth.

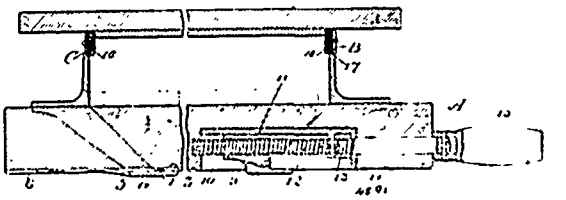
No. 45,909. Radiator. (*Radiateur.*)



James Edmund Henry Paddon, Montreal, Quebec, Canada, 28th April, 1891; 6 years.

Claim.—1st. In a radiator, the combination with a supporting seat formed by a horizontal recess or opening extending longitudinally of the radiator, of a water carrier or evaporator within said recess and partially enclosed by the radiator. 2nd. In a radiator, the combination with a suitable supporting seat formed by a horizontal recess or opening extending longitudinally of the radiator, of a removable water carrier or evaporator-shaped to fit within said recess and enclosed by the sides and top of the radiator. 3rd. In a radiator, the combination with a supporting seat formed by a laterally enlarged or extended horizontal recess or opening extending longitudinally of the radiator, of a removable water carrier or evaporator in the form of a shallow dish or pan-shaped to fit within said recess and partially enclosed by the radiator. 4th. In a radiator, the combination with a supporting seat formed by a horizontal recess or opening substantially semi-circular in cross section and extending longitudinally of the radiator, of a removable water carrier or evaporator of a semi-cylindrical form in cross section to fit within said recess and partially enclosed by the radiator. 5th. The combination with a radiator having a recess B, of the evaporator A, for the purpose set forth.

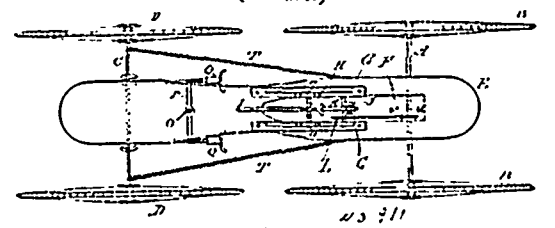
No. 45,910. Clamp. (*Mordache.*)



The Chicago Clamp Company, assignee of William H. Dana, both of Chicago, Illinois, U.S.A., 28th April, 1891; 6 years.

Claim. 1st. In a clamp, a bar, having a longitudinal recess in its lower face, a sliding jaw, a clamping jaw having an arm extending to the lower edge of said bar and provided with an upwardly extending nut located within said recess in said bar, and a revoluble screw threaded rod engaging said nut, as and for the purpose specified. 2nd. In a clamp, a bar having a longitudinal recess in its lower face, a sliding jaw, a clamping jaw having a bifurcated arm embracing the sides of said bar and extending to the lower face of the bar and carrying a nut at its lower end that extends upwardly into said recess, and a revoluble screw threaded rod engaging said nut, as and for the purpose specified. 3rd. In a clamp, a bar having a longitudinal recess in its lower face, a sliding jaw with transverse rib designed to fit into transverse notches made in the lower face of the bar, and a rearwardly extending spring extending into a longitudinal groove made in the lower face of the bar, and a clamping jaw and means for adjusting such clamping jaw located within the recess in the bar, as and for the purpose specified. 4th. In a clamp, a bar having a longitudinal recess in its lower face, a sliding jaw, a clamping jaw having an arm extending to the lower edge of said bar and provided with an upwardly extending nut located within said recess in said bar, and a revoluble screw-threaded rod engaging said nut, the jaws being provided with yielding cushions 16, on their inner faces as and for the purpose specified.

No. 45,911. Vehicle. (*Voiture.*)



William Henry Thompson and George Morris, both of Hamilton, Ontario, Canada, 28th April, 1891; 6 years.

