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No. 67,574. Velocipede Crank Axle.
(Essieu coudé de vélocipèdes.)

Fig. 1.

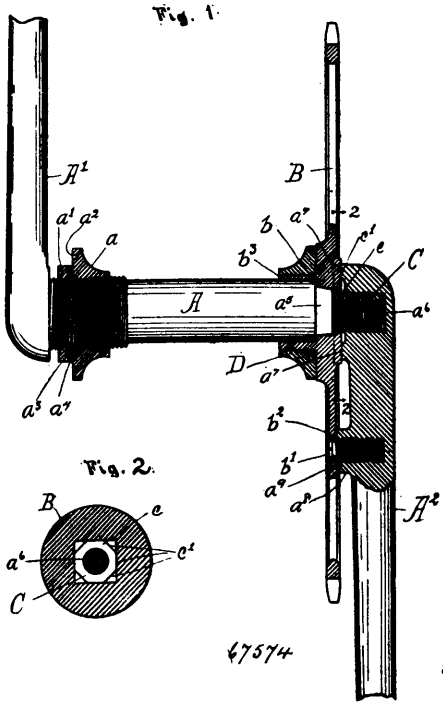


Fig. 2.

67574

The Geo. L. Thompson Manufacturing Company, assignee of James P. Scoville, all of Chicago, Illinois, U.S.A., 1st June, 1900; 6 years. (Filed 2nd August, 1898.)

Claim.—1st. The combination to form a locking device, of a relatively fixed member provided with a threaded portion, an adjusting member having a screw threaded engagement with said fixed member, a locking member having a screw threaded engagement with the adjusting member, a part with which the locking member is adapted to come into locked engagement, and means for holding the adjusting member in various positions of angular adjustment with relation to a given radius of the fixed member whereby the locking member may be brought into locked position with its parts in desired angular relation to the fixed member. 2nd. A velocipede crank axle provided at one end with a tapered angular seat and a reduced and screw threaded portion forming the extreme end of the axle, a sprocket wheel provided with a hub aperture adapted to fit accurately upon said seat and the walls of which overhang or project beyond the seat, an internally and externally screw threaded sleeve fitting upon the end of the axle and provided with an externally angular end portion adapted to fit the angular aperture of the sprocket, a detachable crank arm provided with a socket threaded to receive the sleeve and arranged to bear against the outer face of the sprocket to hold it upon its seat, and means locking the crank arm and sprocket together to form a driving connection. 3rd. A velocipede crank axle provided at one end with a tapered angular seat and a reduced and screw threaded portion forming the extreme end of the axle, a sprocket wheel provided with a hub aperture and adapted to fit accurately upon said seat and the walls of which overhang or project beyond the seat, an internally and externally screw threaded sleeve fitting upon the end of the axle and provided with an externally angular end portion adapted to fit the angular aperture of the sprocket, a detachable crank arm provided with a socket threaded to receive the sleeve and arranged to bear against the outer face of the sprocket to hold it upon its seat, means locking the crank arm and sprocket together to form a driving connection, a bearing cone mounted upon the sprocket, and a second bearing cone adjustably mounted on the end of the axle remote from the sprocket.

No. 67,575. Jacquard Machine. *(Machine jacquarde.)*

The Crompton & Knowles Loom Works, assignee of George W. Stafford and Albert E. Kelmel, both of Providence, Rhode Island, U.S.A., 1st June, 1900; 6 years. (Filed 31st October, 1899.)

Claim.—1st. The combination with the uprights, and the oppositely moving griffs, of the press back wires engaging with prolongations of the stems of the uprights above the hooks thereof, the movable carrier in which the press back wires are mounted, and actuating means for said carrier whereby to move the carrier transversely in the machine and cause said wires to bear the uprights laterally, substantially as described. 2nd. The combination with the uprights, and the oppositely moving griffs, of the press back wires engaging with prolongations of the stems of the uprights above the hooks thereof, the movable carrier for the press back wires, and a cam and pin or roller engaging with said cam, one of the last-mentioned parts being connected with the carrier and the other moved in unison with the griffs, whereby to move the said carrier transversely in the machine, substantially as described. 3rd. The combination with the uprights, and the oppositely moving griffs, of the press back wires engaging with prolongations of the stems of the uprights above the hooks thereof, the movable carrier for the press back wires, and the slotted cam and pin or roller engaging with said cam, one of the last-mentioned parts being connected with the carrier and the other moved in unison with the griffs, whereby to move the said carrier transversely in the machine, substantially as described. 4th. The combination with the uprights, and the oppositely moving griffs, of the press back wires engaging with prolongations of the stems of the uprights above the hooks thereof, the movable carrier supporting the opposite extremities of the said wires, and means to

actuate said carrier whereby to move the same transversely in the machine and thereby cause said wires to bear the uprights laterally,

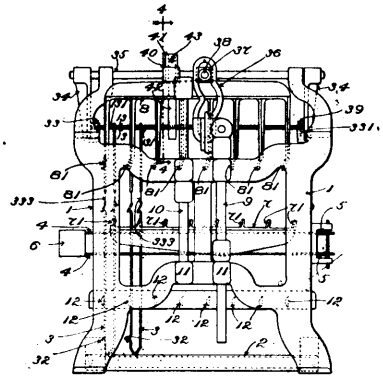


Fig. 1.

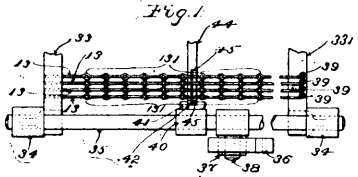


Fig. 2.

67575

substantially as described. 5th. The combination with the uprights, and the oppositely moving griffs, of the press back wires to prevent engagement of a descending upright with an ascending griff, the carrier engaging with the opposite extremities of the said wires and provided with a rest to restrain the intermediate portions of the said wires from movement through their engagement with the uprights, and means to actuate said carrier whereby to cause said wires to bear the uprights laterally, substantially as described. 6th. The combination with the uprights, of the press back wires engaging therewith, the carrier engaging the opposite extremities of the said wires, the rest mounted on the carrier and located at an intermediate point in the length of the wires, and the pins applied to the said rest and holding the wires from movement, substantially as described. 7th. The combination with the upright, of the two wires each having the half eye to receive the limb of the upright, the said half eyes facing in opposite directions, whereby each wire serves to hold the upright in the half eye of the other wire, substantially as described. 8th. The combination with the oppositely moving griffs, of the uprights, and press back devices to prevent engagement of a descending upright with an ascending griff, the said uprights provided with springs to yield under the action of the press back devices and thereby obviate forced disengagement of the hook of an upright from the griff wherewith it is engaged, substantially as described. 9th. The combination with the oppositely moving griffs, of the uprights formed with springs adjacent to the hooks thereof, and press back devices engaging with the said uprights and operating to prevent engagement of a descending upright with an ascending griff, the uprights bending at the spring portions thereof to obviate forced disengagement of the hook of an upright from the griff wherewith it is engaged, substantially as described. 10th. The combination with oppositely moving griffs, of the uprights flattened adjacent to the hooks thereof to produce springs, and press back devices engaging with the said uprights and operating to prevent engagement of a descending upright with an ascending griff, the uprights bending at the flattened spring portions thereof to obviate forced disengagement of the hook of an upright from the hook wherewith it is engaged, substantially as described.

No. 67,576. Lubricator. (*Graisseur.*)

The Penberthy Injector Company, assignee of Elijah McCoy, all of Detroit, Michigan, U.S.A., 1st June, 1900; 6 years. (Filed 17th March, 1900.)

Claim.—1st. In a sight feed lubricator, the combination of a cup having two openings at the top, the support arm connected into one opening, having an oil passage therethrough and a water passage leading from an intermediate point thereon into the cup, a condensation stand pipe connected to the outer end of said passage, and a tube connected to the inner end of said passage and extending to near the bottom of the cup, a sight feed arm connected into the other opening of the cup, and a connecting pipe extending from the delivery passage thereof through the upper part of the cup and connecting into the oil passage of the support arm. 2nd. In a sight feed lubricator, the combination of a cup having two openings at the top on diametrically opposite points, the support arm connected into one opening, having a through oil passage therein, and a water

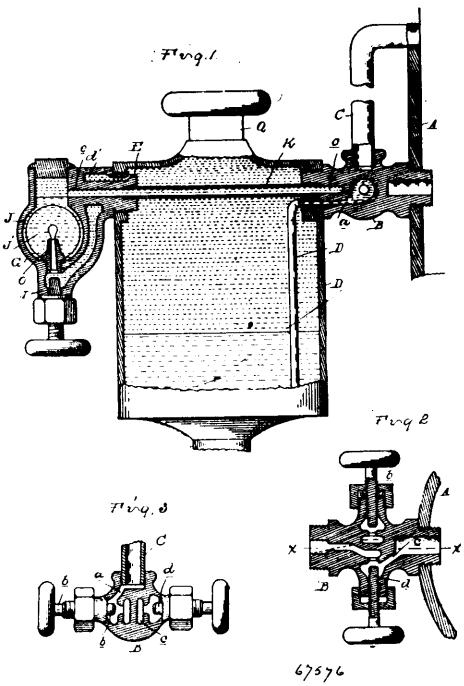


Fig. 1

Fig. 2

Fig. 3

67576

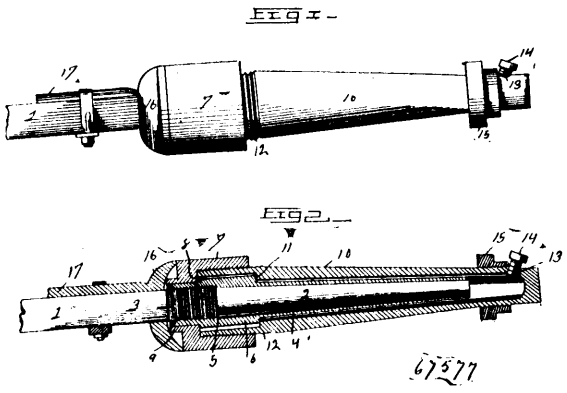
passage leading from an intermediate point thereon into the cup, a stand pipe connected to the outer end of said passage, and a tube connected to the inner end of said passage, and extending to near the bottom of the cup, a single piece sight feed arm connected into the other opening having a controlled oil passage leading from the cup to the bottom of the arm, through a sight feed chamber and back into the cup, and a pipe connecting this oil passage extending across the oil cup and connecting into the oil passage in the support arm. 3rd. In a sight feed lubricator, the combination of a cup having openings at the top, a sight feed arm having its oil discharge opening leading into one of said openings, and a support arm connected into the other opening having an oil passage therethrough, a valve controlling said passage, a tube connecting the oil passage in the sight feed arm to the oil passage in the support arm, a stand pipe connected to said support arm, a tube depending from said support arm in the cup, and a valve controlled passage through the support arm from the stand pipe to the depending tube within the cup. 4th. In a sight feed lubricator, a sight feed arm chambered and comprising a sight feed chamber casing having sight openings on opposite sides thereof, a nipple at one side entering the top of the casing of said lubricator, there being an oil passage in the sight feed arm extending from the upper part of said nipple to the bottom of said sight feed chamber, and an oil passage leading from the top of said chamber through said nipple, and a valve controlling the oil passage to the sight feed chamber. 5th. In a sight feed lubricator, the cup having an opening at the top, a sight feed device connected thereto, comprising a nipple and a body or casing having therein a sight feed chamber, and an oil passage leading in through the nipple and to the bottom of the sight feed chamber, and an opening leading from the top of the sight feed chamber through the same nipple, a connection therefrom to the steam pipe and a condensation supply connection into the cup.

No. 67,577. Axle Box. (*Boite à graisse.*)

Edward Alfriend Perkins, Gordon, Georgia, U.S.A., 1st June, 1900; 6 years. (Filed 24th March, 1900.)

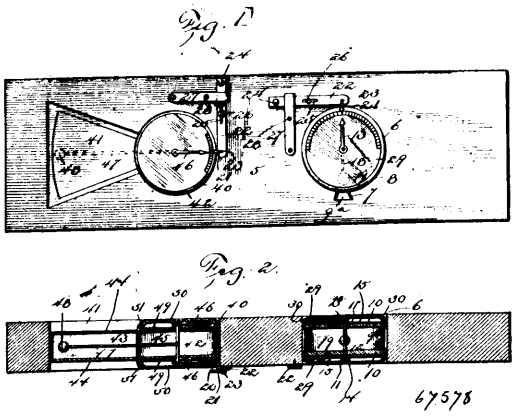
Claim.—1st. The combination with an axle having a screw threaded portion, of a sleeve fitted over the axle and engaging said screw threaded portion which is provided with an enlarged portion intermediate its ends, a coupling having a bearing on the inner end of the sleeve, and provided with a shoulder abutting the inner end of the enlarged portion, a box, free to turn on the sleeve, which has its bore enlarged at its inner end, which loosely receives the enlargement of the sleeve, and providing a shoulder abutting the outer end of the enlarged portion aforesaid, said box having its inner end screwed into the coupling, whereby longitudinal play of the box and coupling is prevented. 2nd. The combination with an axle, of a sleeve fitted thereover, which is screwed into the axle, a coupling having a bearing on the sleeve and held against displacement by the

latter, and a box which receives the sleeve and is connected to the coupling, said box being closed at its upper end, and having a feed



opening for introducing the lubricant to its interior, and a closing device for said opening.

No 67,578. Levelling Instrument. *(Instrument a niveler.)*



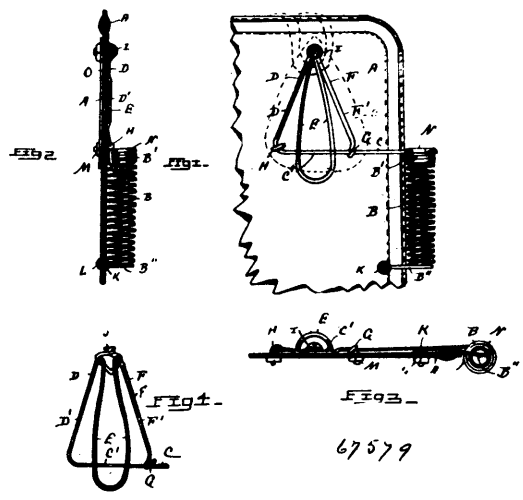
Francis X. Hurtubis, Oswego, New York, U.S.A., 1st June, 1900; 6 years. (Filed 8th May, 1900.)

Claim.—1st. A levelling instrument comprising a beam having transverse openings therein, cylindrical casings fitted in the openings and adapted for oscillation therein, means for limiting the degree of oscillation of the casings, dials carried by the casings, indexes, pivotally mounted upon the casings and having plumb weights connected therewith, fingers carried by the casing and adapted to register with the indexes, slidable plates pivoted to the fingers to oscillate the casings and a spring finger mounted upon the beam and having a clamping screw adapted to clamp it upon the plate to hold the casing in its adjusted positions. 2nd. A levelling instrument comprising a beam having a cylindrical opening therethrough and a communicating angular opening, of a cylindrical casing in the first-named opening and having an extension lying in the second opening, said casing being adapted for oscillatory movement, a dial upon the casing, an index pivotally connected with the casing and having a plumb weight, a slidable plate pivoted to the casing and adapted to reciprocate, a spring finger arranged transversely of the plate and means for clamping the finger against the plate to hold it against slidable movement. 3rd. A levelling instrument comprising a beam having a cylindrical opening therethrough and a communicating angular opening of a cylindrical casing in the first-named opening and having a hollow extension lying in the second opening and corresponding therewith in form, said casing being adapted for oscillatory movement, dials carried by the casing, a spindle pivoted in the casing and having indexes adapted to travel over the dial, a plumb weight in the extension of the casing and adapted to move therein, said weight being connected with the spindle, and means for oscillating the casing.

No. 67,579. Whip and Rein Holder. (*Porte-rêne et fouet.*)

John H. Sullivan, Grand Rapids, Michigan, U.S.A., 1st June, 1900; 6 years. (Filed 24th March, 1900.)

Claim.—1st. As an improved article of manufacture, the hereindescribed rein holder and whip socket consisting of a single piece of wire bent spirally near one end to form the whip socket and having one extremity extended across the axis of the coil at the



lower end thereof and provided with means for attaching it to a support, and the wire at the upper end of the coil extending horizontally therefrom to form the lower member of the rein holder, thence bent inclinatorily upward to form one side of the rein holder, thence downward and upward to form a flexible loop, thence inclinatorily downward to form the other side of the rein holder, said sides diverging from their upper ends to the horizontal member and the flexible loop being disposed intermediate the sides, and the other extremity of the wire being bent around the horizontal member and provided with means for attaching it to the support, substantially as described. 2nd. As an improved article of manufacture, the hereindescribed rein holder and whip socket formed from a single piece of wire, one portion of the wire being bent to form a triangle and a flexible loop vertically disposed between the sides of the triangle, the horizontally disposed side of the triangle having a depressed portion intermediate its ends with which the lower free end of the loop engages, and the other two sides of the triangle having raised portions intermediate their ends, and the extremities of the wire being provided with means for attaching them to a support, substantially as and for the purpose specified.

No. 67,580. Cover for Hams, Bacon, Cheese, etc.
(Couverture pour Jambons fromages.)

John Mitchell, Ayr, Scotland, 1st June, 1900; 6 years. (Filed 29th November, 1899.)

Claim.—1st. The herein described method of preserving hams, bacon, sausages, cheese or other putrescible substances, which consists in covering them with an inner non-adhesive and non-absorbent envelope, such as tissue paper prepared to resist moisture, secondly in surrounding the said envelope by drawing over it a fabric preferably of fine knitted cotton material, and thirdly by immersing the article thus covered in a non-hygroscopic gelatine cement prepared as follows: by mixing a heated alum solution in the proportion of about 2 to 3 lbs. of alum to about 28 lbs. of water with about an equal part of heated gelatine from which the water has been removed and then removing and drying the article thus dipped, substantially as specified. 2nd. The herein described air tight covering for hams, bacon, sausages, cheese, or other putrescible substances, consisting of a non-adhesive and non-absorbent inner envelope, such as tissue paper prepared to resist water, a resistant outer envelope such as a fabric of fine knitted cotton material, and an aluminated non-hygroscopic gelatine cement consisting of about equal parts of a solution of alum in the proportion of about 2 to 3 lbs. of alum to about 28 lbs. of water, and gelatine from which the water has been removed, the mixture being applied to said envelopes at a temperature below 100° centigrade, substantially as described.

No. 67,581. Knitting Machine. *(Machine à tricoter.)*

Binns Kershaw, Manchester, Lancaster, England, 1st June, 1900; 6 years. (Filed 17th January, 1899.)

Claim.—1st. In a circular knitting machine in combination with the needle cylinder, one or more colour troughs furnished with one or more printing wheels, the said colour trough or troughs being arranged in the said cylinder or in close proximity to the outlet end thereof and the said printing wheel or wheels rotated by frictional contact with the knitted fabric, all substantially as set forth. 2nd. In a circular knitting machine, in combination with the needle

cylinder, one or more printing blocks with colour supply arranged in the cylinder or in close proximity to the outlet end thereof, the

Fig. 1.

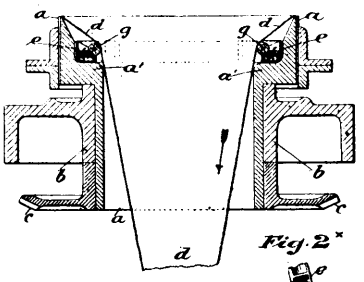


Fig. 2.

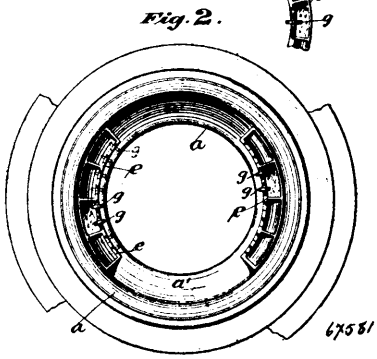


Fig. 2*

said printing block or blocks being adapted to be brought in and out of contact with the knitted fabric, all substantially as and for the purpose set forth.

No. 67,582. Gate. *(Barrière.)*

Fig. 1.

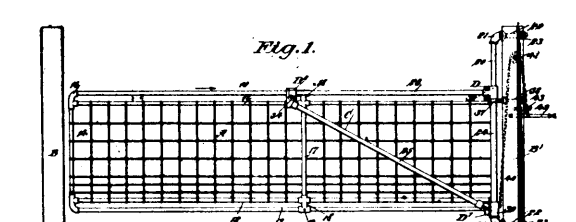
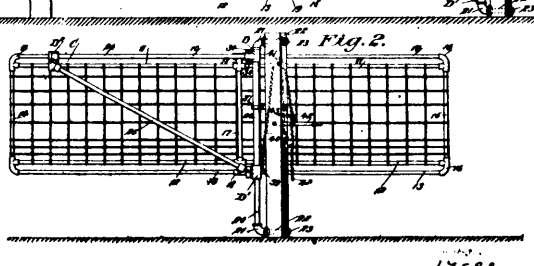


Fig. 2.



Joshua Tennant, Carson City, Michigan, U.S.A., 1st June, 1900; 6 years. (Filed 23rd August, 1899.)

Claim.—1st. In a gate, a swing post, a crane pivotally connected with the said post and mounted for vertical movement upon its pivot, the said crane being of triangular form, each corner of the crane being provided with a fitting and each fitting provided with a guide, the upper fitting adjacent to the swing post being provided with rollers, the upper fitting at the extreme outer end of the crane being also provided with a roller in its guide section, and a gate provided with an upper and a lower auxiliary bar, the upper bar being passed through the guides in the upper fittings of the crane in engagement with the rollers therein, the lower auxiliary bar being passed through the guide of the lower fittings of the crane, for the purpose specified. 2nd. In a gate, the combination with a swing post, a pivot parallel with the post, a crane having a tubular section adjacent to the swing post and mounted to slide and turn upon the pivot connected with the post, the said crane being provided with a fitting at its upper outer corner, its lower inner corner and its upper nner corner, each of the said fittings being provided with a downwardly extending inverted U-shaped guide, the upper fitting at the outer corner of the crane having spaced rollers mounted in its guide portion and the upper fitting at the inner end of said crane being provided with a single roller in its guide section, and means, substantially as described, for raising and lowering said crane. of a gate, the frame of which consists of two upper and two lower bars, end bars connected with the upper and the lower bars, and a body section extending from the innermost upper bar to the innermost lower bar, the upper bar of the gate frame being passed through the upper fittings of the crane in engagement with the single roller on the inner fitting and between the rollers in the outer upper fittings of the crane, the lower bar of the said gate frame being passed through the guide section of the lower fitting of said crane, for the purpose described. 3rd. The combination of a swing post, a triangular frame having vertical movement, mounted on the swing post and provided at each end with a fitting having an off-set guide, the guide being at one side of the crane, a single roller located in the off-set guide of the forward upper fitting, a pair of rollers one above the other located in the upper rear fitting, and a gate, the top bar whereof passes through the guides of the said fittings of the crane, resting upon the single forward roller and passing between the rear double rollers, as set forth.

No. 67,583. Bicycle Frame. *(Cadre de bicycles.)*

FIG. I.

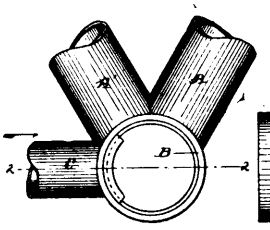


FIG. IV.

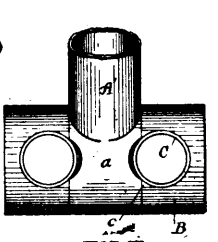


FIG. II.

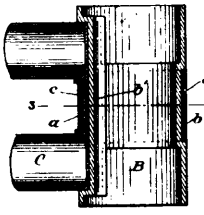
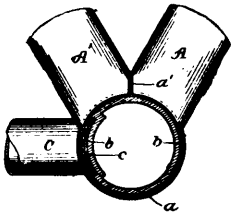


FIG. III.

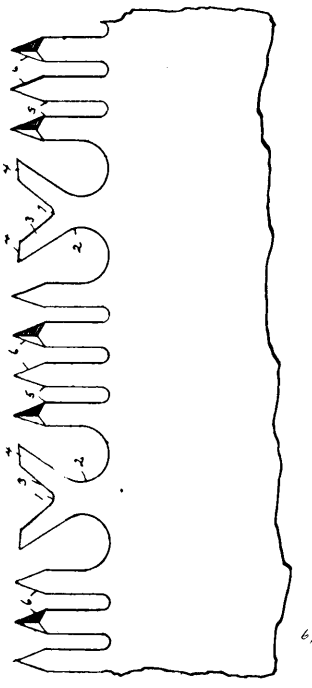


Neff Edward Parish, Cleveland, Ohio, U.S.A., 1st June, 1900; 6 years. (Filed 23rd March, 1900.)

Claim.—1st. In a bicycle frame, the combination of a bearing support, with a single tube, said tube consisting of two angularly arranged portions and an intermediate flattened portion forming a loop to support the bearing support, in such a manner that the inner wall of said loop crosses the ends of the angular members, substantially as set forth. 2nd. In a bicycle frame, the combination of a single tube consisting of two members angularly located relatively to each other, and having an intermediate double-walled flattened portion forming a loop, the inner wall of said loop crossing the ends of the angular members, and a bearing support located in said loop, substantially as set forth. 3rd. In a bicycle frame, the combination of a single tube consisting of two members angularly located relatively to each other, and having an intermediate double-walled flattened portion forming a loop, said double-walled portion longitudinally continuous, the inner wall of said loop crossing the ends of the angular member, and a bearing support located in said loop, substantially as set forth. 4th. In a bicycle frame, the combination of a bearing support with a single tube, said tube consisting of two angularly arranged portions and an intermediate double-walled flattened portion forming a loop, the inner surface of said loop coinciding with the exterior surface of the bearing support, substantially as set forth. 5th. In a bicycle frame, the combination of a single tube, said tube consisting of two angularly arranged portions, and an intermediate portion forming a loop to support the bearing support in such a manner that the inner wall of said loop crosses the ends of the angular members, said inner walls meeting around the bearing support, and a bearing support located in said loop, substantially as set forth. 6th. In a bicycle frame, the combination of a continuous tube consisting of two members angularly located relatively to each other, their joining portion forming a bearing support, and a fork secured to said tube intermediately of the latter and said support, substantially as set forth. 7th. In a bicycle

frame, the combination of a continuous tube consisting of two members angularly located relatively to each other, having a flattened intermediate portion forming a loop, a crank hanger tube secured in said loop, and a fork having a flattened portion joining the two members thereof and secured to said tube intermediately of the latter and said loop, substantially as set forth. 8th. In a bicycle frame, the combination of a continuous tube consisting of two members angularly located relatively to each other, having a flattened intermediate portion forming a loop, a crank hanger formed with a circumferential and a longitudinal depression upon its outer surface, and a fork consisting of two members which are joined by a flattened portion, said loop secured in said circumferential depression and said flattened portion secured in said longitudinal depression intermediately of said tube and loop, substantially as set forth.

No. 67,584. Saw Blade. *(Lame de scie.)*



Charles E. Guenther, Knowlton, and Peter Murray, Wausau, both in Wisconsin, U.S.A., and Edward Layton Anderson, Whitney, Ontario, Canada, 1st June, 1900; 6 years. (Filed 18th May, 1900.)

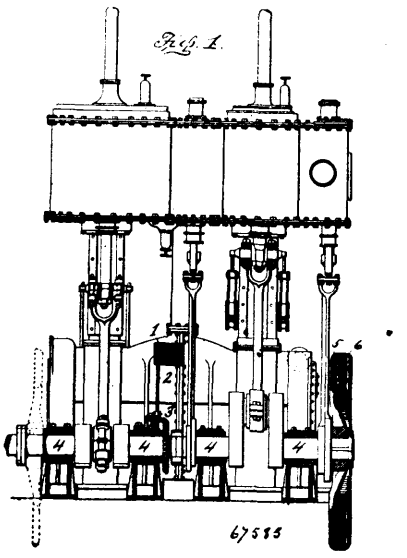
Claim.—The design for a saw blade, substantially as shown and described.

No. 67,585. Engine Governor.

(Gouverneur de machine à vapeur.)

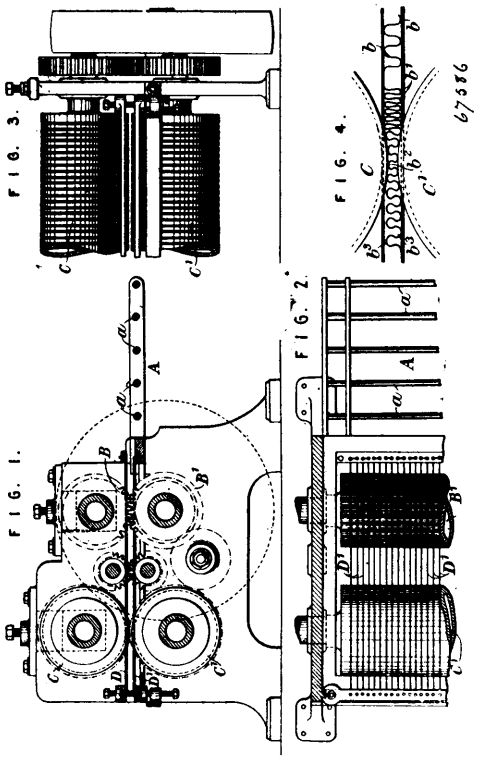
Elmer Ambrose Sperry, Cleveland, Ohio, U.S.A., 1st June, 1900; 6 years. (Filed 15th March, 1900.)

Claim.—1st. As a governor for prime movers, a rotating shaft, a member connected for rotation with the shaft, presenting a braking face, a non-rotatable brake co-operating with such face, and an automatic means for varying the brake application. 2nd. As a governor for prime movers, a rotating shaft, a member connected for rotation with the shaft, presenting a braking face, a non-rotatable brake co-operating with such face, and electrically actuated means for varying the brake application. 3rd. As a governor for prime movers, a rotating shaft, a member connected for rotation by the shaft, presenting a braking face, a non-rotatable brake co-operating with such face, electrically actuated means for varying the brake application, a mechanically driven electrical generator supplying the said means, and a driving connection between the generator and the mover. 4th. As a governor for prime movers, a rotating shaft, presenting a braking face, a non-rotatable water jacketted brake co-operating with such face, and means for automatically varying the braking pressures. 5th. As a governor for prime movers, a friction brake rotatably connected with the mover, a device for cutting off or restriction of the energy located between the source of supply and the mover, and a common means for actuating both the device and the brake. 6th. As a governor for prime movers, a disc rotatably connected with the shaft of the mover, presenting a moving face or faces, an electro-



magnetic system, presenting a magnetic surface or surfaces, co-operating with the faces of such disc, and means for varying the electrical supply to the magnet. 7th. As a governor for prime movers, a disc rotatably connected with the shaft of the mover, presenting a moving face, an electro-magnetic system, presenting a magnetic surface, co-operating with the face of such disc, means for varying the electrical supply of the magnet responsive to the speed changes of the prime mover and an independent manually actuated means of control. 8th. As a governor for prime movers, a disc rotatably connected with the shaft of the mover, presenting a moving face, an electro-magnetic system, presenting a magnetic surface, co-operating with the face of such disc, and means for reversing the direction of the current in the magnet. 9th. As a governor for prime movers, a disc rotatably connected with the shaft of the mover, presenting a moving face, an electro-magnetic system, presenting a magnetic surface, co-operating with the face of such disc, means for varying the electrical supply to the magnet and a step-by-step controller for the electrical circuits of the magnet. 10th. As a governor for prime movers, a disc rotatably connected with the shaft of the mover, presenting a moving face, an electro-magnetic system, presenting a magnetic surface, co-operating with the face of such disc, means for varying the electrical supply to the magnet, and means called into action by the motion of the braking members for reversing the direction of current to the brake. 11th. In a system of governing for prime movers, an electrical braking device and a governor responsive to speed change, each rotatably connected with a moving part, a source of electrical supply, a plurality of switches for handling the electrical energy to the brake and operating connection between the switches and the governor. 12th. In an electrical braking system for movers, a power-driven electrical switch for controlling the electrical energy to the brake, a catch for holding the switch out of action and means for releasing the catch. 13th. In an electrical braking system for movers, a power-driven electrical switch for controlling the electrical energy to the brake, a catch for holding the switch out of action, and means operated by a governor responsive to speed changes for actuating the catch. 14th. As a governor for marine engines, a plurality of systems of rotating weights, one actuated by each system of weights, and means for mechanically coupling the parts for opposite movement. 15th. In an electrical brake for movers, a multipolor magnet presenting a plurality of independent electro-magnetic circuits, electrical conductors suitably disposed in reference to the poles, and a plurality of terminals for the said conductors. 16th. In a governor for prime movers, a throttle for the energy or fuel supply, a piston for operating such throttle, a floating link valve operating system controlling said piston, an electro-magnet for controlling one of the pivots of the link, and a means for regulating the current supply to the electro-magnet. 17th. In a governing system for an engine, a disc upon the engine shaft, and a co-operating non-rotatable friction clutch mounted upon the main engine frame or bed. 18th. In an electro-magnet friction device, a disc having circular grooves in its face, transverse grooves connecting the circular grooves, leaving sector-like projections and windings disposed within the grooves wound upon three sides only of the said projections.

No. 67,586. Machinery for Corrugating Paper.
(*Machine à gaufrer le papier.*)



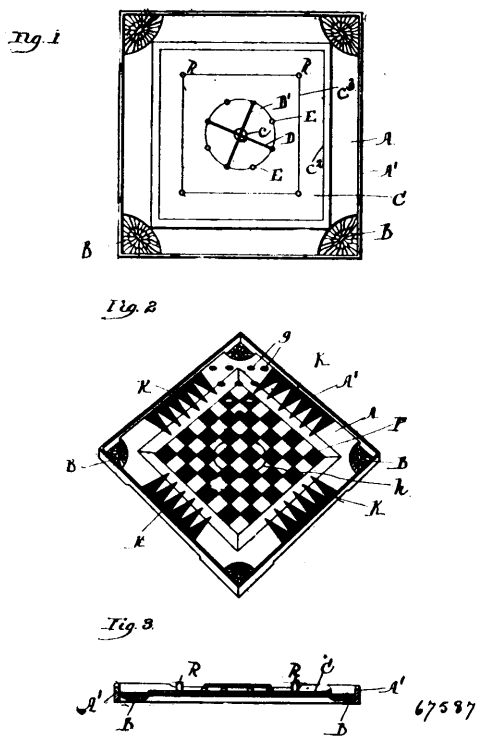
The Protective Packing Paper Company, London, England, assignee, of Gustav Leske, 70 Bleumstrasse, Berlin, Germany, 1st June, 1900; 6 years. (Filed 10th May, 1899.)

Claim.—1st. In a machine for corrugating paper, the combination of heated corrugating rollers, wire grids, and heated pressing rollers arranged to exert such pressure upon the paper that the ridges thereof are spread out laterally so as to overhang the valleys, the wire grids being passed through grooves in the corrugating and pressing rollers, which latter are placed at such a distance apart that the ridges of the paper are only bent outwards and are not creased, substantially as described. 2nd. In a machine for corrugating paper, rollers having teeth of a greater depth at the one end than at the other and also made of a more angular form, substantially as and for the purpose described. 3rd. In a machine for corrugating paper such as described, travelling endless helical wire grids, such travelling helical wires being passed round grooves in the pressing rollers and round special grooved transporting rollers arranged between the pressing rollers and the corrugating rollers, substantially as described. 4th. In a machine for corrugating paper such as described, transporting rollers, round which the helical wires pass, having separate rings rotatable upon the other parts of the rollers, substantially as described. 5th. In a machine for corrugating paper, such as described, special rollers such as F, F¹ that may be provided with grooves and teeth, located between the pressing rollers and corrugating rollers or between these and the transporting rollers, substantially as described.

No. 67,587. Game Board. (*Tableau de jeu.*)

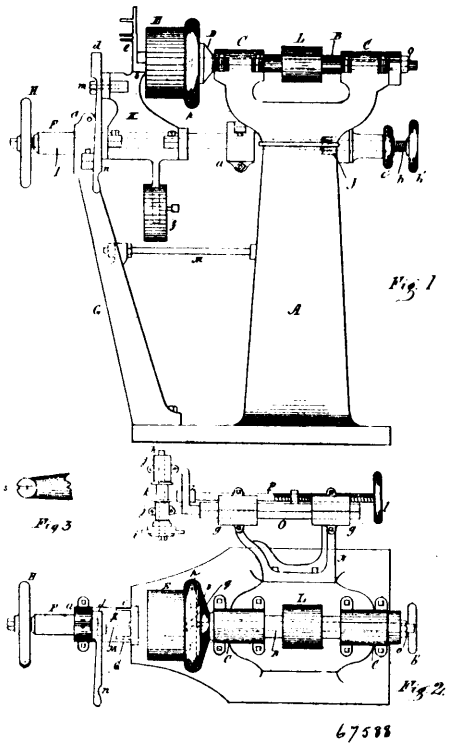
Edgar La Mar Williams, Peoria, Illinois, U.S.A., 1st June, 1900; 6 years. (Filed 24th June, 1899.)

Claim.—1st. A game board, one side whereof is provided with an outer rim, a raised field arranged at a distance from said rim, arches extending across the centre of said raised field and posts arranged intermediate said arches, substantially as described. 2nd. A game board, one surface whereof is provided with a raised field having arches extending across its centre and posts intermediate said arches, and the opposite side whereof is provided with a checker board and with backgammon points opposite the four sides of said checker



board, the corners of the board being provided with pockets, substantially as described.

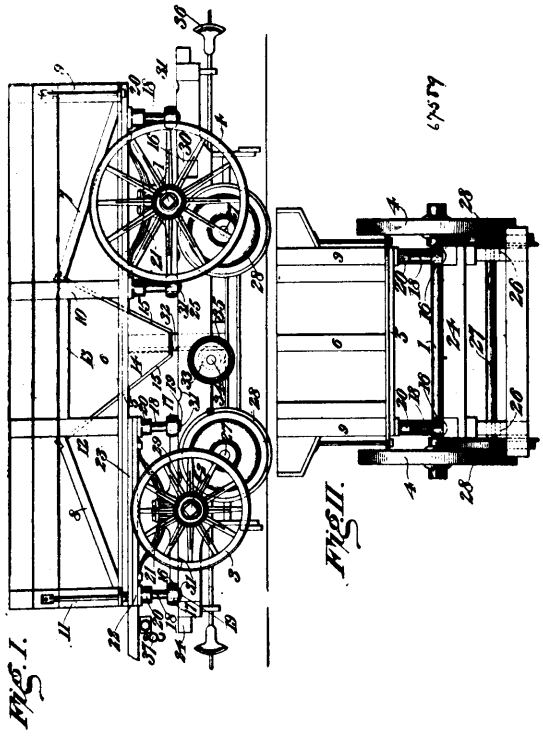
No. 67,588. Machine for Grinding Drill Shoes.
(*Machine à aiguiser les sabots de semoirs.*)



William Stevenson Morris, Manitoba, and Arthur Stuart James, Hamilton, Ontario, Canada. 1st June, 1900; 6 years. (Filed 31st July, 1899.)

Claim.—1st. In a machine for grinding the ends of seed drill shoe castings, consisting of a pedestal and frame to carry a shaft, a driving pulley and a grinding wheel, a bracket attached to the pedestal, carrying a sleeve upon which is a rotating block for holding the casting to be ground, and an eccentric lever to move it, a screw rod in the interior of the said sleeve with hand wheel to feed the casting to the grinding wheel and stop mechanism to prevent it going in too far, an annex frame bolted to the pedestal carrying a thin grinding wheel to grind the oil grooves in the ends of the axles, and devices for operating the said wheel, all constructed substantially as and for the purpose specified. 2nd. In a machine for grinding the ends of seed drill shoe castings, consisting of a pedestal A, and bearings C C, to carry a shaft B, a driving pulley L, and a grinding wheel E, a bracket G, attached to the pedestal A, carrying a hollow shaft or sleeve F, a rotating block K, on said sleeve, for holding the casting to be ground, and an eccentric clamp *d*, secured to the said block by a screw *m*, and operated by a handle *n*, a steel gauge O, also attached to the block K, on the opposite side, a screw rod I, in the interior of the said sleeve F, operated by a hand wheel H, to feed the casting to the grinding wheel E, a stop nut J, in the standard A, to receive the screw rod I, the screw rod *b*, made to engage with the end of the screw I, and adjusted by the hand wheel b^1, and jamb nut C^1, and the counterweight *f*, attached to the swivel block K, all constructed substantially as and for the purpose specified. 3rd. In a machine for grinding the ends of seed drill shoe castings, a bracket N, bolted to the upper side of the pedestal A, provided with square bearings *g g*, a corresponding square slide O, made to move back and forth in said bearings *g g*, bearings *j j*, formed at one end of the slide O, a spindle *h*, made to revolve in said bearings, a small thin emery wheel *i*, attached to the one end of the said spindle *h*, and a pulley *k*, on the centre of the spindle for a driving belt to pass over to rotate the said emery wheel to grind the oil grooves *s*, across the ends of the seed drill shoe castings, after the end of the same has been ground by the large grinding wheel E, and an adjusting screw rod P, supported on projections on the bracket N, one of which acts as a nut, and the said screw being rotated by the hand wheel *l*, adjusts the depth of the groove 5, in the axle and takes up the wear of the emery wheel *i*, substantially as and for the purpose specified.

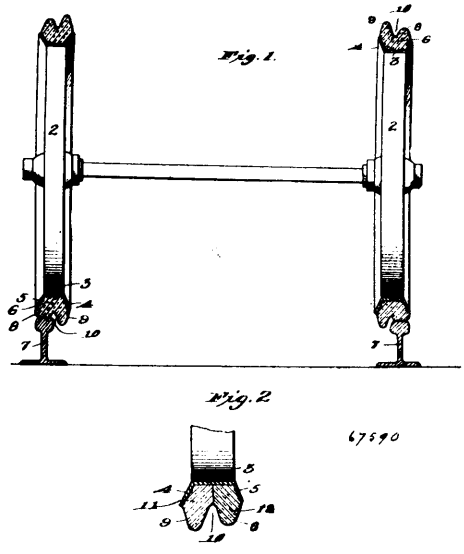
No. 67,589. Means of Transportation.
(*Moyen de transport.*)



Joseph Claybaugh Bonner, Toledo, Ohio, U.S.A., 1st June, 1900; 6 years. (Filed 20th March, 1900.)

Claim.—1st. The combination with a vehicle body, and road running gear, of a railway truck, and means for mounting the body of the vehicle, with its running gear, directly upon the truck, and supporting it thereon independently of its running gear, substantially as and for the purpose specified. 2nd. The combination with a vehicle body, railway truck, and supports, as for instance studs, upon the bottom of the vehicle body, adapted to rest upon the truck and support thereon the weight of the vehicle body, of road running gear operatively located upon the vehicle body, substantially as and for the purpose specified. 3rd. The combination with a vehicle body, railway truck, and supports, as for instance studs, upon the bottom of the vehicle body adapted to support thereon the weight of the vehicle body, of road running gear incorporated with the supports upon the vehicle body, substantially as set forth. 4th. The combination with a vehicle body, front and rear axles, axle cross pieces and supports, as for instance studs, of a railway truck provided with axle recesses, and support sockets, substantially as and for the purpose specified. 5th. The combination with a railway truck, and a road vehicle, of a rack bar carried upon the truck, a pinion for operating the rack bar, and mechanism upon the road vehicle adapted to engage the rack bar for the purpose of uniting the road vehicle to the truck, substantially as and for the purpose specified.

No. 67,590. Rubber Tire. (*Bandage de caoutchouc.*)



Samuel Griswold Dorr, Buffalo, New York, U.S.A., 1st June, 1900; 6 years. (Filed 27th March, 1900.)

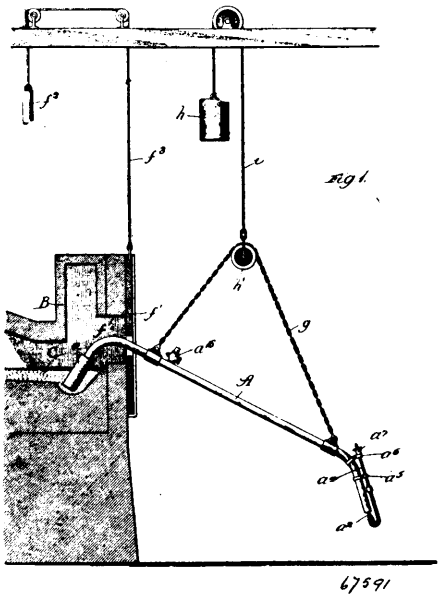
Claim.—1st. A rubber tire for vehicles having its tread surface provided with two annular projections, one of which is thicker than the other, whereby to adapt the tire for ordinary use and for use on a tramway, substantially as described. 2nd. A rubber tire for vehicles having its tread surface provided with two annular projections, one of which is of greater diameter than the other, whereby to adapt the tire for ordinary use and for use on a tramway, substantially as described. 3rd. A rubber tire for vehicles having its surface provided with two integral annular projections, one of which is of greater diameter than the other, whereby to adapt the tire for ordinary use on a tramway, substantially as described. 4th. A rubber tire for vehicles having its tread surface provided with two annular projections separated by a V-shaped groove, whereby to adapt the tire for ordinary use and for use on a tramway, substantially as described. 5th. A rubber tire for vehicles having its tread surface provided with two annular projections one of which is of greater diameter than the other, said projections being separated by a V-shaped groove, whereby to adapt the tire for ordinary use and for use on a tramway, substantially as described. 6th. A rubber tire for vehicles constructed in two annular parts, one of which is provided with a tread and the other with a flange, substantially as described. 7th. A rubber tire for vehicles constructed in two annular parts, one of which is provided with a tread and the other with a flange, said parts being so constructed as when placed together to provide an annular V-shaped groove separating said flange and tread, substantially as described. 8th. A rubber tire for vehicles constructed in two annular parts forming a tread and a flange, respectively, said parts being interchangeable in position on the rim, substantially as described and for the purpose set forth.

No. 67,591. Siphon. (*Siphon.*)

Reuben Gilbert Collins, Dollar Bay, Michigan, U.S.A., 1st June, 1900; 6 years. (Filed 22nd April, 1899.)

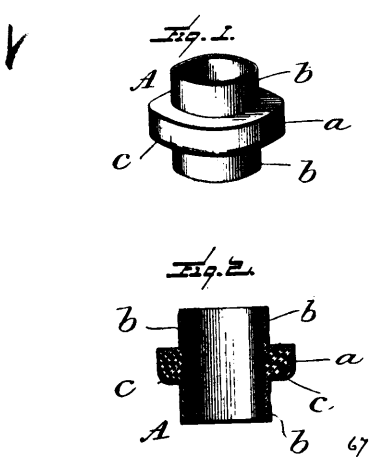
Claim.—1st. A siphon, substantially as described, temporarily sealed at both ends, a siphon tube practically exhausted of air between the said seals, the seal of the upper end adapted to be removed therefrom, after the said end has been submerged within the material to be conveyed thereby. 2nd. A siphon, substantially such as described, temporarily sealed at both ends, a siphon tube

practically exhausted of air between the said seals, one or both of the said seals being adapted to be removed by the action of the



material to be conveyed. 3rd. A siphon, substantially such as described, which consists of a tube practically exhausted of air, a seal on either end of said tube, the said siphon adapted to be sealed before being placed in the material to be conveyed thereby, and the seal of the upper end adapted to be removed therefrom after the said end has been submerged in the said material. 4th. A siphon, substantially such as described, temporarily sealed at both ends, a siphon tube practically exhausted of air between the said seals, one of both of the said seals composed of a material which is soluble in the liquid to be conveyed by the said siphon. 5th. A siphon, substantially such as described, for conveying molten metal, consisting of an exterior tube, an interior tube composed of a material similar to that conveyed therein, and a means for governing the flow of metal through the said siphon. 6th. A siphon, substantially such as described, for conveying molten metal, consisting of a tube temporarily sealed, a shield of refractory material surrounding the end of the said siphon tube, and a means for controlling the position of the said siphon. 7th. A siphon, substantially such as described, for conveying molten metal, consisting of a tube, a ring adapted to fit the end of said tube, and a disc of fusible metal fixed within the said ring. 8th. A siphon, substantially such as described, for conveying molten metal, consisting of a tube, a disc of fusible metal expanded into the ends of the said tube, and means for exhausting the said tube.