Claim. 1st. In a vehicle driven by hand power, a frame attached to the bottom of the vehicle carrying a shaft passing through an upright lever about six inches from its lower end, a crank shaft, a rod connecting the crank shaft with the bottom of the driving lever, a sprocket wheel on the crank shaft, a sprocket wheel on the rear axle, the two said wheels being connected with a chain belt, all constructed to operate and drive a vehicle by hand, substantially as specified. 2nd. In a vehicle driven by hand, the combination, with wheels B, D, axles A, C, of the frame G, shaft H, operating lever I, connecting rod K, crank J, sprocket wheel L on crank shaft, sprocket wheel M on rear axle chain belt N, connecting both sprocket wheels, substantially as and for the purpose specified. 3rd. In a vehicle driven by hand power, the combination of the bar P, bolt O, stirrup Q, Q, bar R, connecting rods S, S, axle C, with the lever I, shaft H, crank J, connecting rod K, sprocket wheels L, M, and chain belt N, all constructed substantially as and for the purpose specified.

CERTIFICATES OF THE PAYMENT OF FEES FOR FURTHER TERMS HAVE BEEN ATTACHED TO THE FOLLOWING PATENTS.

3318. THE TROTTER REFRIGERATOR COMPANY (assignees), 2nd five years of No. 31,068, from the 8th day of April, 1894. Improvements in Refrigerators, 3rd April, 1894.

3319. WILLIAM T. WALKER, 2nd five years of No. 31,140, from the 13th day of April, 1894. Improvements in the purification of gas, such as used for illuminating purposes, by means of ammonia, and producing certain bye products, 3rd April, 1894.

3320. PHILIP W. PRATT, 2nd five years of No. 31,053, from the 8th day of April, 1894. Improvements in Vacuum Arrows, 3rd April, 1894.

3321. THE KNECHTEL FURNITURE COMPANY (assignees), 2nd five years of No. 32,923, from the 23rd day of November, 1894. Improvements on Extension Tables, 4th April, 1894.

3322. GEORGE W. TAFT, and CHARLES H. BURLEIGH, 3rd five years of No. 19,055, from the 4th day of April, 1894. Improvements on Machines for Making, Repairing and Clearing Roads, 4th April, 1894.

3323. THE TORONTO RADIATOR COMPANY (assignees), 2nd five years of No. 31,088, from the 10th day of April, 1894. Improvements in Reaming Machines, 5th April, 1894.

3324. THE TORONTO RADIATOR COMPANY (assignees), 2nd five years of No. 31,123, from the 12th day of April, 1894. Improvements in Screw Tapping Machines, 5th April, 1894.

3325. HENRY W. ROUNTREE, 2nd five years of No. 31,090, from the 10th day of April, 1894. Improvements in Trunks, 5th April, 1894.

3326. CHARLES J. POTTER, 2nd and 3rd five years of No. 31,559, from the 10th day of June, 1894. Improvements in the manufacture of Mill Stones, 5th April, 1894.

3327. CHARLES C. POST, 3rd five years of No. 19,093, from the 8th day of April, 1894. Improvements on Sap Spouts, 6th April, 1894.

4328. B. D. D. RORISON, and RICHARD BAUGHAM, 2nd five years of No. 31,430, from the 23rd day of May, 1894. Improvements in Garden Hoes, 6th April, 1894.

3329. EDWARD G. THOMAS, 2nd five years of No. 31,079, from the 9th day of April, 1894. Improvements in Organ Pedals, 7th April, 1894.

3330. VALENTINE and COMPANY (assignees), 2nd five years of No. 31,616, from the 18th day of June, 1894. Improvements in Paint, &c., 7th April, 1894.

3331. D. RITCHIE & CO., (assignees), 2nd and 3rd five years of No. 34,579, from the 26th day of June, 1895. Improvements in Machines for making Cigarettes 7th April, 1894.

3332. D. RITCHIE & CO., (assignees), 2nd and 3rd five years of No. 36,801, from the 12th day of June, 1896. Improvements in Cigarette Machines, 7th April, 1894.