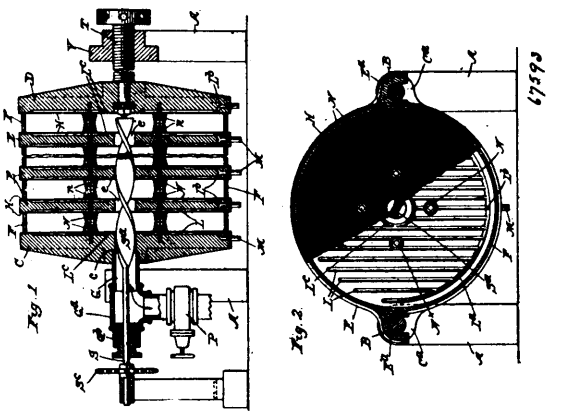
No. 67,592. Gasket. (*Garcette.*)



Harry K. Gilbert, Niagara Falls, New York, U.S.A., 1st June, 1900; 6 years. (Filed 22nd March, 1900.)

Claim.—1st. As an improved article of manufacture, a rubber gasket having a flange with thinner portions extending from opposite sides thereof, substantially as specified. 2nd. As an improved article of manufacture a rubber gasket consisting of a body portion with annular flange and thin portions extending from opposite sides thereof, the under edge of said flange being bevelled, substantially as and for the purpose specified.

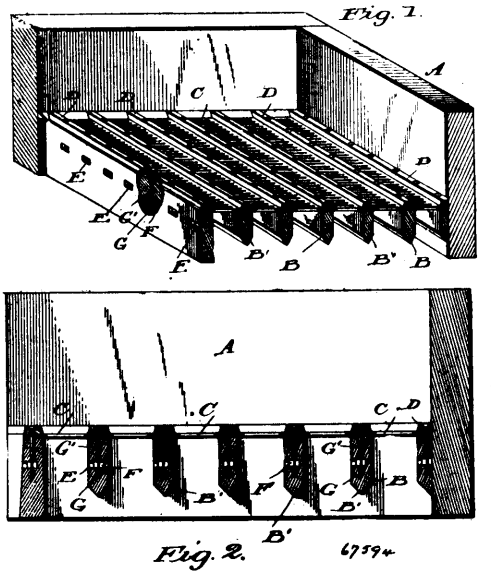
No. 67,593. Filter Press. (*Presse à filtre.*)



The J. E. Turney Drying Machinery Company, Chicago, Illinois, U.S.A., assignee of John H. Hinken, Louisville, Kentucky, U.S.A., 1st June, 1900; 6 years. (Filed 20th July, 1899.)

Claim.—1st. In a filter press, in combination with filter plates having induction apertures, a clearing blade penetrating the plates at such apertures, and suitable means for rotating said blade to clear the apertures. 2nd. In a filter press, in combination with the filter plates having induction apertures in line and the induction pipe in line with such apertures, a clearing blade extending through the apertures and out through the induction pipe, said pipe having an angle and the blade having a stem extending out through the angle provided with a suitable stuffing box, and means beyond the stuffing box for rotating the blade. 3rd. In a filter press, in combination with filter plates having induction apertures, a spiral blade extending through such apertures, and means for rotating the blade. 4th. In a filter press, in combination with the channelled faces of the plates with the threads of its web oblique to the channels.

No. 67,594. Screen Plate for Paper Manufacture.
(*Tamis pour la fabrication du papier.*)

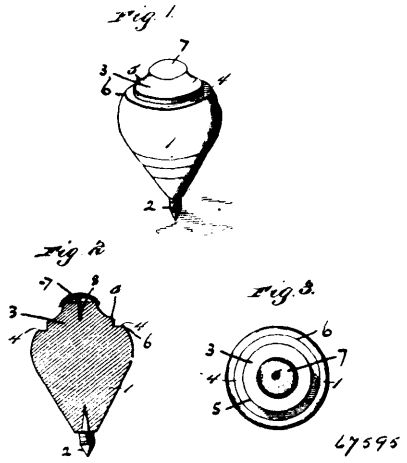


William H. McCarroll, and John B. Taylor, both of Watertown, New York, U.S.A., 4th June, 1900; 6 years. (Filed 25th July, 1899.)

Claim.—1st. In a paper manufacturing machine, a screen box comprising in combination with the frame having a series of girths disposed in parallel rows therein, metallic screen plates, the longi

tudinal edges of which are designed to be held on said girths, metallic bars clamped over said edges and means for holding said bars to the girts, as set forth. 2nd. A screen box for paper making machines, consisting of the frame, a series of girts mounted therein, narrow screen plates held on the edges of said girts, metallic bars for clamping the longitudinal edges of said bars, and the tightening screws passing through apertures in the bars and girts and opening into mortised recesses in the girts, combined with the nuts held in said recesses, and engaged by said screws, as set forth.

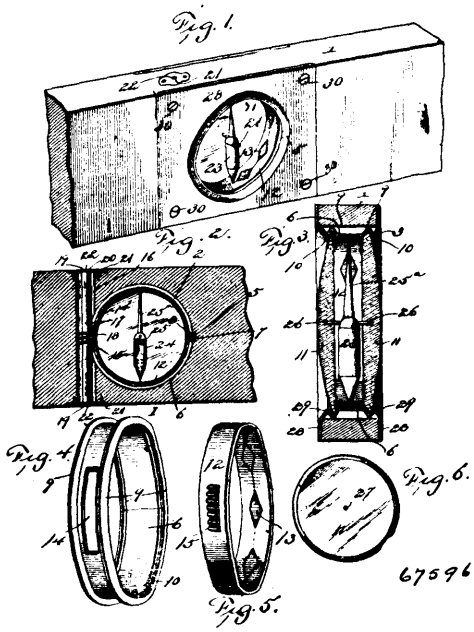
No. 67,595. Toy Top. (*Toupie.*)



Adolphus E. Poteet, Sedalia, Missouri, and Justus W. Lobb, Des Moines, Iowa, U.S.A., 4th June, 1900; 6 years. (Filed 28th November, 1899.)

Claim.—A toy spinning top, comprising a top body, having a pointed plug at its lower end, and a frustro conical head at its upper end, said head having a circumferential groove formed at its base, the opposite outer edges of the groove being sharp or abrupt, and a convex metallic crown piece fitting snugly and entirely covering the upper end of the head, and having an attaching shank or pin driven into the head.

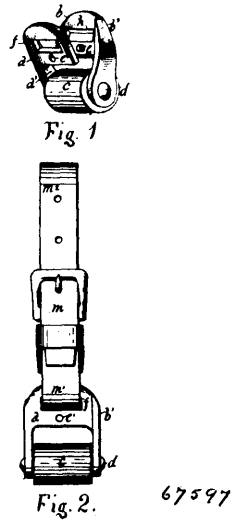
No. 67,596. Level. (*Niveau.*)



Clinton D. Hodge, Philip H. Brennan and Thomas O'Brien, all of Watertown, New York, U.S.A., 4th June, 1900; 6 years. (Filed 17th April, 1900.)

Claim.—1st. In a device of the class described, the combination with a bar having a transverse opening formed therethrough, of a ring having an opening provided through one side thereof, a scaled ring having a toothed lug, a pair of spaced lenses and a plumb bob mounted between the lenses, the scaled ring being loosely mounted inside of the other ring and between the lenses, the toothed lug extending through the opening of the ring, and means extending through the bar and engaging the toothed lug whereby the scaled ring may be adjusted, substantially as set forth. 2nd. In a device of the class described, the combination with a bar having a transverse opening formed therethrough, and a pair of spaced lenses fitted within the opening, of a plumb bob mounted between said lenses, the bob being in two separable sections, the lower section being hollow and internally threaded, the upper section having a pointer at one end, an externally threaded portion at the other end, and oppositely extending spindles, the hollow section being adapted to receive a heavy liquid and the sections being adapted to be connected together by means of their threaded portions, substantially as set forth.

No. 67,597. Rein Guide for Harness.
(*Garde rênes de harnais.*)



Lewis G. Adams and Samuel J. Hall, both of Waterloo, Iowa, U.S.A., 4th June, 1900; 6 years. (Filed 3rd May, 1900.)

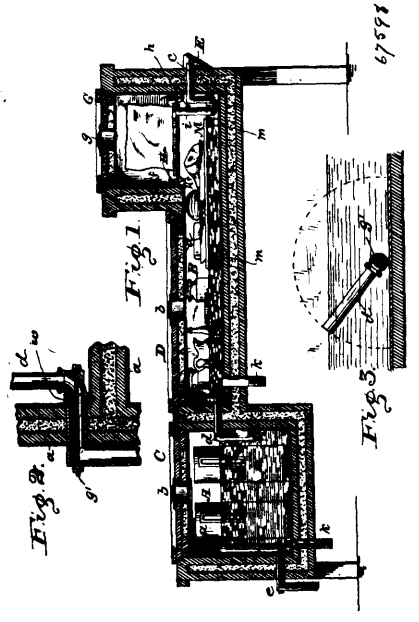
Claim.—1st. In a line guide for harness, the plates *a* and *b*, provided with aperatures *f* and *h*, through their flattened portions for the reception of a hanger strap, the plate *b*, bearing a stud *e*, on its inner flattened surface adapted to engage with the sides of a hole e^1, in the flattened part of the plate *a*, each plate being flanged along its outer edge, the flange of one plate engaging the inner edge of the other plate, and each of said plates having an arm pivoted at its extremity to a pivot bolt *d*, and being revoluble about said pivot bolt, in combination with the pivot bolt *d*, and the roller *c*, all substantially as shown and described. 2nd. A line guide for harness, composed of two separate plates, each having an arm, said arms being pivoted at the opposite ends of a pivot bolt, a roller arranged to work on said pivot bolt between the ends of the arms of said plates, said plates having flanges along their respective arms, apertures in the flattened parts of the plates for the reception of a hanger strap and a stud on the inner side of one plate adapted to enter and engage with the sides of a hole in the other plate, all substantially as shown and described.

No. 67,598. Refrigerator and Creamery.
(*Refrigérateur et crêmeuse.*)

The Polar Creamery Company, Lafayette, Indiana, U.S.A., 4th June, 1900; 6 years. (Filed 17th May, 1900.)

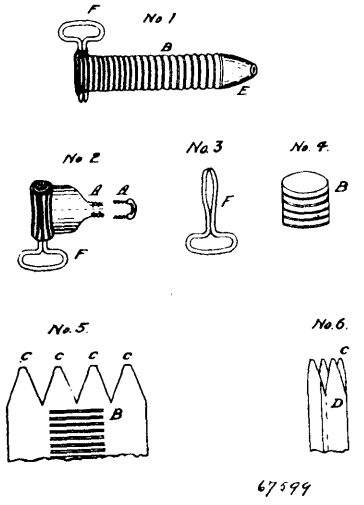
Claim.—1st. In a milk cooler and refrigerator, one deep and one shallow tank communicating with each other through a pipe having an adjustable inlet, and provided, respectively, at their outer ends with a discharge pipe and a supply pipe, the several pipes having elbows to act as traps, in combination with an ice chamber forming an extension to the shallow tank arranged above it, and provided with a shelf or pan for the ice, and a drip tube connected thereto and extending down below the water level in said tank, substantially as and for the purposes set forth. 2nd. In a refrigerator and creamery, one deep and one shallow tank communicating with each other through a pipe having an arm with swinging adjustment in vertical plane, and provided, respectively, at their outer ends with

a discharge pipe and a supply pipe, the several pipes having elbows to act as traps and the outlet pipe having an adjustable inlet as



described, in combination with an ice chamber forming an extension to the shallow tank and arranged above it, and provided with a pan for the ice, and a drip tube, substantially as and for the purpose set forth.

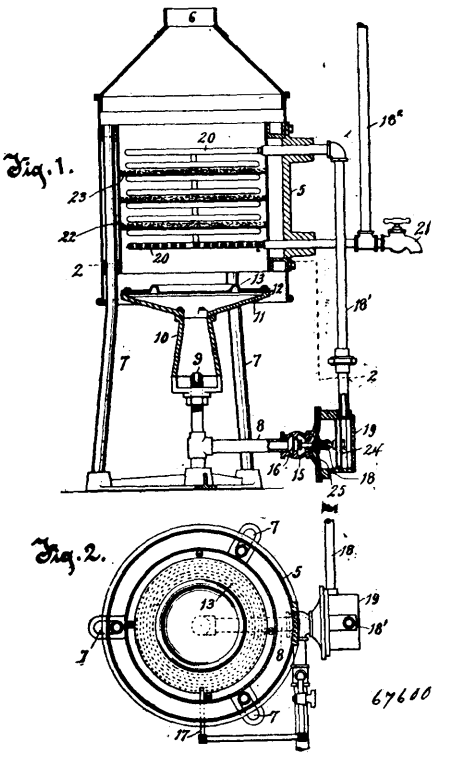
No. 67,599. Liquid Retailing Device.
(Appareil à débiter les liquides.)



The Gerdom-Kellogg Company, assignee of Andrew H. Gerdom both of Albany, New York, U.S.A., 4th June, 1900; 6 years (Filed 11th May, 1900.)

Claim.—1st. A flexible tube provided with corrugations along one side thereof, a spout at one end, a key adapted to be inserted near the end of the tube opposite the spout. so arranged that by means of the key the tube may be wound about itself, substantially as described. 2nd. In a tube for retaining liquid or viscous substances, a corrugated portion along one side thereof, a spout, a cap adapted to be placed on said spout, a means for winding said tube from the rear end thereof upon itself, substantially as described. 3rd. A tube adapted to retain liquid or viscuous substances, provided with a corrugated portion along one side thereof, having an end thereof provided with an opening adopted for the Insertion of a key, with a key adapted to be inserted in said opening, substantially as described.

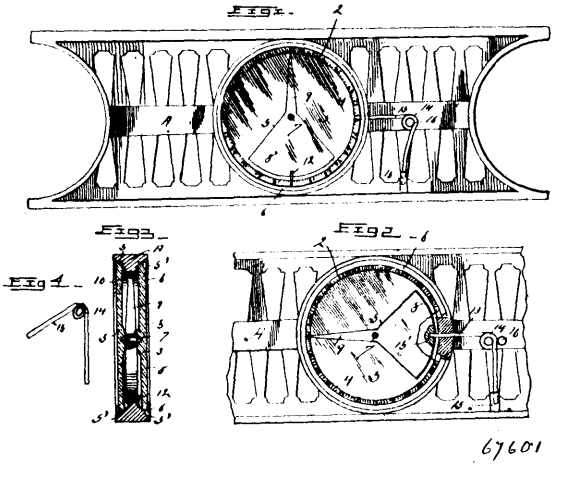
No. 67,600. Water Heating Apparatus.
(Chaffeur d' eau.)



William W. McCallum, Milwaukee, and John S. Blakney, North Greenfield, assignees of Allan G. Mather, Milwaukee, all in Wisconsin, U.S.A., 4th June, 1900; 6 years. (Filed 21st May, 1900.)

Claim.—In an apparatus for heating water in a water service system, the combination of a piston chamber in the water supply pipe, a water actuated and water escape piston in the chamber in the course of the water, a flexible diaphragm of less area than the piston closing the chamber at one side of the piston, a pipe for conducting gas to a water heater, a valve in the gas pipe, and a steam connecting the piston, the diaphragm and the valve compelling concurrent movement thereof.

No. 67,601. Level. *(Niveau.)*

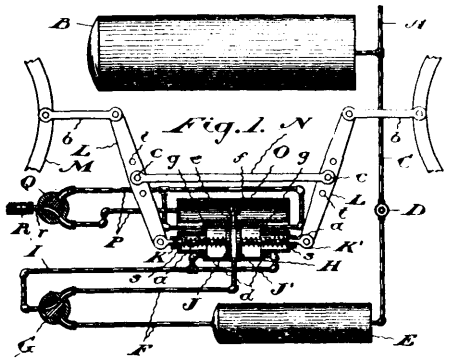


Jacob E. Ramsey, Sunset, Washington, 4th June, 1900; 6 years. (Filed 15th May, 1900.)

Claim.—1st. In a level, the combination with a stock having an aperture therein, lenses fitted in said aperture, and a graduated device in the aperture, of a plumb bob supported for oscillation between the lenses, and a yielding angular locking device exteriorly

exposed on the stock and adapted to be held at its angular portion in locked position on the stock, one member of the said locking device being rigidly connected to the stock and the opposite member free to bear against the edge of a portion of the plumb bob. 2nd. In a level, the combination with the stock having an aperture, a graduated device within the aperture, a spring adapted to engage the plumb bob to hold the same against vibration and having a coil, and a knob adapted to engage the spring to hold the same in its working position and adapted also to receive said coil, substantially as described. 3rd. In a level, the combination with a stock having an aperture, of a plumb bob located in said aperture, an L-shaped spring having a coil at its bend and one arm of which is adapted to engage in an opening in the plumb bob, a lug having a socket to receive one end of the spring, and a knob engaging said spring and adapted to receive said coil, substantially as described.

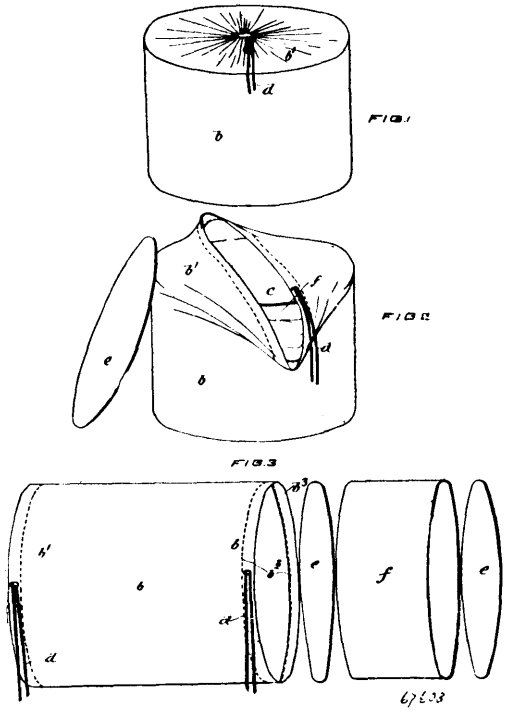
No. 67,602. Air Brake. *(Frein à air.)*



William K. Omick, Pontiac, Michigan, and G. Plunkett Magann, Toronto, Ontario, 4th June, 1900; 6 years. (Filed 16th May, 1900.)

Claim.—1st. In air brake apparatus an air reservoir in combination with a brake cylinder, a pair of pistons moving therein, means for yieldingly pressing the said pistons towards each other, levers pivoted at one end to the said pistons and at the other to the connections to the brake shoes, and a link pivoted to said levers at intermediate positions forming their fulcrums and making them levers of the first order, substantially as and for the purpose specified. 2nd. In air brake apparatus an air reservoir in combination with a brake cylinder, a pair of pistons moving therein, means for yieldingly pressing the said pistons towards each other, levers pivoted at one end to the said pistons and at the other to the connections to the brake shoes, and a link adjustably pivoted to said levers at intermediate positions forming their fulcrums and making them levers of the first order, substantially as and for the purpose specified. 3rd. In air brake apparatus an air supply in combination with a substantially closed brake cylinder, a pair of pistons moving therein, means for yieldingly pressing the said pistons towards each other, a pipe extending from the interior of the cylinder between the pistons to the reservoir, an exhaust pipe communicating with the interior of the cylinder behind the pistons, and means for placing either the reservoir or the exhaust pipe in communication with the interior of the cylinder between the pistons, substantially as and for the purpose specified. 4th. In air brake apparatus an air supply in combination with a substantially closed brake cylinder, a pair of pistons moving therein, means for yieldingly pressing the said pistons towards each other, a pipe extending from the interior of the cylinder between the pistons to the reservoir, an exhaust pipe communicating with the interior of the cylinder behind the pistons, and a three-way valve with which the said pipes are connected whereby compressed air may be admitted between the pistons or exhausted thence into the cylinder behind them, substantially as and for the purpose specified. 5th. In air brake apparatus an air supply in combination with a brake cylinder, a piston moving therein, a reservoir connected with the interior of the cylinder in front of the piston, a pipe from the air supply similarly connected, a valve between the cylinder and reservoir lifting only to permit the air to pass from the cylinder to the reservoir, a pipe leading from the said reservoir, a whistle connected to the pipe, and a valve in the said pipe for controlling the sounding of the whistle, substantially as and for the purpose specified. 6th. In air brake apparatus an air supply in combination with a substantially closed brake cylinder, a piston moving therein, a reservoir connected with the interior of the cylinder in front of the piston, a pipe from the air supply similarly connected, a valve between the cylinder and reservoir lifting only to permit air to pass from the cylinder to the reservoir, a whistle, means for placing the whistle in communication with the reservoir, means for placing the interior of the cylinder behind the piston in communication with the said reservoir, and means for cutting off the supply of air from the cylinder in front of the piston and permitting the air therein to exhaust, substantially as and for the purpose specified. 7th. In air brake apparatus an air supply in combination with a substantially closed brake cylinder, a piston moving therein, a reservoir connected with the interior of the cylinder in front of the piston, a pipe from the air supply similarly connected, a valve between the cylinder and the reservoir lifting only to permit air to pass from the cylinder to the reservoir, means for cutting off the supply of air to the cylinder in front of the piston and permitting the air to exhaust, and manually controlled means for admitting air from the reservoir to the interior of the cylinder behind the piston, substantially as and for the purpose specified. 8th. In air brake apparatus an air supply in combination with a substantially closed brake cylinder, a pair of pistons moving therein, a pipe extending from the interior of the cylinder between the pistons to the air supply, a three way valve located in said pipe whereby the space between the pistons may be put in communication with the air supply or the exhaust, a reservoir connected with the interior of the cylinder between the pistons, a valve between the cylinder and the reservoir lifting only to permit air to pass from the cylinder to the reservoir, a pipe leading from the reservoir to the interior of the cylinder behind the pistons and a valve in the said pipe, substantially as and for the purpose specified. 9th. In air brake apparatus an air reservoir in combination with a substantially closed brake cylinder, a piston moving therein, a spring tending to maintain the piston in its normal position, a pipe extending from the interior of the cylinder to the air reservoir, an exhaust pipe communicating with the interior of the cylinder behind the piston, and means for placing either the reservoir or the exhaust pipe in communication with the interior of the cylinder in front of the piston, substantially as and for the purpose specified.

No. 67,603. Cheese Cover. *(Couvercle pour fromage.)*

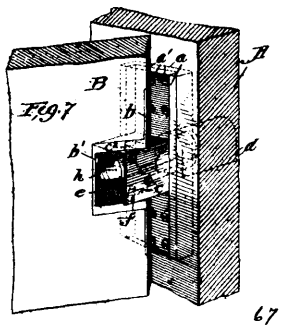


William Alexander McKay, Montreal, Quebec, Canada, 4th June, 1900; 6 years. (Filed 17th May, 1900.)

Claim.—1st. A covering for cheese consisting of a tabular fabric of sufficient length to enclose the cheese and project beyond each end thereof, a string run through each of said projecting ends and adapted to be drawn upon and close said ends to completely overlap the cheese or other perishable, substantially as described. 2nd.

A covering for cheese consisting of a tubular fabric b having projecting ends b^1 b^1 with cords d d run therethrough and having projecting ends d^1 d^1 whereby they may be drawn upon to close the projecting ends b^1 b^1 of the covering b, all substantially as described and for the purpose set forth.

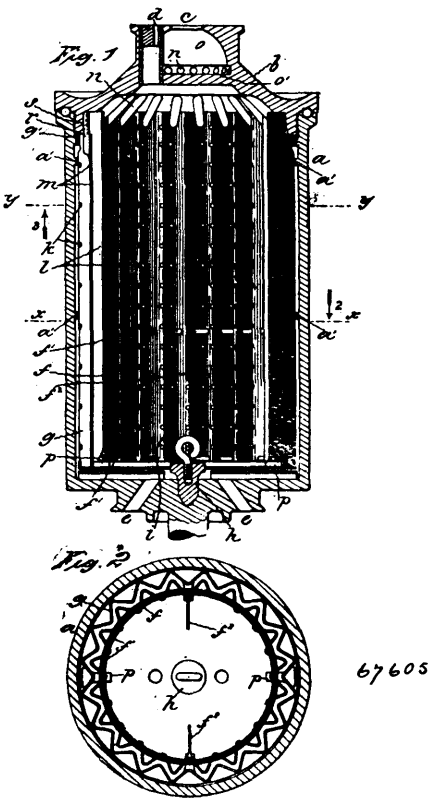
No. 67,604. Hinge. (*Penture.*)



Abraham L. Stump and Francis Bruecker, both of Shelby, Ohio, U.S.A., 4th June, 1900; 6 years. (Filed 21st May, 1900.)

Claim.—1st. A spring hinge comprising a plate having a transverse socket, a second plate having a hollow part projecting into said socket, a pivotal connection between said parts, and a spring within said hollow part exerting tension on said parts, substantially as described. 2nd. A spring hinge comprising a plate having a transverse socket, a second plate having a hollow part projecting into said socket, a pivotal connection between said parts, a slide within said hollow part actuated by the relative movement of the plates, and a spring exerting tension on said slide, substantially as described. 3rd. A spring hinge comprising a plate having a transverse socket, a second plate having a hollow part projecting into said socket, a pivotal connection between said plates, a slide within said hollow part actuated by the relative movement of the plates, and a spring exerting tension on said slide, and means for varying the tension on said spring, substantially as described. 4th. A spring hinge comprising a plate having a transverse socket, a second plate having a hollow part projecting into said socket, a pivot pin carried by said first named plate entering a slot in the wall of said hollow part, means for closing said slot to hold the pivot pin in position, and a spring within said hollow part exerting tension on said plates, substantially as described. 5th. A spring hinge comprising a plate having a socket, a second plate having a hollow portion pivoted within said socket, a slide within said hollow portion having a flanged outer end, an abutment carried by the first plate coacting with said flange to move the slide, a spring having its rear end adapted to exert inward pressure on the rear end of said slide, a screw bolt rotatably mounted in the front end of said hollow portion, and a nut threaded on said bolt and designed to vary the tension of the spring on the adjustment of the bolt, substantially as described. 6th. A spring hinge comprising a plate having a socket, a second plate having a hollow portion pivoted within said socket, a slide within said hollow portion having a flanged outer end, an abutment carried by the first plate coacting with said flange to move the slide, a spring having its rear end adapted to exert inward pressure on the rear end of said slide, a removable plate closing an opening in the front end of said hollow portion, a screw bolt having a part projecting through an opening in said plate and having a flange bearing against the inner face of said plate, and a nut threaded on said bolt and bearing against the front end of the spring, substantially as described. 7th. A spring hinge comprising a plate having a socket, a second plate having a hollow portion pivoted within the socket, a slide within the hollow portion having flanged outer end, a spring exerting tension on said slide, and anti-friction projections carried by said first named plate coacting with said flanged end of the slide, substantially as described. 8th. A spring hinge comprising a plate having a socket, a second plate having a hollow portion pivoted within the socket, a slide within the hollow portion having a flanged outer end, a spring exerting tension on said slide, and projections carried by said first named plate coacting with said flanged end of the slide, said flange having a recessed portion adapted to receive the projections when the door is swung to a predetermined limit to hold it in its open position, substantially as described. 9th. A spring hinge comprising a plate having a socket, a second plate having a hollow portion pivoted within the socket, a slide within the hollow portion, a spring exerting tension on said slide, a movable projection carried by said first named plate adapted to coact with said slide to move the same, and means for adjusting said projection, substantially as described. 10th. A spring hinge comprising a plate having a socket, a second plate having a hollow portion pivoted within the socket, a slide within the hollow portion, a spring acting on said slide, a plate carried by said socket plate having projections coacting with said slide, and means for adjusting said plate, substantially as described. 11th. A spring hinge comprising a plate having a socket, a second plate having a hollow portion pivoted within the socket, a slide within the hollow portion having an operating connection with the socket plate, a spring acting on said slide, and an anti-friction bearing for said slide, substantially as described. 12th. A spring hinge comprising a plate having a socket, a second plate having a hollow portion pivoted within the socket, a slide within the hollow portion having a flanged outer end, an anti-friction roller between the slide and bottom of said hollow portion, a spring exerting tension on said slide, and a projection carried by said first named plate coacting with said flanged end of the slide, substantially as described. 13th. In a spring hinge, the combination with a door and its support, of a slide carried by the support and having a flanged end, a spring exerting tension on the slide, and anti-friction projections moved by the door against the flange as the door is swung whereby the slide is moved to compress the spring, substantially as described.

No. 67,605. Centrifugal Separator. (*Séparateur centrifuge.*)

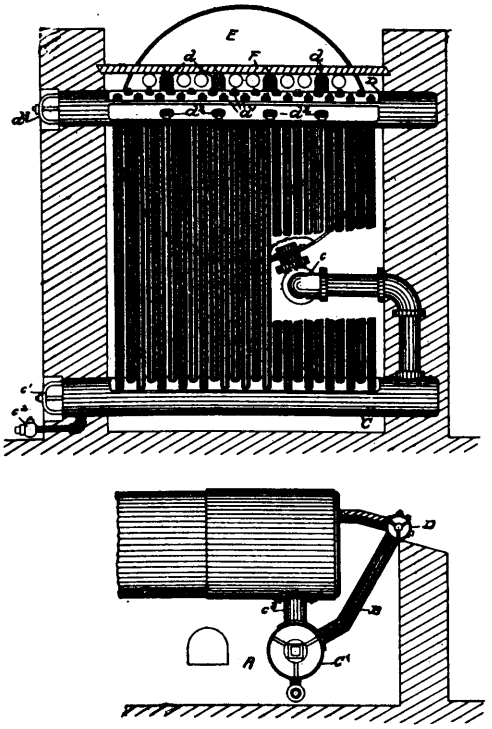


Perley L. Kimball, Bellows Falls, Vermont, U.S.A., 4th June, 1900; 6 years. (Filed 7th May, 1900.)

Claim.—1st. In combination, the separator body, the separator cover, and the corrugated partition carried by the separator cover and provided with sets of flow passages at different distances from the centre of rotation, substantially as described. 2nd. In combination, the separator body, the separator cover, and the corrugated partition carried by but separable from the separator cover and provided with sets of flow passages at different distances from the centre of rotation, substantially as described. 3rd. In combination, the separator body, the separator cover, and the corrugated partition separably confined at its foot by the floor of the separator body and supported laterally from the inner wall of the separator body, substantially as described. 4th. In combination, the separator body, the separator cover, and the corrugated partition journalled by a pintle in the floor of the separator body and laterally supported from the wall of the separator body, all substantially as described. 5th. In combination, the separator body, the separator cover, a central inlet for full milk and non-central outlet for cream, and the feed conduits adapted to deliver the incoming milk exteriorly of the circle described by said outlet in its rotation, all substantially as described. 6th. In combination, the separator body, the separator cover, a central inlet for full milk and non-central outlet for cream, the corrugated partition carried by said cover, and the feed conduits connected to said inlet adapted to deliver the incoming milk within the corrugations of said partition, all substantially as described. 7th. In combination, the separator body, the separator cover, a central inlet for full milk and non-central outlet for cream,

a corrugated partition within said separator body and the feed conduits connected to said inlet and adapted to deliver the incoming milk within the corrugations of the said partion, all substantially as described. 8th. In combination, the separator body, the separator cover, the perforated and corrugated partition carried by said cover, and the perforated and corrugated partition supported and confined un derneath in and by the floor of the separator body and adapted to be supported laterally by the wall of the separator body, all substantially as described. 9th. In combination, the separator body, the separator cover, the downwardly projecting and corrugated partition provided with milk flow passages, and the upwardly extending and corrugated partition provided with milk flow passages non-aligned as to the milk flow passages in the downwardly projecting partition, all substantially as described and for the purposes set forth. 10th. In combination, the separator body, the separator cover, a central inlet for full milk and non-central outlet for cream, the feed conduits connected to said inlet, and the corrugated inner partition provided with cream flow passages situated within the circle described by the outlet ends of said feed conduits in their rotation, all substantially as described.

No. 67,606. Steam Generator. (*Générateur à vapeur.*)



67606

Edward Thomas Hannam and John Adams Bechtel, both of Cincinnati, Ohio, U.S.A., 4th June, 1900; 6 years. (Filed 11th May, 1900.)

Claim.—1st. The combination in a steam generator, of a series of water tubes inclined upwardly and rearwardly through the curved belt of products of combustion at the rear of the boiler, a connection between the tubes and a low point of the boiler, and one or more connections between the tubes and a high point of the boiler, whereby water is taken from a low part of the boiler and discharged into a higher part, substantially as and for the purpose set forth. 2nd. The combination in a steam generator, of a series of water tubes arranged in the combustion chamber and inclined upward from a position beneath the boiler to a position in the rear of the boiler, a connection between the tubes and a low point of the boiler, and one or more connections between the tubes and a high point of the boiler, whereby water is taken from a low part of the boiler and discharged into a higher part, substantially as and for the purpose set forth. 3rd. The combination in a steam generator, of a series of upwardly extending water tubes arranged in the combustion chamber, a connection between the tubes and a low point of the boiler, one or more connections between the tubes and a high point of the boiler, whereby water is taken from a low part of the boiler and discharged into a higher part, and a boiler dead plate supported by the water tubes, substantially as and for the purpose set forth. 4th. The combination in a steam generator, of a water drum in the combustion chamber below the boiler, a water drum higher in the combustion chamber, a series of water tubes connecting the drums, a connection between the lower drum and a low point in the boiler, and pipes connecting the upper drum and a higher point in the boiler, and a boiler dead plate supported by the plates, substantially as and for the purpose set forth. 5th. The combination in a steam generator, of a water drum in the combustion chamber below the boiler, a water drum in a higher part of the combustion chamber, a series of water tubes connecting the drums, a connection between the lower drum and a low point in the boiler, one or more connections between the upper drum and a higher point in the boiler, whereby water is taken from the lower part of the boiler and discharged into a higher part, and plugs in the upper drum through which the tubes and pipes connected therewith may be cleaned, substantially as and for the purpose set forth. 6th. The combination in a steam generator, of a water drum in the lower part of the combustion chamber and connected with a low point of the boiler, a water drum in a higher part of the combustion chamber, a series of straight water tubes connecting the drums, one or more pipes connecting the upper drum with a high point of the boiler, and one or more openings in the upper drum through which the pipes connected therewith may be cleaned, substantially as and for the purpose set forth. 7th. The combination in a steam generator, of a water drum in the combustion chamber below and connected with a low point of the boiler, a water drum in a higher part of the combustion chamber in the rear of the boiler, a series of straight water tubes connecting the drums and passing through the curved belt of products of combustion at the rear of the boiler, one or more pipes connecting the upper drum with a high point of the boiler, and one or more openings in the upper drum through which the pipes connected therewith may be cleaned, substantially as and for the purpose set forth. 8th. The combination in a steam generator, of a water drum in the combustion chamber below and connected with a low point of the boiler, a water drum located at the top of the rear wall and partially outside of the combustion chamber, a series of straight water tubes connecting the drums and passing through the curved belt of products of combustion at the rear of the boiler, one or more pipes connecting the upper drum with a high point of the boiler, a dead plate supported by the pipes connecting the upper drum with the boiler, and one or more openings in the exposed portions of the upper drum, whereby the pipes connected therewith may be cleaned, substantially as and for the purpose set forth.

No. 67,607. Door Mat. (*Paillasson.*)

Fig. 1

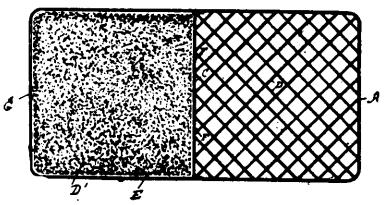


Fig. 2.

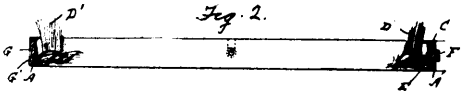
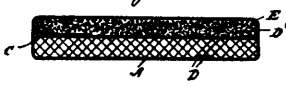


Fig. 3



67607

Charles Kuhn, Fruitvale, California, U.S.A., 4th June, 1900; 6 years. (Filed 15th May, 1900.)

Claim.—1st. A mat, comprising a main exterior frame with subdividing bar extending across it, a section of iron lattice work with upturned edges secured in one-half of the frame and a fibrous mat secured in the other half and having a containing frame sprung into engagement therewith. 2nd. A door mat, consisting of a circumscribing metallic frame having a transverse dividing bar, a metallic cleansing surface fixed in one-half the space, consisting of a lattice of iron strips having upturned edges as shown, a fibrous mat having an elastic metallic border secured thereto, and means for removably fixing said mat and its border into the other section of the main frame. 3rd. A door mat, consisting of a main peripheral frame having a transverse subdividing bar, a cleaning surface formed of a lattice work of metallic strips with upturned edges fixed in one-half of the main frame, a fibrous mat having a surrounding elastic metallic border within which it is secured, said border fitting within the remaining half of the main frame, and pins and spring catches by which said mat is removably secured in place.

No, 67,608. Stave Jointer. (*Varlope pour douves.*)

Fig. 1.

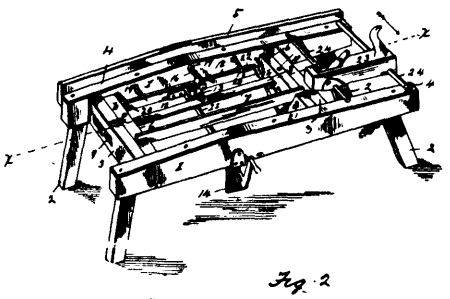
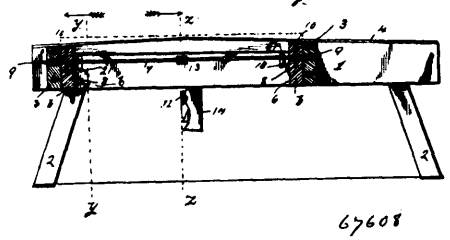


Fig. 2



67608

John F. C. Connell, Calvary, Georgia, U.S.A., 4th June, 1900; 6 years. (Filed 15th May, 1900.)

Claim.—1st. In a stave jointer, the combination with the longitudinal side pieces connected by cross bars and having formers secured thereto, of two sets of clamping jaws, each set of which is composed of a fixed jaw and a movable jaw, and means for forcing the movable jaw of each set toward the fixed jaw of each set, said means comprising a pivoted spring-actuated crank lever, and a bar to which the crank lever is pivoted, the ends of said bar being pivoted to the movable jaws, substantially as and for the purpose set forth. 2nd. In a stave jointer, the combination with the longitudinal side pieces of the frame and the cross pieces connecting the same, said cross pieces being provided with longitudinal slots, of two sets of clamping jaws, each set comprising the fixed jaw and the movable jaw, a bar connecting the movable clamping jaws, and having its ends extending through the slots in the cross pieces, an operating lever pivoted to one of the side pieces of the frame and provided with a crank arm, a link connecting the crank arm with the bar, a spring connecting one of the side pieces of the frame with the crank of the operating lever to retract the movable jaws, means for holding the operating lever in adjusted position, and a spring-actuated gauge adapted to support the stave while being inserted between the movable and fixed jaw of each set, substantially as and for the purpose set forth.

No. 67,609. Postal Examination Practice Cabinet.
(Cabinet postal d'examen.)

George H. Markline, Meridian, Mississippi, U.S.A., 4th June, 1900; 6 years. (Filed 15th May, 1900.

Claim.—1st. A cabinet having a series of removable pigeon hole cases, adapted to be drawn out laterally therefrom, and stops and guides to limit the lateral withdrawal of said cases and to permit of their being lifted when withdrawn, entirely clear of the cabinet and thereby removed therefrom, substantially as described. 2nd. A cabinet having a series of vertical compartments, guides and stop strips at the front side of said cabinet between said compartments, and a series of cases adapted to be placed in said compartments, said cases having the vertical stops at their rear, inner ends adapted to coact with the stop strips at the front side of the cabinet when said cases are drawn out, whereby said cases may be supported by the cabinet when drawn out therefrom and are also adapted to be removed from the cabinet by lifting said cases vertically, substantially as described. 3rd. A cabinet having a series of vertical compartments, flanged supporting rollers in the bottoms of said compartments, stop strips between said compartments on one side of the cabinet and a series of cases in said compartments, said cases having the stops adapted to coact with the stop strips of the cabinet, and being provided with the parallel bottom grooves engaged by the flanges of the supporting rollers, substantially as described. 4th. A cabinet having a series of vertical compartments open on one side, stop and guide strips between the front sides of said compartments, said stop and guide strips having rebates on their inner sides which rebates are open at the upper ends of said strips, and a series of cases in said compartments, said cases having the guide and stop projecting flanges at their rear inner sides, adapted to engage and travel in the rebates of the vertical stop and guide strips, substantially as described. 5th. A cabinet having a series of pigeon hole

Fig. 1.

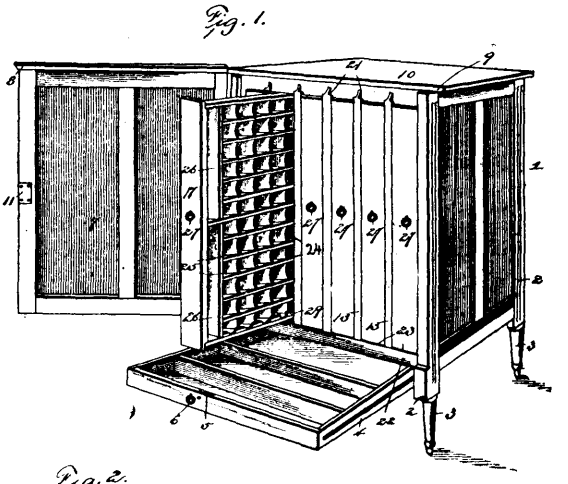


Fig. 2.

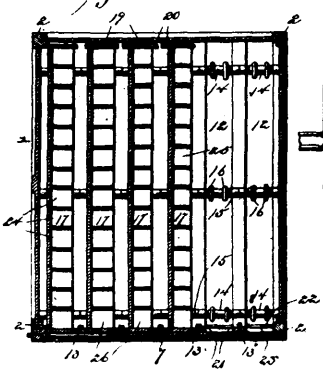
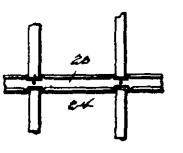


Fig. 5.



67609

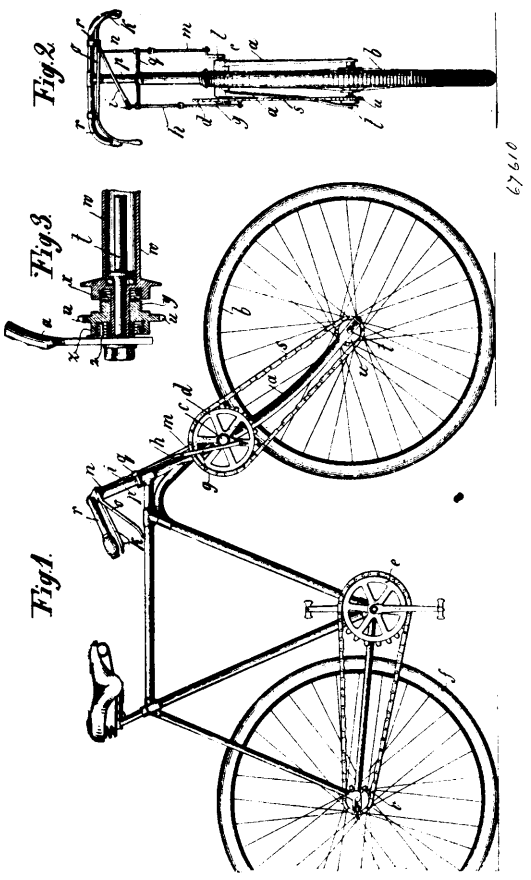
cases adapted to be withdrawn therefrom or contained therein, a pair of said cases having removable partitions, whereby the pigeon holes therein may be widened, and one of said pair of cases having a removable back, said pair of cases being adapted to be secured together, the one with the removable back on the face of the other, and with the widened pigeon holes of said respective cases registering with each other, whereby the said pair of cases are united to increase the depth of the pigeon holes therein, substantially as described.

No. 67,610. Cycle. (*Mécanisme de cycles.*)

Franz Powel, Rethem on the Leine, Hanover, Germany, 4th June, 1900; 6 years. (Filed 5th January, 1900.)

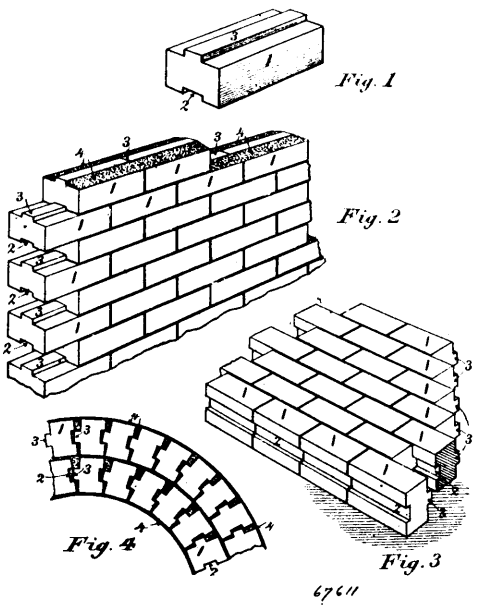
Claim.—1st. The combination in an auxiliary, hand actuated driving mechanism for the front wheel of cycles, of a chain wheel mounted on an axle located in the front fork, a sprocket wheel in connection with the axle of the front wheel, a chain for imparting motion from the chain wheel to the sprocket wheel, transposed cranks in connection with the chain wheel and the axle carrying same, connecting rods guided in a cross bar in connection with the steering post, and a hand lever for each of the cranks and their connecting rods, the sprocket wheel in connection with the axle of the front wheel being adapted to remain inoperative when the auxiliary driving mechanism is out of action by uncoupling from the nave of the front wheel, substantially as described and shown. 2nd. In an auxiliary, hand actuated driving mechanism for the front wheel of cycles of the kind described, the nave of the front wheel fitted with a recessed and internally screw threaded extension, substantially as described and shown and for the purpose indicated. 3rd. In an auxiliary, hand actuated driving mechanism for the front wheel of cycles of the kind described, a sprocket wheel in combination with the recessed nave of the front wheel, said sprocket wheel loosely mounted on the nave and fitted with an externally screw threaded extension, said extension adapted to fill the recess of the nave and impart motion to same and the front wheel respectively, an extension at the opposite side of the sprocket

wheel recessed and internally screw threaded, said recess adapted to receive a guide arm with hook stationary on the front fork and to be



laterally moved, when turning so as to engage with, and disconnect from, the recess of the nave of the front wheel, substantially as described and shown and for the purpose indicated.

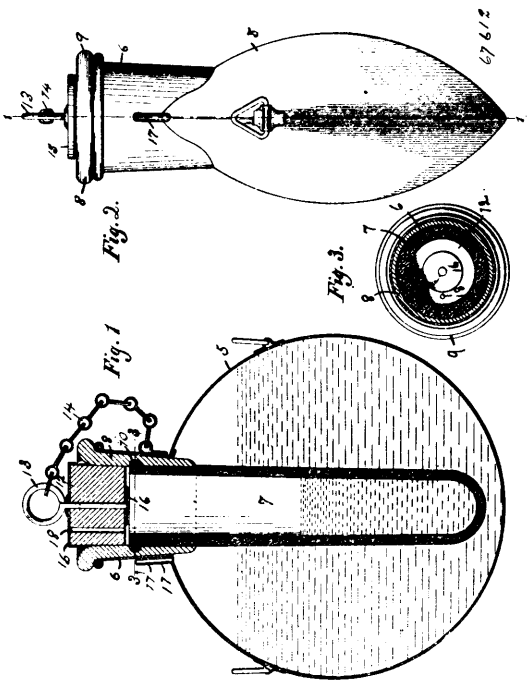
No. 67,611. Brick. *(Brique.)*



John Thompson, Toronto, Ontario, Canada, 4th June, 1900; 6 years. (Filed 23rd February, 1899.)