3333. CHARLES CLUTHE, 2nd five years of No. 31,093, from the 10th day of April, 1894. Improved instrument for Straightening Club Feet, 9th April, 1894.

3334. SIDNEY McCLOUD and CHARLES E. DOLITTLE 2nd five years of No. 31,116, from the 11th day of April, 1894. Improvements in Machines for Reducing Railroad Rails, 10th April, 1894.

3335. JOHN E. GILL, 3rd five years of No. 19,103, from the 10th of April, 1891. Improvements on Lubricating Oils, 10th April, 1894.

3336. EDWARD S. PIPER, 3rd five years of No. 19,269, from the 13th day of April, 1891. Improvements in Semaphore and other Elevated Signal Lights, 11th April, 1894.

3337. JAY W. CHAPMAN, 2nd five years of No. 31,191, from the 24th day of April, 1894. Improvements on Staves, 13th April, 1894.

3338. JOHN McKENZIE, 2nd five years of No. 31,193, from the 24th day of April, 1894. Improvements in Railway Rail Joints, 18th April, 1894.

3339. THE WM. A. FRAZER WOOD MANUFACTURING COMPANY (assignees) 2nd five years of No. 31,166, from the 20th day of April, 1894. Improvements in Mouldings for Caskets, &c., 20th April, 1894.

3340. HENRY BERTRAM, 2nd five years of No. 31,185, from the 24th day of April, 1894. Improvements in Machines for Planing and Shaping Metals, 20th April, 1894.

3341. ALEXANDER H. HILL, 3rd five years of No. 19,191, from the 25th day of April, 1894. Improvements in Sliding Window Blinds, 23rd April, 1894.

3342. EDWARD A. FLOYD, 2nd five years of No. 31,285, from the 7th day of May, 1894. Improvements in Artificial Teeth, 23rd April, 1894.

3343. THE IMPERIAL OIL COMPANY (assignees), 3rd five years of No. 19,189, from the 24th day of April, 1894. Improvements in the Process and Apparatus for the Fractional Distillation of Hydrocarbon Oils, 24th April, 1894.

3344. THE BELL TELEPHONE COMPANY OF CANADA (assignees), 2nd and 3rd, five years of No. 31,342, from the 11th day of May, 1894. Improved System of Telephonic Communications, 25th April, 1894.

3345. THE BELL TELEPHONE COMPANY OF CANADA (assignees), 2nd and 3rd, five years of No. 31,842, from the 26th day of July, 1894. Improvements in the Constructions of Electric Circuits, 25th April, 1894.

3346. THE BELL TELEPHONE COMPANY OF CANADA, (assignees), 2nd and 3rd, five years of No. 32,545, from the 19th day of October, 1894. Improvements in Connecting Devices for Electric Circuits, 25th April, 1894.

3347. THE DAYTON GLOBE IRON WORKS COMPANY (assignees), 3rd five years of No. 18,253, from the 30th day of April, 1894. Improvements in Turbine Water Wheels, 25th April, 1894.

3348. WM. KYLE, 2nd five years of No. 31,235, from the 2nd day of May, 1894. Improvements in Racks for Agricultural Tools, 26th April, 1894.

3349. DAVID AIKMAN, 2nd five years of No. 31,202, from the 29th day of April, 1894. Improved process for manufacturing Peat Fuel, 27th April, 1894.

3350. THE ONTARIO PEAT FUEL COMPANY (assignees), 2nd five years of No. 31,201, from the 29th day of April, 1894. Improvements in the Process of Manufacturing Peat Fuel, 28th April, 1894.

3351. ROSINA L. MOORE, 2nd five years of No. 31,219, from the 1st day of May, 1894. Improvements in Boilers, 30th April, 1894.

3352. GUSTAV A. CNCKEN, 2nd five years of No. 31,231 from the 2nd day of May, 1894. Improvements relating to the Cutting, Grooving and Bevelling of Wood to form Boards, Staves and the like, and to the Machinery Therefor, 30th April, 1894.