Claim.—1st. A brick for construction and building purposes, having a tongue extending along the middle portion of one of its wider sides, substantially as shown and described. 2nd. A brick for construction and building purposes, having a groove extending along the middle portion of one of the wider sides thereof, substantially as shown and described. 3rd. A brick for construction and building purposes, having the combination of a tongue extending along the middle of one of its wider sides, with a groove along the middle of the opposite longitudinal wider side, said groove being of less depth but slightly wider than the said tongue, substantially as shown and described.

No. 67,612. Canteen. *(Bidon.)*



Caroline Smith Parker, Chicago, Illinois, U.S.A., 4th June, 1900; 6 years. (Filed 18th September, 1899.)

Claim.—1st. In a canteen, in combination, a body portion having a neck, a filter tube having a lateral projection at its outer end, a collar of elastic material adapted to fit upon the outer end of the filter tube and to fit within the neck of the canteen. 2nd. In a canteen, in combination, a body portion having a neck, a filter tube fitted within the neck, a closure for the outer end of the tube, and a vent for the tube. 3rd. In a canteen, in combination, a body portion and its neck, a filter tube fitted within the neck and having its inner end closed, a closure for the outer end of the tube, the body of the canteen and the tube both being vented. 4th. In a canteen, in combination, a body portion and its neck, a filter tube fitted within the neck and having its inner end closed, a closure for the outer end of the tube and having a vent aperture therethrough, and a vent for the body portion of the canteen exterior to the tube. 5th. In a canteen, in combination, a body portion having a neck, a filter tube adapted to enter the neck, a collar adapted to removably and tightly fit upon the outer end of the tube and within the canteen neck, the collar being prolonged beyond the filter end, and a stopper fitting such prolonged portion of the collar. 6th. In a canteen, in combination, a body portion having a neck, a filter tube having a lateral projection at its outer end, a collar of elastic material adapted to fit upon the outer end of the filter tube and to fit within the neck of the canteen and having a stop shoulder at its outer end for engaging the end of the neck. 7th. In a canteen, in combination, a body portion having a neck, a filter tube having a bead around its outer end, a collar of elastic material adapted to fit within the neck and upon the end of the tube and having an internal annular groove to receive the bead of the tube.

No. 67,613. Cannery Hoist. *(Ascenseur.)*

John C. West, Simcoe, Ontario, Canada, 4th June, 1900; 6 years. (Filed 2nd May, 1900.)

Claim.—1st. As a cannery hoist, a track in combination with a plate or frame adapted to move on the said track, an endless sprocket chain suitably carried and driven parallel to the track and in proximity to the plate, a sprocket wheel engaging the upper portion of the chain, a sprocket wheel engaging the lower portion of

the chain, and means for holding either of the sprockets from rotating, substantially as and for the purpose specified. 2nd. As a

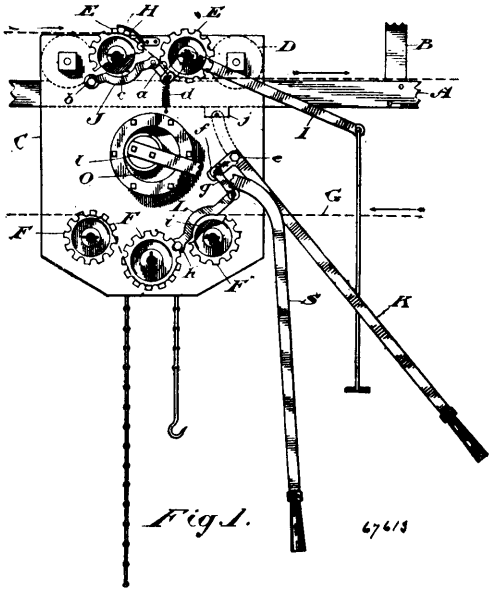
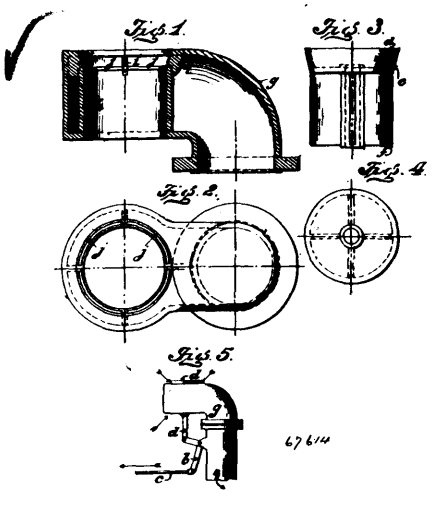


Fig 1. 6763

cannery hoist, a track in combination with a plate or frame adapted to move on the said track, an endless sprocket chain suitably carried and driven parallel to the track and in proximity to the plate, a sprocket wheel engaging the upper portion of the chain, a sprocket wheel engaging the lower portion of the chain, means for securely holding the said chain in engagement with the said sprocket wheels, and means for holding either of the sprockets from rotating, substantially as and for the purpose specified. 3rd. As a cannery hoist, a track in combination with a plate or frame adapted to move on the said track, an endless sprocket chain suitably carried and driven parallel to the track and in proximity to the plate, a sprocket wheel engaging the upper portion of the chain, an idler adapted to hold the chain in engagement with the said sprocket wheel, a sprocket wheel engaging the lower portion of the chain, an idler adapted to retain the chain in engagement with the said sprocket, and means for holding either of the said sprockets from rotating or releasing the same, substantially as and for the purpose specified. 4th. As a cannery hoist, a track in combination with a plate or frame adapted to move on the said track, an endless sprocket chain suitably carried and driven parallel to the track and in proximity to the plate, a sprocket wheel engaging the upper portion of the chain, an idler adapted to hold the chain in engagement with the said sprocket wheel, a sprocket wheel engaging the lower portion of the chain, an idler adapted to retain the chain in engagement with the said sprocket, a friction drum formed on or secured to each sprocket wheel, a brake lever pivoted on the frame in proximity to each drum, and levers pivoted on the frame and adapted to operate the said brake levers, substantially as and for the purpose specified. 5th. As a cannery hoist, a track in combination with a plate or frame adapted to move on the said track, an endless sprocket chain suitably carried and driven parallel to the track and in proximity to the plate, a sprocket wheel engaging the upper portion of the chain, an idler adapted to hold the chain in engagement with the said sprocket wheel, a sprocket wheel engaging the lower portion of the chain, an idler adapted to retain the chain in engagement with the said sprocket, means for holding the first-mentioned sprocket wheel from rotating or releasing the same, a lever pivoted on the frame, a brake shoe carried by the said lever and adapted to engage the said track, and means operated by the said lever for stopping the rotation of the sprocket wheel engaging the lower side of the chain when the brake is released from the track and for releasing it when the brake is so engaged, substantially as and for the purpose specified. 6th. As a cannery hoist, a track in combination with a plate or frame adapted to move on the said track, an endless sprocket chain suitably carried and driven parallel to the track and in proximity to the plate, a sprocket wheel engaging the upper portion of the chain, an idler adapted to hold the chain in engagement with the said sprocket wheel, a sprocket wheel engaging the lower portion of the chain, an idler adapted to retain the chain in engagement with the said sprocket, means for holding the first-mentioned sprocket wheel from rotating or releasing the same, a lever pivoted on the frame, a brake shoe carried by the said lever and adapted to engage the said track, a friction drum formed on or secured to the sprocket wheel engaging the lower side of the chain, a brake lever pivoted on the frame in proximity to the drums and means whereby when the lever is operated to press the brake shoe against the track the brake lever is raised from the drum, and *vice versâ*, substantially as and for the purpose specified. 7th. As a cannery hoist, a track in combination with a plate or frame adapted to move thereon, an endless sprocket chain suitably carried and driven parallel to the track and in proximity to the plate, a sprocket wheel engaging the said chain and secured to an axle journalled in the plate, a friction pinion secured to the said axle behind the plate, a friction wheel having its shaft carried by bearings vertically movable on the plate, a sprocket wheel secured to the said friction wheel, and means for moving the said bearings to move the friction wheel into or out of engagement with the friction pinion, substantially as and for the purpose specified. 8th. As a cannery hoist, a track in combination with a plate or frame adapted to move thereon, an endless sprocket chain suitably carried and driven parallel to the track and in proximity to the plate, a sprocket wheel engaging the said chain and secured to an axle journalled in the plate, means for retaining the chain in engagement with the said sprocket wheel, a friction pinion secured to the said axle behind the plate, a friction wheel having its shaft carried by bearings vertically movable on the plate, a sprocket wheel secured to the said friction wheel, and means for moving the said bearings to move the friction wheel into or out of engagement with the friction pinion, substantially as and for the purpose specified. 9th. As a cannery hoist, a track in combination with a plate or frame adapted to move thereon, an endless sprocket chain suitably carried and driven parallel to the track and in proximity to the plate, a sprocket wheel engaging the said chain and secured to an axle journalled in the plate, a friction pinion secured to the said axle behind the plate, a friction wheel having its shaft carried by bearings vertically movable on the plate, a sprocket wheel secured to the said friction wheel, a stationary brake located above the said friction wheel, and means for moving the said bearings to press the friction wheel against the friction pinion or the brake as desired, substantially as and for the purpose specified. 10th. As a cannery hoist, a track in combination with a plate or frame adapted to move thereon, an endless sprocket chain suitably carried and driven parallel to the track and in proximity to the plate, a sprocket wheel engaging the said chain and secured to an axle journalled in the plate, a friction pinion secured to the said axle behind the plate, a friction wheel located above the said friction pinion, a sprocket wheel secured thereto, a shaft on which the said wheel is journalled an eccentric carrying the said shaft and journalled in the frame, and a lever secured to the eccentric by which it may be rotated, substantially as and for the purpose specified. 11th. As a cannery hoist, a track in combination with a plate or frame adapted to move thereon, an endless sprocket chain suitably carried and driven parallel to the track and in proximity to the plate, a sprocket wheel engaging the said chain and secured to an axle journalled in the plate, means for retaining the chain in engagement with the said sprocket wheel, a friction pinion secured to the said axle behind the plate, a friction wheel located above the said friction pinion, a sprocket wheel secured thereto, a shaft on which the said wheel is journalled, an eccentric carrying the said shaft and journalled in the frame, a lever secured to the eccentric by which it may be rotated, and a stationary brake located above the said friction wheel, substantially as and for the purpose specified. 12th. As a cannery hoist, a track in combination with a plate or frame adapted to move thereon, an endless sprocket chain suitably carried and driven parallel to the track and in proximity to the plate, a sprocket wheel engaging the said chain and secured to an axle journalled in the plate, a friction pinion secured to the said axle behind the plate, a friction wheel located above the said friction pinion, a sprocket wheel secured thereto, a shaft on which the said wheel is journalled, an eccentric carrying the said shaft and journalled in the frame, a lever secured to the eccentric, by which it may be rotated, a link in which is journalled the end of the shaft of the friction pinion, and an eccentric similar to the aforesaid eccentric journalled in the upper part of the link and having the rear end of the friction wheel shaft secured thereto, substantially as and for the purpose specified. 13th. As a cannery hoist, the track A in combination with the plate or frame C adapted to move on the said track, the endless sprocket chain G, the sprocket wheel F and the friction pinion M secured to the same axle, the sprocket wheel F^{11}, the lever K pivoted at e, the brake shoe j carried by the lever, means operated by the lever for stopping the rotation of the sprocket wheel F^{11} when the brake shoe e is released from the track, the friction wheel N journalled on the shaft J, the sprocket wheel O secured thereto, and means for moving the shaft vertically in the frame, substantially as and for the purpose specified. 14th. In a cannery hoist, the track A in combination with the plate or frame C adapted to move on the said track, the endless sprocket chain G, the sprocket wheels F, F^{11}, the friction drum i secured to the sprocket wheel F^{11}, the brake lever L pivoted at h, the forked lever K pivoted at e, the brake shoe j carried by the lever, the arm f of the lever and the link g pivotally connecting the arm f and the brake lever L, substantially as and for the purpose specified. 15th. In a cannery hoist, the track A in combination with the plate or frame C adapted to move on the said track, the endless sprocket chain G, the sprocket wheels F, F^{11}, the friction drum i secured to the sprocket wheel F^{11}, the brake lever L pivoted at h, the forked lever K pivoted at e, the brake shoe j carried by the lever, the arm f of the lever, the link g pivotally connecting the arm f and the brake lever L, the sprocket wheels E, E^1, the friction drum e secured to the sprocket wheel E, the L-shaped lever I pivoted on the frame, the brake lever

J pivoted at *b*, and the link *g* pivotally connecting the lever and the brake lever, substantially as and for the purpose specified. 16th. In a cannery hoist, the track A in combination with the plate or frame *c* adapted to move on the said track, the endless sprocket chain *e*, the sprocket wheels F, F^{11}, the friction drum *i* secured to the sprocket wheel F^{11}, the brake lever L pivoted at *h*, the forked lever K pivoted at *e*, the brake shoe *j* carried by the lever, the arm *f* of the lever and the link *g* pivotally connecting the arm *f* of the brake lever L, the sprocket wheels E, E^1, the friction drum *c* secured to the sprocket wheel E, the L-shaped lever I pivoted on the frame, the brake lever J pivoted at *b*, the link *g* pivotally connecting the lever and the brake lever, and the coil spring *d*, substantially as and for the purpose specified. 17th. In a cannery hoist, a track in combination with a plate or frame adapted to move on the said track in combination with an endless sprocket suitably carried and driven parallel to and in proximity to the track, means for rigidly connecting either side of the chain with the frame so that the latter may be moved in either direction, a brake adapted to engage the track to hold the frame stationary, a sprocket wheel adapted to engage a lifting chain, and means controlled by the operator for rotating the said sprocket wheel from the said endless chain when the frame is stationary, substantially as and for the purpose specified. 18th. In a cannery hoist, a track in combination with a plate or frame adapted to move on the said track in combination with an endless sprocket suitably carried and driven parallel to and in proximity to the track, means for rigidly connecting either side of the chain with the frame so that the latter may be moved in either direction, a brake adapted to engage the track to hold the frame stationary, a sprocket wheel adapted to engage a lifting chain, means controlled by the operator for rotating the said sprocket wheel from the said endless chain when the frame is stationary, and means for holding the said sprocket wheel when it is not being driven by the endless chain, substantially as and for the purpose specified.

No. 67,614. Throttle Valve. (*Valve d'admission.*)



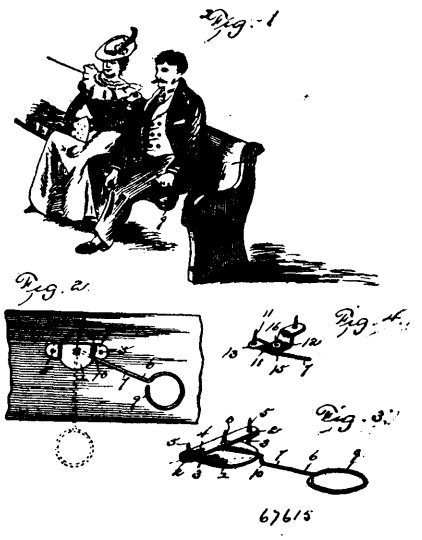
William J. Healy, Susquehanna, Pennsylvania, U.S.A., 5th June, 1900; 6 years. (Filed 21st May, 1900.)

Claim.—1st. The combination with a valve chamber having a single tapering seat and an annular ring formed concentrically therewith, of a balanced throttle valve having a conical portion fitted to the seat and giding ribs connected with the valve and engaging the walls of the ring for maintaining its central position. 2nd. The combination in a throttle valve with a valve chamber having an annular ring therein with a surrounding chamber, said ring and valve chamber having spacing devices and a tapering seat formed at the top into which the chamber of the ring opens, of a valve having a conical portion adapted to fit the seat and guiding ribs fitting the wall of the ring for centering the valve and means for raising and lowering the valve. 3rd. The combination with a valve chamber having an annular ring therein with a surrounding chamber and a valve seat into which the chamber opens, of a valve fitted to this seat, said valve having a closed, imperforate top and provided with guiding ribs fitting the walls of the ring for centering the valve.

No. 67,615. Hat Rack for Church Pews.
(*Porte-chapeaux pour bancs d'église.*)

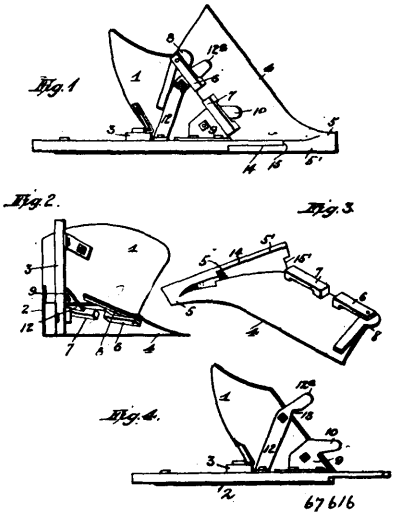
Millard F. Nagle, Shamokin, Pennsylvania, U.S.A., 5th June, 1900; 6 years. (Filed 22nd May, 1900.)

Claim.—1st. In an attachment of the character set forth, the combination of a bracing support having a horizontal bearing surface, and a receiver in pivotal relation to said support and comprising an arm having a part thereof bearing upon the said horizontal support and the outer extremity in the form of a ring or loop, the said



receiver having the portion thereof carrying the ring or loop in a plane below the device to which it is pivotally connected to permit the ring or loop to freely clear the support upon which it may be turned and without touching the rim of the hat which may be supported therein. 2nd. In an attachment of the character set forth, the combination of a bracing support comprising a plate with diametrically disposed horizontally arranged ears, a keeper adapted to bear upon the said ears, and a receiver comprising an arm with an intermediate drop having a holder formed on its outer terminal in the shape of a ring or loop and its inner terminal attached to a pivot, the rear extremity of the arm having bearing upon the said plate and limited in its movement in opposite directions by the front edges of the ears.

No. 67,616. Plough Share. (*Soc de charrue.*)

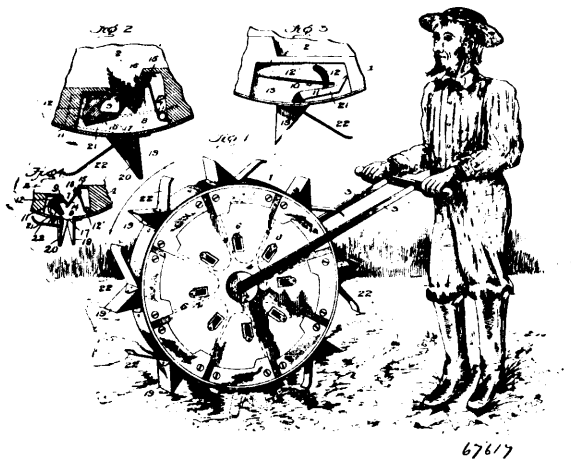


Corwin Camdon Coffinberry, Union, Oregon, U.S.A., 5th June, 1900; 6 years. (Filed 22nd May, 1900.)

Claim.—1st. The combination with the mould board and land side of a plough, of the detachable share, the keepers fixed on said share, tongues for engaging said keepers, a flange depending from said share and provided with a recess and locking notches adapted to engage a similar recess and notches in the land side, and means for securely locking and holding said parts in a locked position, substantially as set forth. 2nd. The combination with a mould board and land side of a plough, of the detachable share, the keepers fixed on said share, the cam lever pivoted in one of said keepers, tongues projecting from said mould board and adapted to engage the said keepers, one of said tongues being provided with a bevelled face locking notch and adapted to be engaged by the aforesaid cam lever

to force the same into contact with its keeper, thereby locking said parts, a flange depending from said share and provided with a recess and locking notches adapted to engage a similar recess and locking notches in the forward end of the land side, substantially as set forth.

No. 67,617. Seed Planter. *(Semoir à graines.)*



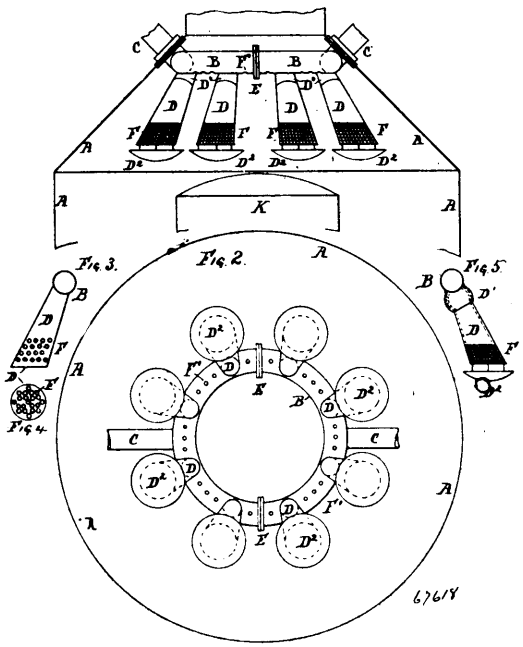
Orson David Park, Manton, Michigan, U.S.A., 5th June, 1900; 6 years. (Filed 22nd May, 1900.)

Claim—1st. In a seed planter of the character described, the combination with the seed compartment provided with a seed discharge orifice communicating with a recess, a spring actuated valve located within the recess, an adjustable gauge plate located within the recess and adapted to regulate the quantity of seed to be discharged through the said aperture, a seed bill leading from the recess, a cover for the seed bill provided with a trip arm which, after the seed bill has been buried in the ground, will be opened by the trip arm coming in contact with the ground and permit of the discharge of seed through the bill, and a connection between the cover and the valve, whereby when the cover is opened, the valve will close the discharge opening in the seed compartment, substantially as and for the purpose set forth. 2nd. In a seed planter of the character described, the combination with the seed compartment provided with a seed discharge orifice communicating with a recess, a spring actuated valve located within the recess, a seed bill leading from the recess, a cover for the seed bill provided with a trip arm which, after the seed bill has been buried in the ground, will be opened by the trip arm coming in contact with the ground and permit of the discharge of seed through the bill, and a connection between the cover and the valve, whereby when the cover is opened, the valve will close the discharge opening in the seed compartment, with connection consisting of a stud projecting from said valve, a spring bearing against said stud, and an arm projecting from said cover and actuated by said stud, substantially as and for the purpose set forth.

No. 67,618. Smoke Preventing Apparatus.
(Appareil à consumer la fumée.)

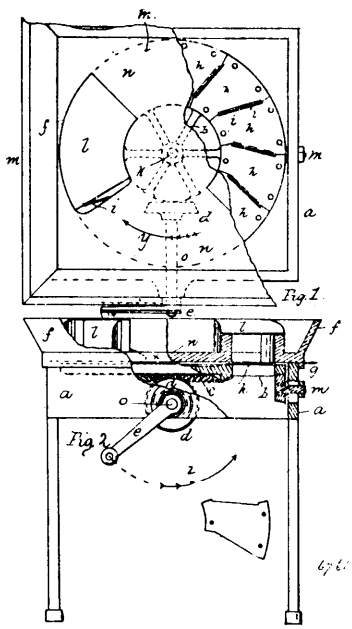
Robert Henry Burns, New York City, New York, U.S.A., 5th June, 1900; 6 years. (Filed 22nd May, 1900.)

Claim.—1st. In combination with the upper casing or hood of a vertical boiler, a conforming inlet chamber for the admission of air or combustion assisting medium and a plurality of suspended outlet pipes, substantially as and for the purpose set forth. 2nd. In combination with the upper casing or hood of a vertical boiler, a conforming inlet chamber for the admission of air or combustion assisting medium, a plurality of suspended outlet pipes, and an universal joint connecting each of said outlet pipes with said inlet chamber, substantially as and for the purposes set forth. 3rd. In combination with the upper casing or hood of a vertical boiler, a conforming inlet chamber for the admission of air or combustion assisting medium, a plurality of suspended outlet pipes, and a shield located



at the discharge ends of said outlet pipes, substantially as and for the purposes set forth.

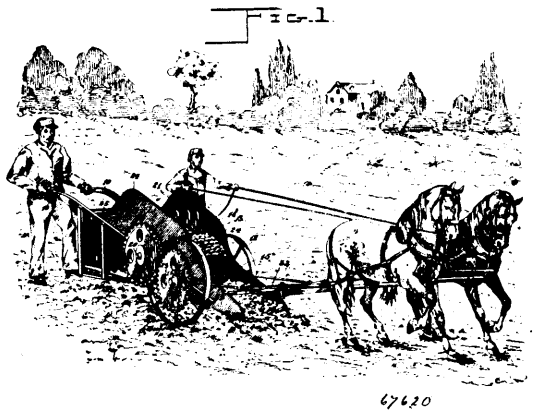
No. 67,619. Fruit and Vegetable Slicer.
(Appareil à couper les fruits et légumes.)



Edward Benjamine Sprague, Belleville, Ontario, Canada, 5th June, 1900; 6 years. (Filed 18th May, 1900.)

Claim.—1st. The horizontally revolving knives in combination with the hopper and the chutes, substantially as and for the purpose hereinbefore set forth. 2nd. The horizontally revolving knives and disc in combination with the bevel gear driving mechanism, substantially as and for the purpose hereinbefore set forth. 3rd. The automatic feeding chutes in combination with horizontal revolving knives, substantially as and for the purpose hereinbefore set forth.

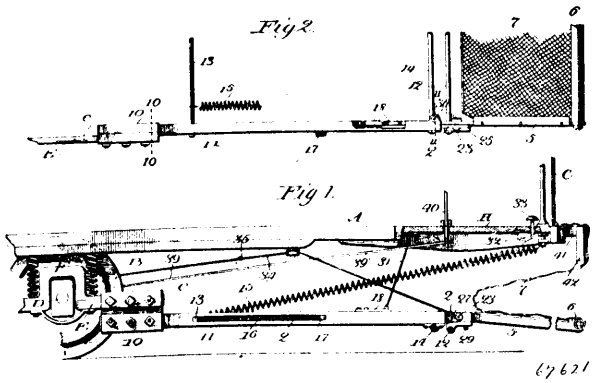
No. 67,620. Potato Digger. *(Arrache-patates.)*



Norbert Champagne, St. Monique, Quebec, Canada, 5th June, 1900; 6 years. (Filed 23rd May, 1900.)

Claim.—1st. In a potato digger, framework carrying a longitudinal grate formed by a series of bars having the arched portions, combined with a revoluble agitator and feeder arranged within the arched portions of the bars and having fingers arranged to sweep over the surface of the grate, and means for rotating said agitator and feeder, substantially as and for the purposes described. 2nd. In a potato digger, a longitudinal grate having the arched portion situated between the inclined front and rear portions, combined with a revoluble feeder and agitator having fingers arranged to sweep across the face of the grate, and a receptacle at the rear of the grate, substantially as and for the purposes described. 3rd. In a potato digger, the combination of handle bars, a grate supported by and between the handle bars and having the inclined sharpened front end, a revoluble feeder and agitator having fingers arranged to traverse the grate, and a receptacle in rear of the grate, substantially as and for the purposes described. 4th. In a potato digger, the combination of handle bars, a grate supported by and between said handle bars, a feeder and agitator arranged to traverse the grate, and a receptacle suspended from the handle bars, in rear of the grate, and having the transversely inclined slatted bottom, substantially as and for the purposes described. 5th. In a potato digger, the combination of the handle bars, the ground wheels mounted on said handle bars, a grate supported between the handle bars and formed by a series of bars having the arched portions between the inclined front and rear portions, a revoluble drum journalled in the handle bars, arranged within the arched portions of the grate bars, and having fingers arranged to sweep the face of the grate, gearing between the drum shaft and one of the ground wheels, and a receptacle in rear of the grate and provided with the transversely inclined slatted bottom, all arranged as and for the purposes set forth.

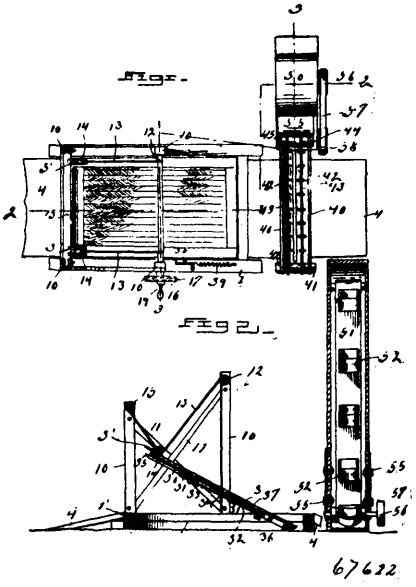
No. 67,621. Car Fender. *(Défense de chars.)*



Obediah Cullison, York, Pennsylvania, U.S.A., 5th June, 1900; 6 years. (Filed 23rd May, 1900.)

Claim.—1st. The combination with a car, of the channel bars 11 carried thereby, and having their vertical webs slotted in a longitudinal direction, sliding bars 2, mounted in the channels of the bars 11, a tie rod between the rear ends of the sliding bars extending through the slots in the supporting bars, and means for moving the sliding bars and the fender, substantially as set forth. 2nd. The combination with a car truck provided with forward extending arms *c*, brackets 10 supported by said arms, channel bars 11 mounted in the said brackets, the sliding bars 2 mounted in the channels of the said bars 11, a fender carried at the forward ends of the bars 2, and means for moving the fender and the sliding bars, substantially as set forth. 3rd. The combination with a car, of supporting bars carried thereby, the sliding bars mounted in ways in the said supporting bars, the fender pivotally connected with the sliding bars at their forward ends, the fender being formed with the side frame pieces 5 arranged in approximately the horizontal plane of the sliding bars, the catches for holding the fender and sliding bars in retracted position, the means for projecting them forward, and trip arms operated by the fender for releasing the catches when the fender meets with an obstruction, substantially as set forth. 4th. In an automatic car fender, the combination of the sliding bars 2, the springs adapted to move the bars forward, catches for holding the bars retracted, the fender pivotally connected with the forward ends of the sliding bars, and having the side pieces 5, which, when the fender is in normal position, are approximately in the horizontal plane of the sliding bars, and the trip arms 24, consisting of the extensions of the arms 5 rearward beyond their pivotal connections with the sliding bars, lying close to the sides thereof, and adapted to engage with the catches when the sliding bars and fender are retracted, substantially as set forth. 5th. The combination with a car, of sliding bars, a fender supported thereby, means for projecting the fender, spring catches for holding the fender and sliding bars in a retracted position, trip arms operated by the fender when it meets an obstruction for releasing the spring catches, and adjusting means for the catches, substantially as set forth. 6th. The combination, in an automatic fender, of the sliding bars, the fender pivotally connected with said bars, means for projecting the fender and bars, catches for holding them in retracted position, the trip arms for the catches, and the bearings 26 and 27, for limiting the extent of movement of the fender on its pivots in each direction, substantially as and for the purposes set forth. 7th. In an automatic fender, the combination of the sliding bars, a fender pivoted thereto, the catches which hold the bar and fender in retracted position, the trip arms which engage with said catches when the bars and fender are retracted, and means for regulating the engagement of the said arms and catches, substantially as set forth. 8th. In an automatic fender, the combination of the sliding bars 2, springs for moving them forward, catches for holding them retracted, a fender proper pivotally supported by the sliding bars, having the side pieces 5, the said pieces being continued in rear of the pivots uniting them with the sliding bars, and constituting trip arms 24, and being provided, adjacent to the pivots, with the flanges having the bearing faces 26 and 27, and the adjustable bearing screws 29, mounted in the said flanges and adapted to engage with the sliding bars, substantially as set forth. 9th. The combination of a fender proper, means connected therewith arranged to automatically project the fender forward, means for holding it in a retracted position, and means independent of said automatic projecting means for drawing back or retracting the fender, arranged to be connected with the wheel axle at the will of the motorman, such means being normally disconnected from the axle, whereby the fender may be retracted by the forward movement of the car, substantially as set forth. 10th. The combination of a car fender, means for holding the fender in a normal position, a trip to release the fender to permit of its being brought into action, means for bringing the fender into action when released, and means under the control of the motorman, connected with the running gear of the car for restoring the fender to its normal position while the car is moving forward, substantially as set forth. 11th. The combination of a fender proper, means for automatically projecting it forward, means for holding it in a retracted position, a trip for releasing the fender, the said projecting and holding means and trip being independent, in their operations, of the running of the gear car, gearing connected with the car axle and with the fender for retracting the fender by the forward movement of the car, a clutch device under the control of the motorman for bringing such gearing into operation, the parts set forth being combined substantially as set forth, whereby the fender may be both projected and withdrawn without interfering with the movements of the car. 12th. The combination of the sliding bars 2, the fender carried thereby, means for holding them in a retracted position, a trip device for releasing the fender so it may be projected, a clutch connected with the axle, flexible connections 34, between the loose member of the clutch and the bars 2, and means under the control of the motorman for operating the clutch, substantially as set forth. 13th. In a car fender, the combination of a bow-shaped spring 41, connected near its middle portion to the car platform, a cross spring between the ends of said spring, and netting supported over the said spring, substantially as set forth. 14th. In a car fender, the combination of a bow-shaped spring 41, connected at its central portion to the front edge of the car platform, the said spring being provided with vertically disposed arms 42, at its ends, a plurality of coiled springs 43 extending between these arms, and the netting extending in front of the spring 43 and over the spring 41, substantially as set forth. 15th. In a car fender, the combination of sliding bars, catches 18 for holding the bars in retracted positions, a fender carried by the sliding bars, flexible connections 31 connected with the catches, means adapted to be operated by the motorman for operating the said flexible connections to release the sliding bars from the catches, and means for tripping the catches automatically, substantially as set forth.

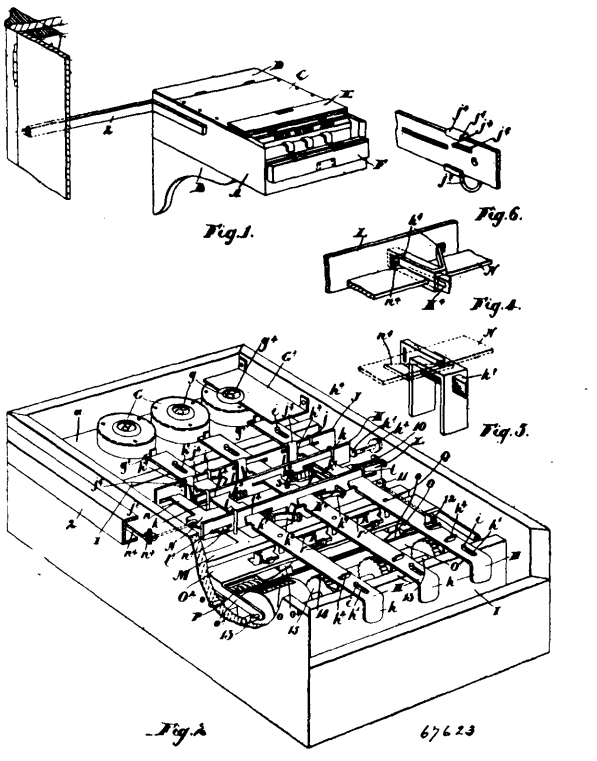
No. 67,622. Unloader. *(Appareil à décharger.)*



William G. Gibben. Westborough, Missouri, U.S.A., 5th June, 1900; 6 years. (Filed 23rd May, 1900.)

Claim.—1st. In a wagon dump, the combination with a frame having a series of holes through its side bars, a rod through one of said series, and a platform journalled on said rod, of a catch for holding said platform in horizontal position, uprights rising from the frame, a windlass journalled in one pair of said uprights, ropes leading from the windlass under pulleys connected to the platform to a cross bar connecting the other pair of uprights, and means for checking the movement of said windlass, as and for the purpose set forth. 2nd. In a wagon dump, the combination with a frame, a platform pivoted therein, a catch for removably holding it in horizontal position, and a superstructure consisting of uprights mounted on the frame, of a windlass jo rnalled in one pair of said uprights, connections between said windlass and the other end of the platform, a block on one of said uprights provided with a transverse hole, a crank shaft connected with said windlass by a sprocket chain which runs on opposite sides of said block, and a pin removably inserted through said chain and the hole in the block, as and for the purpose set forth. 3rd. In a wagon dump the combination with the frame, the platform pivoted therein, and means for raising its free end, of bolts sliding in guides beneath the platform and connected by a cross bar, the forward ends of said bolts being bevelled so as to engage the front bar of the frame, stops on the platform for resting on said bar when the platform is lowered, a connecting bar between said bolts, a contractile spring between this connecting bar and the guides, a lever connected with the cross bar, and means for retracting the lever when the platform is lowered, as and for the purpose set forth. 4th. In a wagon dump, the combination with the frame, the platform pivoted therein, and means for raising its free end, of bolts sliding beneath the platform with their free ends engaging the front bar thereof, a cross bar connecting their rear ends, a lever pivoted at one end beneath the platform and connected by a link with the cross bar, and a spring operated foot piece pivoted within the frame and having its lower end engaging said lever when the platform is lowered, as and for the purpose set forth. 5th. In a wagon dump, the combination with a frame, a platform pivoted therein, spring actuated bolts for holding the platform in horizontal position, and a lever pivoted to the platform and connected with said bolts, of a foot piece pivoted through one side of the frame with its lower end in its position to engage said lever when the platform is lowered, and a spring bearing the upper end of said foot piece in a direction to throw its lower end normally out of engagement, as and for the purpose set forth. 6th. In an unloader, the combination with the wagon dump comprising a frame, a platform pivoted therein, means for tilting the same, and inclined inlet and outlet boards, of an elevator, a horizontal carrier pivoted to and delivering into said elevator and standing normally above and across the inlet board of said platform, and mechanism for driving the elevator and carrier, all as and for the purpose set forth. 7th. In an unloader, the combination with a wagon dumping device located upon the ground, of an elevator at one corner of said device, a horizontally disposed carrier pivoted to said elevator and normally extending across the inlet end of the dump and means for holding the carrier temporarily elevated when it is desired to drive on to the dump, all as and for the purpose set forth.

No. 67,623. Voting Machine. *(Machine à voter.)*



Alfred Abram Farwell, Harrison, Hot Springs, British Columbia, Canada, 5th June, 1900; 6 years. (Filed 12th March, 1900.)

Claim.—1st. In a voting machine, the combination with a circular register for each candidate provided with a central index opening and a minor bar extending forwardly from same, of a push bar designed to operate against the minor bar, so as to operate the register and means for restoring the bar to its normal position, as and for the purposes specified. 2nd. In a voting machine, the combination with a circular register for each candidate provided with a central index opening and a minor bar extending forwardly from same, of a push bar designed to operate against the minor bar, so as to operate the register, a case and frame supporting the registers, and a plate provided with openings through which the index openings of each register extend, such plate covering the operating parts adjacent to the registers, as and for the purpose specified. 3rd. The combination with the register and push bars operating the same, of the adjustable bar provided with inclined planes at the upper side, the co-acting bar with reversely inclined planes, the pins on the push bars, the springheld contact plates provided with V-shaped recesses between them and operating in suitable guide ways with a maximum space between all sufficient to let one pin alone pass, and means for adjusting the upper bar so as to throw it down out of the path of the pin on the push bar as it returns, as and for the purpose specified. 4th. The combination with the register and push bars operating the same, of the adjustable bar provided with inclined planes at the upper side, the co-acting bar with extending planes, the pins on the push bars, the spring held contact plates provided with V shaped recesses between and operating in suitable guide ways with a maximum space between all sufficient to let one pin alone pass at a time and a cord connected to the end of the lower bar having the inclined plane on it, and operated from the door to move the inclined plane in the lower bar from supporting the inclined planes on the upper bar, as and for the purpose specified. 5th. The combination with the registers and their respective push bars, of the rear cross bar supported in suitable staples and provided with slots through which the push bars extend, said push bar having an inclined toothed portion on one edge at the rear portion thereof, and a supplemental notch at the front thereof and the spring catches on the rear cross bar designed to engage the toothed portion of the cross bar and means for restoring the bar to its normal position, as and for the purpose specified. 6th. The combination with the registers and their respective push bars having the intermediate short slots and long slots, of the intermediate cross plate supported in suitable staples and provided with slots through which the push bars extend, the set screw abutting the end of the intermediate cross bar and means for giving a determinate movement to the intermediate cross bar, as and for the purpose specified. 7th. The combination with the registers and their respective push bars having the intermediate short slot and long slots, of the intermediate cross

plate supported in suitable staples and provided with ratchet racks and slots through which the push bars extend, the set screw abutting the end of the intermediate cross bar, the front cross bar supported in suitable guide ways, the plunger dogs supported on same and spring held against the ratchet racks and means for operating the cross bar, as and for the purpose specified. 8th. The combination with the registers and their respective push bars having the intermediate short slot and long slot, of the intermediate cross plate supported in suitable staples and provided with ratchet racks and slots through which the push bars extend, the set screws abutting the end of the intermediate cross bar, the front bar supported in suitable guide ways, the plunger dogs supported on same and spring held against the ratchet racks, the slots in the cross bar, the inclined notches on the push dog normally abutting the slots and the supplemental notches in front of the same, as and for the purpose specified. 9th. The combination with the registers and their respective push bars having the intermediate short slot and long slots, of the intermediate cross plate supported in suitable staples and provided with ratchet racks and slots through which the push bars extend, the set screws abutting the end of the intermediate cross bar, the front cross bar supported in suitable guide ways, the plunger dogs supported on same and spring held against the ratchet racks, the cross plate extending beneath the front and intermediate cross bar and provided with inclined contact plates designed to operate against the projections on the push dog, so as to release them and means for operating such cross plate, as and for the purpose specified. 10th. The combination with the registers and their respective push bars having the intermediate short slot and long slots, of the intermediate cross plate supported in suitable staples and provided with ratchet racks and slots through which the push bars extend, the set screws abutting the end of the intermediate cross bar, the front bar supported in suitable guide ways, the plunger dogs supported on same and spring held against the ratchet racks, the cross plate extending beneath the front and intermediate cross bar and provided with inclined contact plates designed to operate against the projections on the push dog, so as to release them and a cord operated from the door for adjusting such plate, as and for the purpose specified.

No. 67,624. Voting Machine. (*Machine à voter.*)

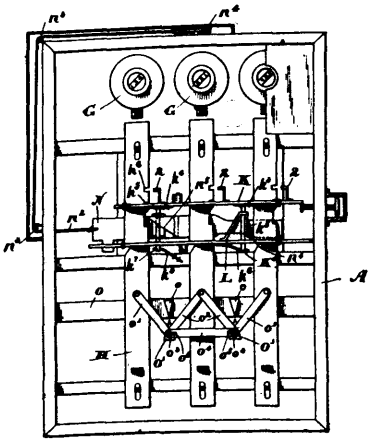


Fig. 1

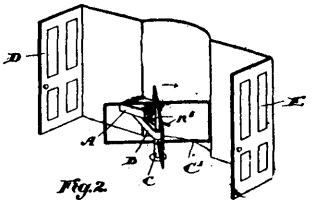


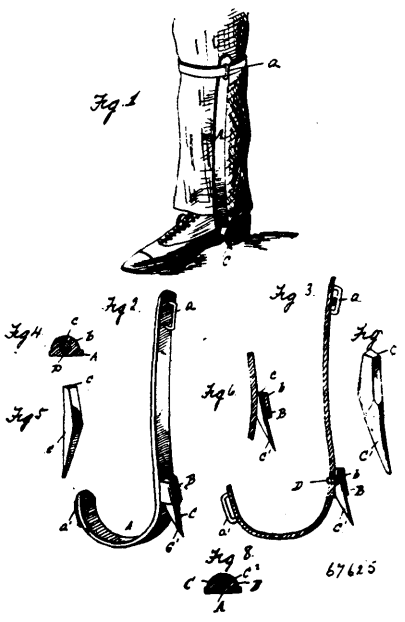
Fig. 2

67624

Alfred Abram Farwell, Harrison, Hot springs, British Columbia, Canada, 5th June, 1900; 6 years. (Filed 23rd May, 1900.)

Claim.—1st. The combination with the push bars, and flat cross plate and co-acting mechanism for releasing the push bars in order to allow of them being restored to their normal position, of the cord attached to the end of the cross plate, the lever outside the case connected to the opposite end of the cord, and the turn stile pin operating on the lever, as and for the purpose specified. 2nd. The combination with the push bars, each having two notches and the cross bar having the racks and the dogs connecting therewith, of the spring arm secured to the cross bar and designed to co-act with the notches in the push bar, as and for the purpose specified. 3rd. The combination with the push bars, and cross bar having the wedge blocks, of the links o^1 and o^2, pivotally connected at one end to the push bars and at the opposite end to the cross link provided end slots, the wedge blocks held at the apex of the connections by the pins extending through the slots and designed to operate, as shown and for the purpose specified.

No. 67,625. Pole Climber. (*Epron pour grimper les poteaux.*)



67625

Daniel A. Jones, Oshkosh, Wisconsin, U.S.A., 5th June, 1900; 6 years. (Filed 23rd May, 1900.)

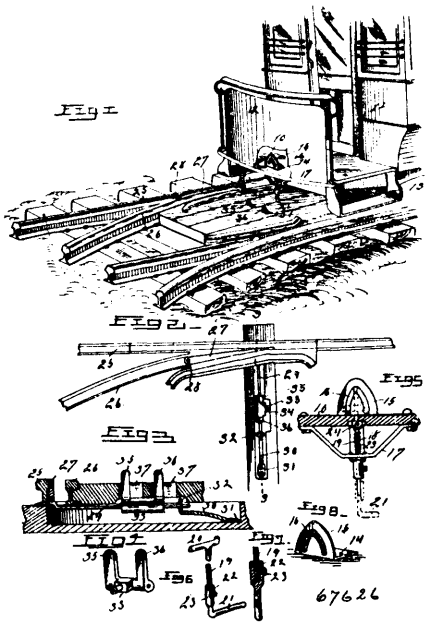
Claim.—1st. A pole climber comprising in its construction a shank of suitable shape having means for attaching it to the leg and provided on its outer surface at or near its lower end with a lug having an upwardly tapered socket or recess, which is entirely outside the vertical axis of the said shank and a removable gaff or spur having an upward taper, and seated in said recess, the penetrating end of the gaff extending d wnwardly and outwardly from said socket, substantially as described. 2nd. An pole climber comprising in its construction a shank of suitable shape having means for attaching it to the leg and provided on its outer surface at or near its lower end with a lug which is provided with an upwardly and outwardly tapered socket or recess, which is entirely outside of the vertical axis of said shank, and a removable gaff or spur having an upward taper, and seated in said recess, the penetrating end of the gaff extending downwardly and outwardly from said shank, substantially as described. 3rd A pole climber comprising in its construction a shank of suitable shape having means for attaching it to the leg and provided on its outer surface at or near its lower end with a lug which is provided with a socket or recess, which is entirely outside the vertical axis of the said shank, a removable gaff or spur seated in said recess, the penetrating end of the gaff extending downwardly and outwardly from said shank, and a screw or pin passed laterally into the gaff or spur, substantially as described. 4th. A pole climber comprising in its construction, a shank of suitable shape having means for attaching it to the leg and provided on its outer surface at or near its lower end with a lug which is provided with a socket or recess tapered upwardly on all sides in the form of a dovetail and a removable gaff or spur, the upper portion of which is tapered upwardly on all sides to form a dovetail by which it is held wedged in the socket, substantially as described.

No. 67,626. Switch. (*Aiguille.*)

Frank Wright, Henderson, Kentucky, U.S.A., 5th June, 1900; 6 years. (Filed 23rd May, 1900.)