3353. PATTERSON & BROTHERS COMPANY, (assignees), 2nd five years of No. 31,215, from the 2nd day of May, 1894. Improvements in Seed Drills. 30th April, 1894.

TRADE-MARKS

Registered during the month of April, 1894, at the Department of Agriculture—Copyright and Trade-Mark Branch.

4909. M. CALM & BROTHER, of New York, N.Y., U.S.A. Castor Oil for internal use, 2nd April, 1894.

4910. RICHARD JOHN SCORE, of Toronto, Ont., trading as R. SCORE & SON. Trousers and other articles of Clothing, 5th April, 1894.

4911. JUAN LOPEZ, of Havana, Cuba. Cigars and Cigarettes, 6th April, 1894.

4912. 4913. 4914. EDOUARD MARTELL, of Cognac, France. Brandies, 9th April, 1894.

4915. 4916. VALENTINE'S MEAT JUICE COMPANY, of Richmond, Virginia, U.S.A. Extracts of Meat and Compounds thereof, 9th April, 1894.

4917. 4918. THE VICTORIA PHŒNIX BREWING COMPANY, of Victoria, B. C. Bottled Beer, 9th April, 1894.

4919. ROBERT LOVELL GIBSON, of Toronto, Ont., trading as THE GIBSON MALT TABLET COMPANY. Confections, 10th April, 1894.

4920. VILLENEUVE & COMPANY, of Montreal, Que. Cigars, 10th April, 1894.

4921. JAMES LEGGAT, of Montreal Que. Boots and Shoes, 10th April, 1894.

4922. THE BARBOUR BROTHERS COMPANY, of Peterson, New Jersey, U.S.A. Fish Nets, 11th April, 1894.

4923. THE E. B. EDDY COMPANY, LTD., of Hull, Que. Paper, 12th April, 1894.

4924. DOUGLAS JOHN THOMPSON and THOMAS JOHNSON PARKINSON, of Toronto, Ont., trading as the CANADIAN PRESERVIT COMPANY. A Curative and Preservative Compound for keeping butter, cheese, meat, cream, fruit and other perishable goods sound and sweet, 12th April, 1894.

4925. ROBERT KILGOUR, of the firm of Kilgour Bros., Toronto, Ont. Paper Bags, 13th April, 1894.

4926. S. DAVIS & SONS, Montreal, Que. Cigars, 13th April, 1894.

4927. NICHOLAS D. GILBERT and JOHN H. GILBERT, of Picton, Ont. A Proprietary Compound Medicine, 17th April, 1894.

4928. WILLIAM E. PERRY, of Yarmouth, N.S. A Proprietary Medicine, 20th April, 1894.

4929. RUNK, MONTGOMERY & COMPANY, of Montreal, Que. Cigars, 20th April, 1894.

4930. S. DAVIS & SONS, of Montreal, Que. Cigars, 21st April, 1894.

4931. JOHN MICHAELS, doing business together with Henry Jacobs as H. Jacobs & Company, of Montreal, Que. Cigars, 21st April, 1894.

4932. WESLEY GRAY, of Chesley, Ont. Collars and Cuffs, 23rd April, 1894.

4933. MERCK & COMPANY, of New York, N. Y., U. S. A. Antiseptics and Medicines for all Skin Diseases, 24th April, 1894.

4934. LEON LARUE, Jr., of Montreal, Que. Cut and Plug Tobacco and Cigarettes, 25th April, 1894.

4935. A. HUCKELS & COMPANY, of Ottawa, Ont. Mineral Water, 28th April, 1894.

COPYRIGHTS

Entered during the month of April, 1894, at the Department of Agriculture—Copyright and Trade-Mark Branch.

7326. THE STICKIT MINISTER AND SOME COMMON MEN. By S. R. Crockett. Wm. Briggs (Book-Steward of the Methodist Book and Publishing House,) Toronto, Ont., 2nd April, 1894.