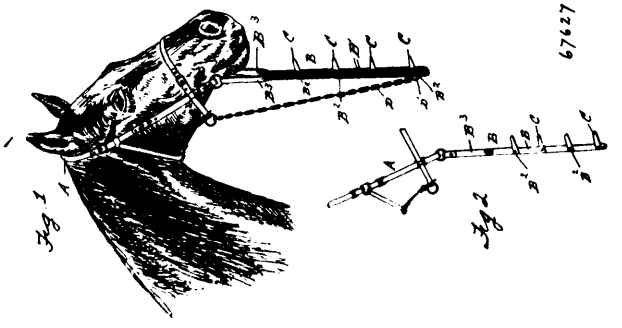
Claim.—1st. The combination with the switch tongue pivoted at one end, of the operating rod loosely secured to the tongue at one end and yielding and slidingly supported at the other end, and vertical arms secured to the rod and normally projected upward through slots in the roadway, substantially as described. 2nd. The combination with the switch tongue, of its operating rod loosely secured at one end to the tongue, a pair of vertical arms adjustably

secured to the rod, and a spring secured at its outer end and provided with an inner upturned end having a hole in which the



opposite end of the operating rod is slidingly supported and normally held raised, substantially as described.

No. 67,627. Animal Yoke or Poke. (*Joug.*)



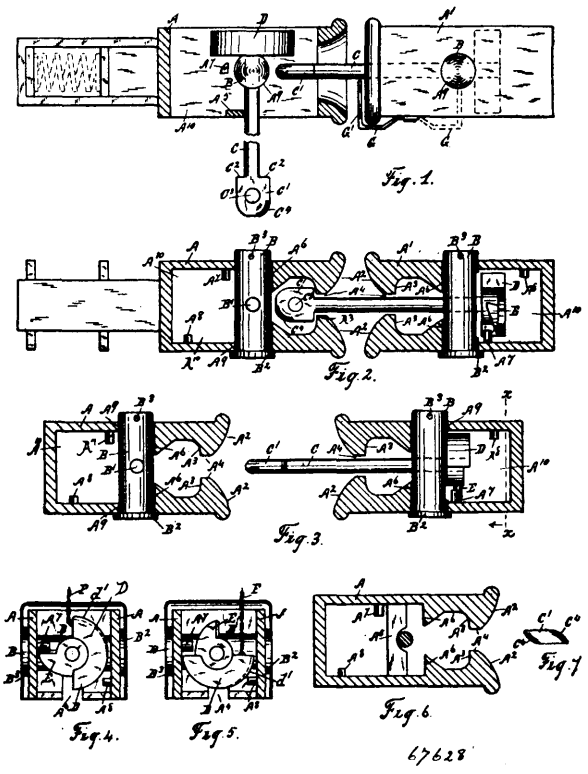
Frank Arthur Wovley, Bowie, Texas, U.S.A., 5th June, 1900; 6 years. (Filed 23rd May, 1900.)

Claim.—1st. A device of the kind described, comprising a bridle or halter having a depending yoke or poke attached to the cheek straps thereof and provided with forwardly projecting teeth and the chain or straps connecting the lower edge of said yoke or poke with the halter or bridle in rear of the connection of the poke therewith, whereby an upward or forward movement of the poke is prevented, substantially as described. 2nd. A depending yoke or poke, composed of two pieces riveted together and having a forwardly projecting tooth secured at each rivet, the upper ends of said pieces being curved and supported for the purpose of attachment to the bridle or halter and the chain connected to the lower end of the straps, and adapted to be connected to the bridle or halter at its upper end in rear of connection of the poke therewith, substantially as described.

No. 67,628. Car Coupler. (*Attelage de chars.*)

Alexander Heron, Delaware, Ontario, Canada, 5th June, 1900; 6 years. (Filed 10th April, 1899.)

Claim.—1st. In an automatic car coupling, a draw bar provided with a stud A^7 and socket bearing A^9, a spindle B rotating freely in said socket bearing in said draw bar, and provided with a socket or opening B^1, and a coupling link C extending through the opening B^1 in said spindle B, and rotating and adjustable lengthwise freely therein, in combination with a weight D provided with an arm E, substantially as and for the purpose set forth. 2nd. In an automatic car coupling, a draw bar provided with a stop A^8 and socket bearing A^9, a spindle B rotating freely in said socket bearing in said draw bar and provided with a socket or opening B^1, and a coupling link C extending through the opening B^1 in said spindle B

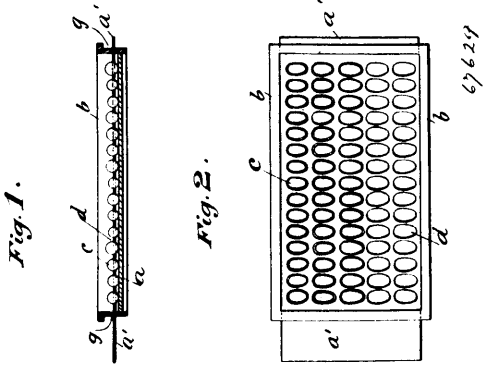


and rotating and adjustable lengthwise freely therein, in combination with a weight D, provided with an eccentric, segmental face, substantially as and for the purpose set forth. 3rd. In an automatic car coupling, a draw bar provided with a stud A^7 and a socket bearing A^9, a spindle B rotating freely in said socket bearing in said draw bar and provided with a socket or opening B^1, a coupling link C formed with shoulders C^2 and extending through the opening B^1 in said spindle B and rotating and adjustable lengthwise therein, and weight D provided with an arm E, in combination with a draw bar A^1, provided with jaws A^3, flaring mouth A^2, and in which an opening A^4 is formed, substantially as and for the purpose set forth. 4th. In an automatic car coupling, a draw bar provided with a stop A^8, and socket bearing A^9, a spindle B, rotating freely in said socket bearing in said draw bar and provided with a socket or opening B^1, a coupling link C, formed with shoulders C^2, and extending through the opening B^1, in said spindle B, and rotating and adjustable lengthwise freely therein, and a weight D, provided with an eccentric segmental face, in combination with the draw bar A^1, provided with the jaws A^3, and flaring mouth A^2, and in which an opening A^4, is formed, substantially as and for the purpose set forth. 5th. In an automatic car coupling, a draw bar, provided with a stud A^7, and stop A^8, and in which a socket bearing A^9, is formed, a spindle B, rotating freely in said socket bearing in said draw bar, and provided with a socket or opening B^1, and a coupling link C, extending through the opening B^1, in said spindle B, and rotating and adjustable lengthwise freely therein, in combination with a weight D, provided with an eccentric segmental face and with an arm E, substantially as and for the purpose set forth. 6th. In an automatic car coupling, a draw bar provided with a stud A^7, and stop A^8, and in which a socket bearing A^9, is formed, a spindle B, rotating freely in said socket bearing in said draw bar, and provided with a socket or opening B^1, a coupling link C, provided with shoulders C^2, and extending through the opening B^1, in said spindle B, and rotating and adjustable lengthwise freely therein, and a weight D, provided with an eccentric segmental face, and with an arm E, in combination with a draw bar A^1, provided with the jaws A^3, and flaring mouth A^2, and in which an opening A^4, is formed, substantially as and for the purpose set forth. 7th. In an automatic car coupling, a draw bar provided with a stud A^7, and stop A^8, and in which a socket bearing A^9, is formed, a spindle B, rotating freely in said socket bearing in said draw bar and provided with a socket or opening B^1, a coupling link C, provided with shoulders C^2, and extending through the opening B^1, in said spindle B, and rotating and adjustable lengthwise freely therein, and a weight D, provided with an eccentric, segmental face, and with an arm E, in combination with a draw bar A^1, provided with the jaws A^3, flaring

mouth A^2, bar A^5, and shoulders A^6, and in which an opening A^4, is formed, substantially as and for the purpose set forth. 8th. In an automatic car coupling, a draw bar provided with a stud A^7, and stop A^8, and in which a socket bearing A^9, is formed, a spindle B, rotating freely in said socket bearing in said draw bar, and provided with a socket or opening B^1, a coupling link C, provided with shoulders C^2, and extending through the opening B^1, in said spindle B, and rotating and adjustable lengthwise freely therein, and a weight D, provided with an eccentric segmental face, and with an arm E, in combination with the draw bar A^1, provided with the jaws A^3, and flaring mouth A^2, and in which an opening A^4, is formed, and the operating device F, substantially as and for the purpose set forth. 9th. In an automatic car coupling, a draw bar provided with a stud A^7, and stop A^8, and in which a socket bear- A^9, is formed, a spindle B, rotating freely in said socket bearing in said draw bar, and provided with a socket or opening B^1, a coupling link C, provided with shoulders C^2, and extending through the opening B^1, in said spindle B, and rotating and adjustable lengthwise freely therein, and a weight D, provided with an eccentric, segmental face, and with an arm E, in combination with the draw bar A^1, provided with the jaws A^3, flaring mouth A^2, bar A^5, and shoulders A^6, and in which an opening A^4, is formed, and the operating device F, substantially as and for the purpose set forth. 10th. In an automatic car coupling, a draw bar provided with a socket bearing A^9, a spindle B, rotating freely in said socket bearing in said draw bar, and provided with a socket or opening B^1, and a coupling link C, two diagonal corners of which are rounded, and which extends through the opening B^1, in said spindle B, and rotates and is adjustable lengthwise freely therein, in combination with the weight D, and support G, substantially as and for the purpose set forth. 11th. In an automatic car coupling, a draw bar, provided with the socket bearing A^9, a spindle B, rotating freely in said socket bearing in said draw bar, and provided with a socket or opening B^1, a coupling link C, two diagonal corners of which are rounded, and which is provided with the shoulders C^2, and which extends through the opening B^1, in said spindle B, and rotates and is adjustable lengthwise freely therein, the weight D, and support G, in combination with the draw bar A^1, provided with the jaws A^3, and flaring mouth A^2, and in which an opening A^4, is formed, substantially as and for the purpose set forth. 12th. A draw bar provided with a stop A^8, in which a socket bearing A^9, is formed, a spindle B, rotating freely in said socket bearing in said draw bar, and provided with an opening B^1, a coupling link C, two diagonal corners of which are rounded, and which is provided with the shoulders C^2, and which extends through the opening B^1, in said spindle B, and rotates and is adjustable lengthwise freely therein, the weight B, provided with an eccentric, segmental face, and a support G, in combination with a draw bar A^1, provided with the jaws A^3, flaring mouth A^2, bar A^5, shoulders A^6, and in which an opening A^4, is formed, and the operating device F, substantially as and for the purpose set forth.

No. 67,629. Egg Storing Tray.

(*Plateau à emmagasiner les œufs.*)



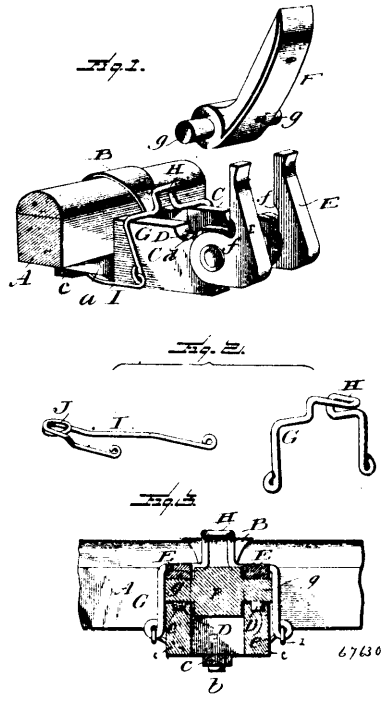
James Lyons, Alfred Lyons and George Lyons, all of Lancaster, England, 5th June, 1900; 6 years. (Filed 15th May, 1899.)

Claim.—In a tray for storing eggs wherein the eggs are turned through frictional contact with the tray bottom, a slide a^1 mounted in the ends and a little above the bottom of the tray, the said slide being formed with egg compartments *d* and serving both to keep the eggs apart from each other and to turn same, all substantially as set forth.

No. 67,630. Shaft Coupling. (*Joint de timoniers.*)

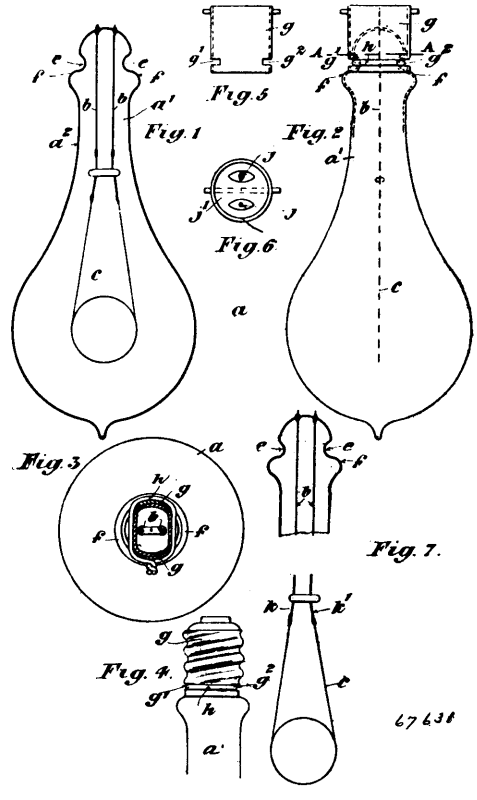
Henry Jackson Mitchell, Plymouth, Indiana, U.S.A., 5th June, 1900; 6 years. (Filed 28th March, 1900.)

Claim.—A shaft or thill coupling, consisting of a suitable coupling head having outwardly extending arms with segmental bearings and elastic cushions, coupling sections pivoted to the arms, a swinging loop for engaging the coupling sections and provided with a thumb piece, and a bifurcated springs with which the swinging loop



engages, said spring having an auxiliary coiled spring, substantially as and for the purpose set forth.

No. 67,631. Electric Lamp. (*Lampe électrique.*)

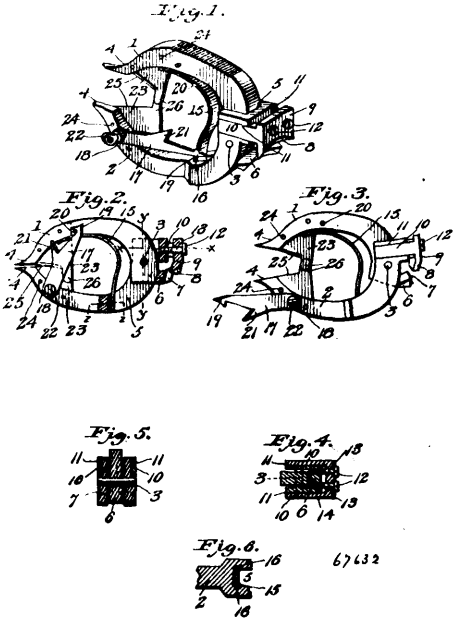


Jacob Atherton, 11 Charing Cross Road, London, England, 5th June, 1900; 6 years. (Filed 24th July, 1899.)

Claim.—In an electric incandescent lamp, the combination with a bulb *a* having an elongated neck a^1 and indentations *e* e^1 on oppo-

site sides of said neck, of a cap g having slots or openings g^1 g^2 on opposite sides thereof to correspond with the said indentations, and a wire h adapted to engage with the said slots and indentations so as secure detachably the cap to the neck of the bulb, substantially as shown and described.

No. 67,632. Manicure Implement. *(Manicure.)*



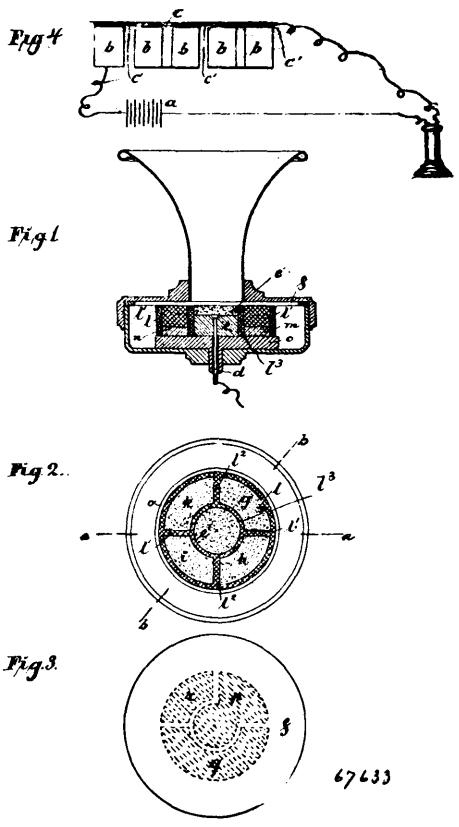
James H. Redfern, Bay Mills, Michigan, U.S.A., 5th June, 1900; 6 years. (Filed 18th May, 1900.)

Claim.—1st. In a manicure implement, a pair of handles, two cutting jaws respectively carried thereby and having acurate working edges, extending transversely of the handles, and means for regulating the distances between the working planes of said edges. 2nd. In a manicure implement, pivoted handles cutting jaws thereon, having arcuate working edges, a stem on one jaw having a sliding engagement with its handle, and an adjusting screw passing through the jaw into the handle. 3rd. In a manicure implement, pivoted handles, cutting jaws thereon having arcuate working edges, a stem on one jaw having a dovetailed sliding engagement with one of the handles, and fixing means for said jaw. 4th. In a manicure implement, pivoted handles, arcuate edged cutting jaws thereon, parallel stems one jaw having a sliding engagement with one handle, and fixing means for said jaw. 5th. In a manicure implement, arcuate edged cutting jaws thereon, parallel stems on one jaw slidable in facial grooves in one handle, and an adjusting and fixing screw passing through the jaw into the handle. 6th. In a manicure implement, crossed and pivoted handles, arcuate edged cutting jaws on adjacent ends thereof, tweezer jaws at the opposite ends, and intermediate shear blades with overlapping heel extending. 7th. In a manicure implement, pivoted handles, arcuate edged cutting jaws thereon, a keeper hook pivoted to one handle, clamping means for the hook, and a lateral scraper on the hook.

No. 67,633. Microphone. *(Microphone.)*

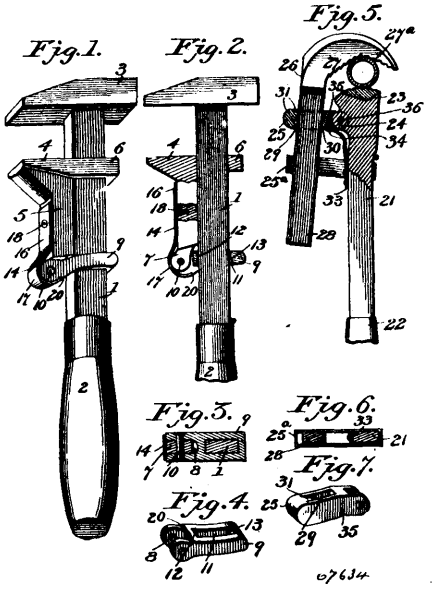
August Herman Skold, Stockholm, Sweden, 5th June, 1900; 6 years. (Filed 5th July, 1898.)

Claim.—A microphone with granulated carbon contacts in series, formed by several spaces, such as e, g, h, i, k, filled with granulated carbon, placed beside each other opposite one side of the diaphragm said spaces being separated from one another by insulating partitions such as l, l^1, l^2, l^3, and provided with contact pieces such as p, q, r,



on the diaphragm opposite the said spaces to connect the places of contact of the carbon spaces and the contact pieces on the diaphragm in series in the line circuit, substantially as set forth.

No. 67,634. Wrench. *(Clé à écrou.)*

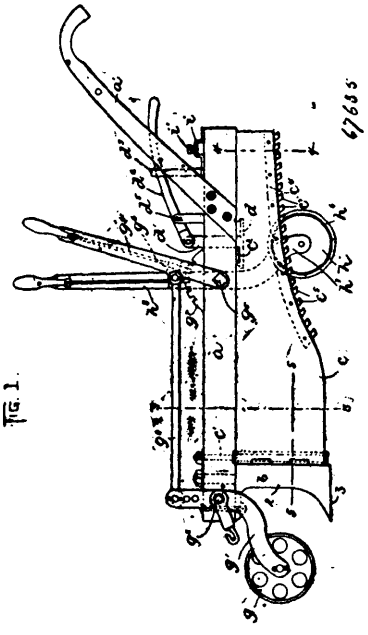


William Thomas Hatton and Chester E. Guernsey, both of Canyon City, Oregon, U.S.A., 6th June, 1900; 6 years. (Filed 3rd November, 1899.)

Claim.—1st. A wrench, comprising a main shank or bar, a stationary or fixed jaw, a movable jaw adapted to slide longi-

tudinally of the shank or bar and provided with a short shank, a clutch loop having one end bifurcated and pivoted to the short shank of the movable jaw, said loop being provided with an opening to receive the main shank or bar and having the inner end wall of the opening rounded and provided at the outer end of the opening with a tooth, and a spring mounted on the short shank and engaging the clutch loop, substantially as described. 2nd. A wrench, comprising a main shank or bar, a fixed jaw, a movable jaw slidingly mounted on the main shank or bar and provided with an integral short shank lying flat against the front face of the main shank or bar, a clutch loop pivoted at one end of the outer end of the short shank and having an opening receiving the main shank or bar, the free end of the loop engaging with the rear face of the main shank or bar and being operated from the rear side of the wrench, and a spring secured to the short shank and having its inner end hook-shaped and extending around the pivoted end of the clutch loop and engaging the same at a point between the pivot and the main shank or bar, whereby it is adapted to throw the clutch loop into engagement with the main shank or bar, substantially as described. 3rd. A wrench, comprising a pair of shanks, each carrying a jaw, the two jaws being relatively movable, a clutch loop having a bifurcated end pivoted to one shank and provided therein with an opening slidably receiving the other shank, said clutch loop being further provided upon one side of its opening with a rounded fulcrum surface, and on the opposite side of the wall of the opening with an inwardly projecting clutch tooth adapted to engage the adjacent wrench shank, and a spring arranged to bear against the loop to hold the tooth thereof normally engaged with said shank, substantially as described.

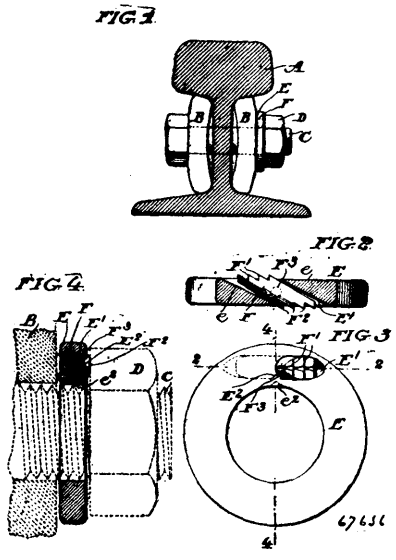
No. 67,635. Cultivator. (*Cultivateur.*)



G. N. Holland and A. A. Smith, both of Hampden, Maine, U.S.A., 6th June, 1900; 6 years. (Filed 16th May, 1900.)

Claim.—1st. A cultivator, comprising a beam, a furrowing plough affixed thereto, elongated hinged hoe blades behind the plough, each blade having its lower edge inclined and curved inwardly, and means for adjustably securing the blades to the beam. 2nd. A cultivator, comprising a beam, a furrowing plough affixed thereto, elongated hinged hoe blades behind the plough, each blade having its lower edge inclined and curved inwardly, and provided with a series of downwardly projecting teeth, and means for adjustably securing the blade to the beam. 3rd. A cultivator, comprising a beam, a clamping plate movable toward and from the lower edge of the beam, a lever for operating the clamping plate, a furrowing plough attached to the forward portion of the beam, and hinged hoe blades behind the plough, having segmental arms which are movable between the clamping plate and beam. 4th. A cultivator, comprising a beam, a furrowing plough affixed thereto, elongated hinged hoe blades behind the plough, means for adjustably securing the blades to the beam, and a marking attachment comprising a socket on the beam provided with a locking device, and a bar movable in said socket and provided with a marker.