7327. McKELLAR'S FARMERS ACCOUNT BOOK. Second edition. Improved and Enlarged. Robt. D. Richardson, Winnipeg, Man., 2nd April, 1894.

7328. HOW TO VAMP. A New Method for Teaching the Art of Playing by Ear Artistic Piano Accompaniments. By Theo La Motte. W. H. Billing, Toronto, Ont., 2nd April, 1894.

7329. LE LAURÉAT. Critique des Œuvres de M. Louis Fréchette par W. Chapman, Québec, Qué., 2 avril, 1894.

7330. MEMOIRS OF THE RIGHT REVEREND EDMUND BURKE. Bishop of Zion. First Vicar Apostolic of Nova Scotia. By Cornelius O'Brien, D.D., Archbishop of Halifax, N.S., 2nd April, 1894.

7331. OH WERT THOU IN THE CAULD BLAST. Vocal Duet. Words by Robert Burns. Music by Dr. E. Dean Marriott. The Anglo-Canadian Music Publishers' Association, Limited, London, England, 3rd April, 1894.

7332. THE CANADIAN ALBUM. Men of Canada; or Success by Example. Vol. III. Edited by Rev. Wm. Cochrane, D.D. Thomas S. Linscott, Brantford, Ont., *4th April, 1894.*

7333. ODDS AND ENDS OF QUEBEC HISTORY, which is now being preliminarily published in separate articles in "The Daily Telegraph." Quebec. (Temporary Copyright) Thomas O'Leary, Quebec, Que., 4th April, 1894.

7334. DANIEL WILSON. (Portrait). William James Thomson, Toronto, Ont., 5th April, 1894.

7335. TWILIGHT SCHOTTISCHE. For Piano, by W. Carkeek. Whaley, Royce & Co., Toronto, Ont., 7th April, 1894.

7336. THE FARMER'S HAND BOOK AND GUIDE. John S. Pearce & Co., London, Ont., 9th April, 1894.

7337. THE ONTARIO DOCKET. Toronto, March, 1894, Vol I. No. 1 (periodical.) Arthur Henry O'Brien, Toronto, Ont., 11th April, 1894.

7338. ABERDEEN POLKA. By Hunter Gowan, Toronto, Ont., 12th April, 1894.

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7348. AN EVERLASTING CALENDAR. Beginning with 15th October, 1582, and ending 28th February, 4000. Giving the information of Easter Sunday from 1700 to 2099. (Chart.) John Wm. Hallman, Toronto, Ont., 17th April, 1894.

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7358. THE MYSTERY OF THE BLIND LINE OF SCALEBY, which is now being preliminarily published in "The Spectator," Hamilton, Ontario. Richard Fergusson Dixon, Hamilton, Ont., 20th April, 1894. (Temporary Copyright.)

7359. NOTICE *Re* PAYMENT OF PREMIUMS ON LIFE INSURANCE POLICIES. Charles McPherson Gripton, St. Catharines, Ont., 24th April, 1894.

7360. INTEREST TABLES AT 3½ PER CENT PER ANNUM. Compiled by Ernest Wellings. William Williamson, Toronto, Ont., 25th April, 1894.

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7362. RALSTON AND WANDS' COMBINATION ENDOWMENT TABLE. Peter Augustus Ralston and Frank Lansing Wands, Bay City, Michigan, U.S.A., 26th April, 1894.

7363. THE GREAT ELECTION, by Professor Campbell, LL.D. Rev. John Campbell, Cote St. Antoine, County of Hochelaga, Que., 27th April, 1894.

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7366. PRIMARY ARITHMETIC. James P. O'Reilly, Toronto, Ont., 30th April. 1894.

7367. PRIMARY ARITHMETIC. Teachers' Edition. James P. O'Reilly, Toronto, Ont., 30th April, 1894.

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