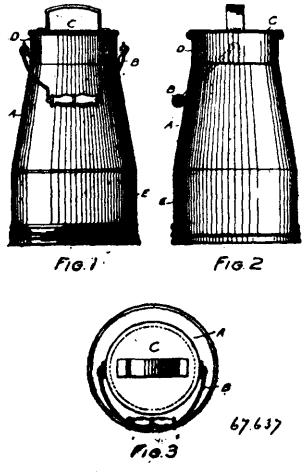
No. 67,636. Nut Lock. (*Arrête-écrou.*)



Frank Freese, Emil J. Bahls, and William F. Kling, all of Philadelphia, Pennsylvania, U.S.A., 6th June, 1900; 6 years. (Filed 21st May, 1900.)

Claim.—1st. A nut lock consisting of an annular washer having an oblique perforation extending from face to face in combination with a stud of less diameter than the perforation in the washer, said stud being centrally pivoted in said perforation and having sharpened ends adapted to project beyond or lie substantially flush with the faces of the washer as the stud is oscilated on its pivot. 2nd. A nut lock consisting of an annular washer having an oblique perforation extending from face to face and at its centre lying close to the inner wall of the washer, in combination with a stud of less diameter than the perforation in the washer, said stud being centrally pivoted in said perforation on a projection from the inner wall of the washer and having sharpened ends adapted to project beyond or lie substantially flush with the faces of the washer as the stud is oscillated on its pivot.

No. 67,637. Dairy Milk Can. (*Bidon à lait.*)



Garrett Brown, assignee of Elias Mathews, both of Denver, Colorado, U.S.A., 6th June, 1900; 6 years. (Filed 21st May, 1900.)

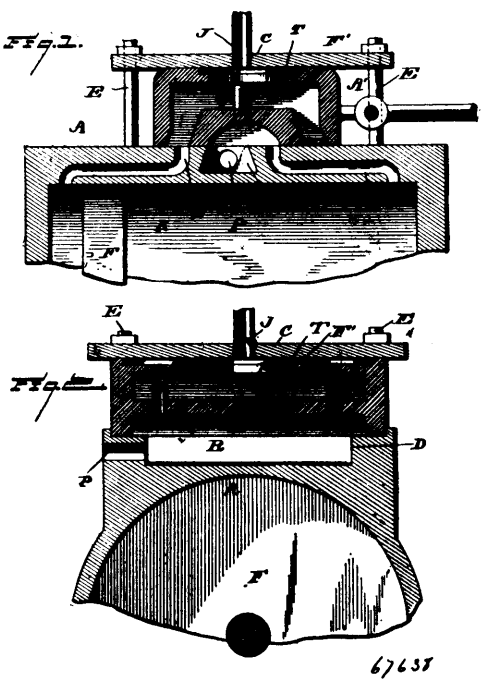
Claim.—A dairy milk can comprising the upper and lower vertical portions D and E and the gradually sloping intermediate portion A comprising a comparatively large portion of the can.

No. 67,638. Slide Valve. (*Tiroir.*)

Alexander C. Du Sonchet and Augustus D. Thomas, both of Paducah, Kentucky, U.S.A., 6th June, 1900; 6 years. (Filed 22nd May, 1900.)

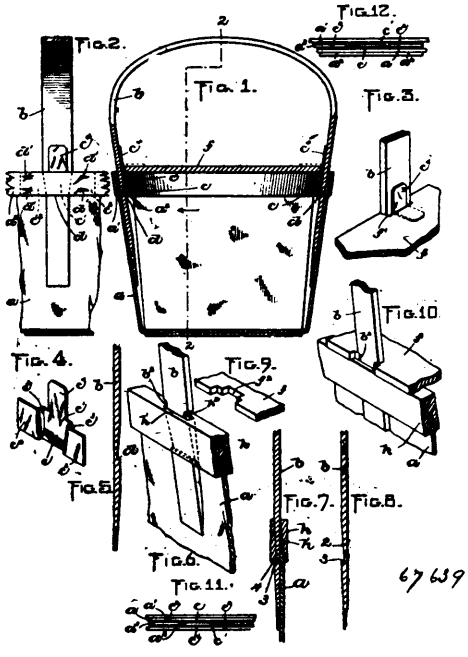
Claim.—In a balanced slide valve, the combination with the steam cylinder having suitable feed and exhaust ports, the hollow slide

valve chest adapted to slide on said cylinder, and guided between ribs on the opposite edges of the upper face of the cylinder, a steam



chest cover between which and said cylinder the valve is designed to work, said valve chest having an elongated dome shaped exhaust port of the cylinder, exhaust pockets formed in the upper outer face of the chest, and on either side of the steam feeding port S of the chest, packings seated in said pockets and bearing between the bottom of the pockets and the lower face of the chest cover, communicating passageways between said pockets and said dome shaped exhaust compartment, as set forth.

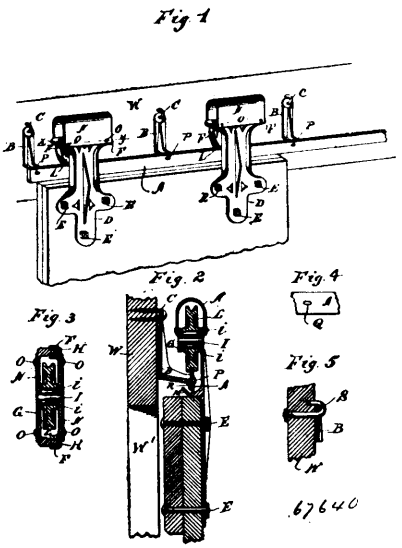
No. 67,639. Fruit Box or Basket.
(*Boite à fruit ou panier.*)



Henry Oscar Little, Bridgewater, Massachusetts, U.S.A., 6th June, 1900; 6 years. (Filed 28th May, 1900.)

Claim.—1st. A fruit box or basket having handle sockets in its sides, each socket having a flexible locking shoulder to engage a complemental locking shoulder on a handle inserted in said sockets. 2nd. A fruit box or basket having handle sockets in its sides, each having a flexible locking shoulder, and a handle having a complemental locking shoulder on its end portions, adapted to engage the said flexible shoulders. 3rd. A fruit box or basket having metallic socket pieces interposed between flexible parts forming the mouth or rim of the box or basket, said pieces having socket walls and handle engaging shoulders. 4th. A fruit box or basket having metallic socket pieces interposed between flexible parts forming the mouth or rim of the box or basket, said pieces having socket walls, handle engaging shoulders, and cover engaging ears. 5th. A fruit box or basket having a handle, notches formed in the handle just above the upper edge of the box, and a cover having notches formed in the handle just above the edges of the box, and a cover having notches formed to engage the notches in the cover.

No. 67,640. Door Hanger. (*Ferrure de porte.*)



William Louden, Fairfield, Iowa, U.S.A., 6th June, 1900; 6 years. (Filed 25th May, 1900.)

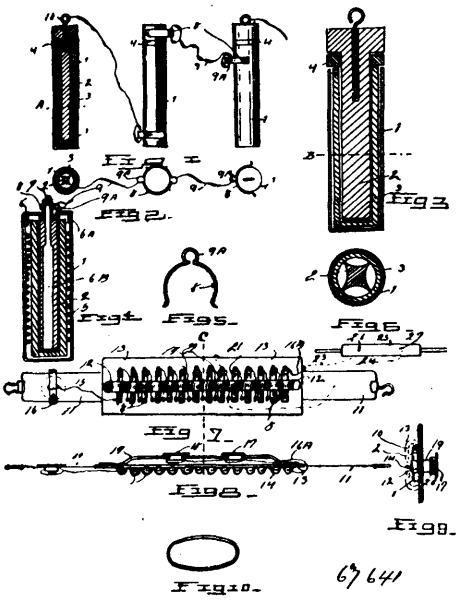
Claim.—1st. The combination of a hanger to support a sliding door, a track for said hanger to run upon, and brackets rigidly secured at their lower ends to the track and their upper ends adapted to rest against and be pivotally secured to the wall, substantially as described. 2nd. The combination of a door hanger, a track for the hanger to run upon, and L shaped brackets having their lower outer ends secured to the inner side of said track, their upper ends being adapted to rest against and be pivotally secured to a wall, substantially as set forth. 3rd. The combination of a door hanger, a track for the hanger to run upon, brackets secured at their lower ends to the inner side of said track and their bodies adapted to rest against a wall and having an eye in their upper ends and the staple to pivotally connect said upper ends of each bracket to the wall, substantially as described. 4th. The combination of a door hanger, a track for the hanger to run upon, and brackets adapted to be pivotally secured to a wall at their upper ends, while their lower ends are horizontally broadened and adapted to fit into horizontally elongated holes in the track, substantially as shown and described. 5th. The combination of a door hanger, a track for the hanger to run upon, and brackets adapted to be pivotally secured to a wall at their upper ends while their outer lower ends are horizontally broadened and adapted to fit into horizontally elongated holes in the track, a downwardly projecting brace being formed on the lower end of the bracket to abut against and support the track, substantially as set forth. 6th. In a door hanger having a frame to encase and carry a wheel outwardly projecting pins on the corners of said frame, and a hood fitted upon said pins and supported by them outside of the edges of the hanger frame, substantially as set forth.

No. 67,641. Electric Belt. (*Ceinture électrique.*)

William H. I. Geiger, Hobart, Colorado, U.S.A., 6th June, 1900; 6 years. (Filed 25th April, 1900.)

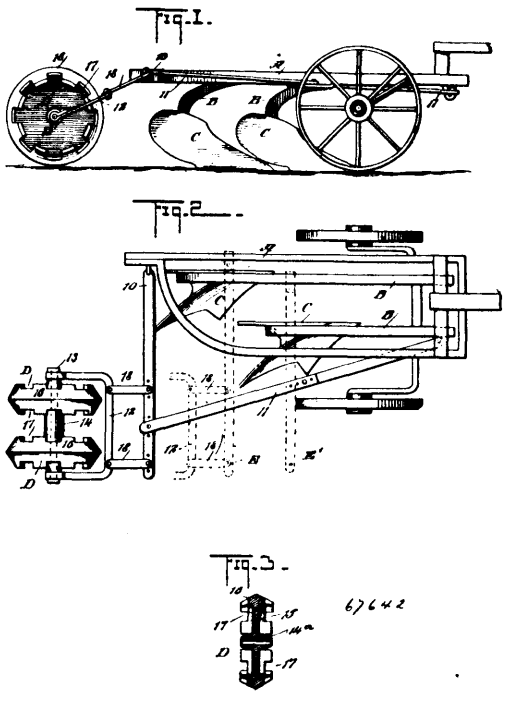
Claim.—1st. An electric belt comprising a plurality of cells each consisting of a tubular, voltaic element closed at its lower end, a rod comprising an opposite voltaic member inserted in said tubular member and extending beyond it, an exciting fluid absorbent element surrounding said rod element and filling the interior of said tubular member, an insulating washer between said tubular shell and said rod and a spring clamping clip secured to the ends of a conducting wire and adapted to fit resiliently on the surface of said tubular member of one cell and on the external portion of the rod member of the adjacent cell whereby the said cells are coupled in series into a bat-

tery, substantially as described. 2nd. The combination in an electric belt, of a battery comprising a plurality of independent voltaic



cells coupled together and each consisting of a negative element comprising a tube of any suitable form of cross section and closed at its lower end, a cap threadedly secured to its upper end, a hole axially through said cap, a positive element comprising a rod extending loosely through said cap into said tube, a reduced portion and a shoulder on said rod adjacent to said cap, an insulating washer between said shoulder of said rod and said cap, an absorbent element comprising any suitable material, as felt, surrounding said rod in said tube, a conductive wire surrounding said absorbent element and in contact with the interior surface of said tube, and means including spring clamping electrodes and conductive wires for coupling the cells into a battery, substantially as described. 3rd. The combination in an electric belt, of the copper tubes having a closed bottom, the zinc rod centrally suspended in the centre of said tube and extending beyond its open end and having a hollow centre, the absorbent fabric surrounding said rod, the insulating washer between the upper end of said tube and said rod, a conductive wire, detachable spring clamping electrodes arranged to be resiliently attached to said tubes at opposite ends of said conductive wire, a body band, means secured to said band for securing it to the body, a covering for the battery secured to said band, a looped strip of suitable material secured to said covering, a second strip secured to said covering or band on the opposite side of said covering from said battery, electrodes slidably secured to said strip and conductive wires operatively connecting said electrodes and batteries, substantially as described. 4th. The combination in an electric belt, of the copper tubes, the zinc rods, the absorbent members and the insulating washers detachably coupled into a battery, with the belt comprising the band, the covering, the looped strip, the electrode supporting strip, the electrodes and the conductive wires connecting said electrodes and battery together, substantially as described. 5th. The combination in an electric belt, of the battery cells consisting of copper tubes, zinc rods extending into said tubes and having one end project beyond said tube, a hole axially through said zinc rod, a shoulder on the extending end adjacent to the end of said tube and an insulating washer between said shoulder and the top of said tube, substantially as described. 6th. The combination in an electric belt, of the battery comprising a plurality of independent cells each consisting of the copper tube, the zinc rod, the absorbent element, the insulating washer, the conductive wires and spring clamping electrodes, with the band, the looped strip for holding the cells and battery and the electrodes and connecting wires, substantially as described. 7th. The combination in an electric belt, of the battery comprising a plurality of independent cells each consisting of a solution or absorbent containing copper tubes adapted to constitute the cathode or negative element of the cell closed integrally at one end, a zinc rod extending into said tube and adapted to form the positive or anode element of said cell, an absorbent body of any suitable material surrounding said zinc rod and saturated with a current exciting fluid and an insulating washer between the entrance end of the tube and the zinc rod, with a coupling electrode consisting of a wire having at each end an elastic clamping clip adapted to fit removably on the tube and zinc rod, and with a body belt comprising a flexible band having hook and eye attachments arranged to secure it round the body, a covering strip secured to said band and provided with a strip formed into a plurality of loops, each of which is arranged and adapted to receive a cell of the battery, a second strip secured at its ends to the back of said covering and band and free at its middle portion, electrodes slidably secured to said strip, an electrode slidably secured at one end of said band and indepndent of the electrodes at the back of said band, and electric connection between said battery and said electrodes, substantially as described. 8th. In an electric belt, the combination of a battery having a plurality of independent cells comprising a tube, a zinc rod, the absorbent covering for said rod and the insulating washer, the cap and the wire coiled around the absorbent member, with the coupling wire and the spring clamping clip comprising a narrow band of conductive spring metal of semi-circular outline arranged to resiliently clamp to the said tube and rod by means of its elastic tension and arranged to be instantly connected to or detached from said tubes and rods of the cells of said battery and a body belt, of any suitable construction arranged to support said battery and containing electrodes slidably attached thereto and operatively connected to said belt, means for guiding said battery into two or more independent batteries, one or more supplementary belts, means for supplying the supplementary belt or belts from the battery or batteries, formed by dividing the whole battery of the main belt into two or more batteries and at the same time supply the main belt and body from the remaining battery of the main belt, substantially as described. 9th. The combination with the copper tubes, the zinc rods, the absorbent member surrounding said rods, and the insulating washer, with the coupling wires having a spring clamping clip at one end adapted to be normally sprung on to the body of said tube and a pin or spring clamp at the opposite end arranged to electrically connect with the zinc rod, substantially as described. 10th. The combination in an electric belt, of the battery comprising the cells, the coupling wires and spring contact clips with the band, the battery covering secured to said band, means for securing said battery to said band and covering, body contact electrodes slidably connected to said belt and electrically connected to said battery, one or more supplementary bands having body contact electrodes secured to them and means for cutting and dividing said batteries into two or more independent batteries and for supplying a supplementary belt or belts from the battery or batteries formed by dividing the whole battery at the main belt and at the same time supply the body from the remaining battery of the main belt, substantially as described.

No. 67,642. Soil Packing Attachment for Gang Ploughs. *(Attache pour charrue buttoir.)*



David Edward Towle, Park River, North Dakota, U.S.A., 6th June, 1900; 6 years. (Filed 25th May, 1900.)

Claim.—1st. A packing attachment for ploughs, consisting of a frame, a wheel mounted to turn in the said frame, the rim of the wheel being inclined and provided with recesses in its side edges, the rim being solid between opposite recesses, and means for attaching the frame of the attachment to the frame of a plough, as described. 2nd. A packing attachment for ploughs, consisting of a frame, means for adjustably attaching said frame to the frame of a plough, and a wheel mounted to revolve within the said frame,

which wheel is provided with a rim tapering in opposite directions from its center, and also with recesses in its side edges, as set forth. 3rd. The combination, with a plough frame, a spreading bar attached to the frame at or near its rear, and a draft bar connecting the spreading bar with the forward portion of the frame at the draft line, of a yoke connected with the spreading bar, and wheels mounted to turn in the said yoke, the said wheels having rims tapering in opposite directions from a central line, the rims being also provided with recesses in their side edges, for the purpose set forth. 4th. A wheel for packing soil, provided with a rim tapering in opposite directions from a central line and provided with side recesses, as set forth.

No. 67,643. Poultry Brooder. (*Couveuse.*)

Fig. 1

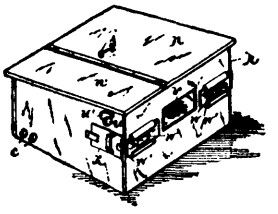
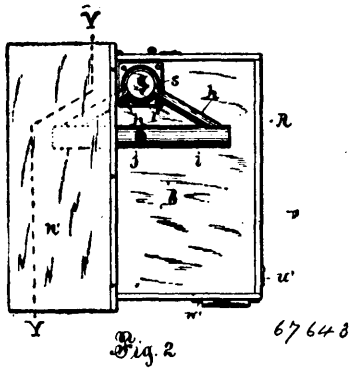


Fig. 2



67643

Alexis S. Whitney, Gouverneur, New York, U.S.A., 6th June, 1900; 6 years. (Filed 28th May, 1900.)

Claim.—1st. A poultry brooder, embodying a case having side and end walls and a raised floor, relatively arranged to provide a brood chamber above and a closed basement beneath said floor, a partition extending transversely of the basement and from side to side thereof and partitions extending from the rear wall of the basement to said transverse partition, said partitions being relatively arranged to form, with said floor of the brood chamber and walls of the basement, a closed central heating chamber and air controlling and moderating chambers at opposite sides of said heating chamber, all located side by side and at one end of the basement, air induction openings leading to said moderating and controlling chamber, air diffusing apertures of smaller diameters than said induction openings, through which the heating chamber has communication with the air controlling and moderating chambers, a lamp in said heating chamber, and means for conveying heat from the heating chamber to the brood chamber. 2nd. A poultry brooder, embodying a case having side and end walls and a raised floor, relatively arranged to provide a brood chamber above and a closed basement beneath said floor, said floor having an opening leading to the basement and the walls of said brood chamber having ventilating ports, a partition extending transversely of the basement and from side to side thereof, and partitions extending from the rear wall of the basement to said transverse partitions, said partitions being relatively arranged to form, with said floor of the brood chamber and walls of the basement, a closed central heating chamber beneath said opening in the floor and air controlling and moderating chambers at opposite sides of said heating chamber, all located side by side at one end of the basement, air induction openings leading to said moderating and controlling chambers, air diffusing apertures of smaller diameters than said induction openings, through which the heating chamber has communication with the air controlling and moderating chambers, a lamp in said heating chamber, a cylinder extending into the brood chamber from the opening in the floor thereof, pipes extending from said cylinder, a drum in the brood chamber, a drum in the brood chamber, into which said pipes discharge, and an exit pipe leading from said drum.

No. 67,644. Core Oven. (*Fourneau..*)

Fig. 1.

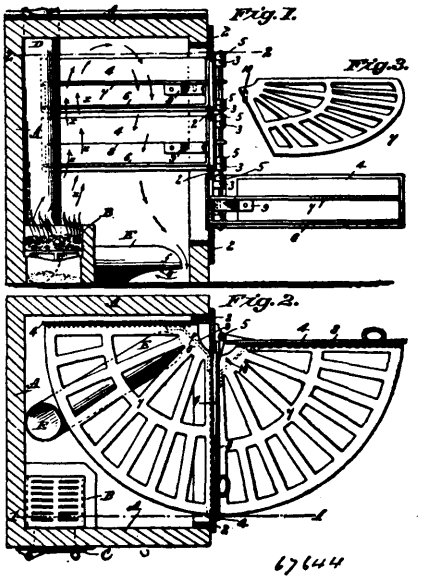


Fig. 3.

Fig. 2.

67644

Eli Millett, Springfield, Massachusetts, U.S.A., 6th June, 1900; 6 years. (Filed 25th May, 1900.)

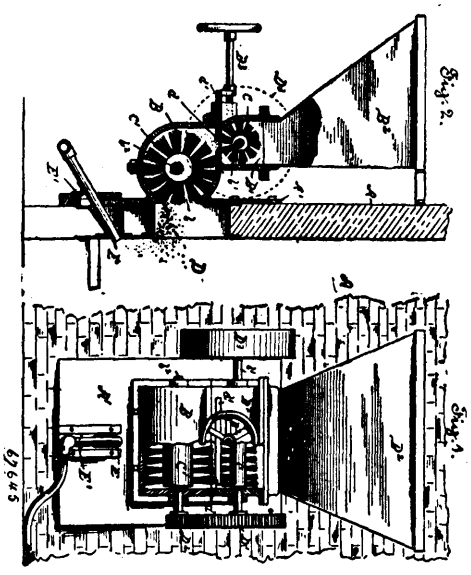
Claim.—1st. An oven for baking cores and analogous purposes, having a shelf frame substantially as described, with one or more shelf openings therein, combined with a core holding shelf hung to swing on said frame, having an oven closing door attached to its opposite edges, one swinging within and one without the oven, on each of which doors is a shelf supporting projection between said shelf and the upper edges of the doors, a strap uniting the ends of said doors near their hinge parts, a second shelf supported removably on said projection and there retained by engagement with said door uniting part, substantially as described. 2nd. In an oven for baking cores containing a fire grate therein for heating said oven, a draft flue for removing the products of combustion from said oven consisting of a horizontal section extending from a point near said grate diagonally across the bottom of the oven and terminating near a corner thereof opposite said grate, and having an inlet opening under the extremity thereof near said corner, and a vertical flue section connected to the end of said horizontal section near said grate, running from thence upwardly through the top of the oven, combined with a series of core holding shelves between said grate and the upper wall of the oven through which the heat generated by said grate must pass upwardly and downwardly before reaching the said inlet opening under the extremity of said horizontal flue section, substantially as described.

No. 67,645. Fuel Feeder. (*Alimentateur de combustible.*)

Frank Norman Spear, Los Angeles, California, U.S.A., 6th June, 1900; 6 years. (Filed 28th May, 1900.)

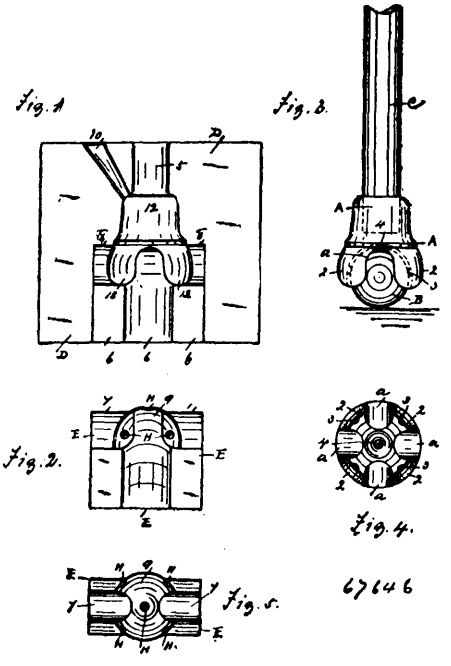
Claim.—1st. In a furnace feeder, the combination with a casing having a feed chamber and a delivery chamber, a fuel passageway between the chambers, a rotary feed brush arranged within the feed chamber for causing a continuous feed of fuel to the delivery chamber, a delivery brush arranged within the delivery chamber, and compressed by a wall thereof adjacent the discharge opening by which the fuel is ejected directly into the combustion chamber, and of means for imparting rotary motion to the said brushes. 2nd. In a furnace feeder, the combination with a casing having a feed chamber, and a delivery chamber, a fuel passageway between the chambers, a rotary feed brush arranged within the feed chamber for causing a continuous feed of fuel to the delivery chamber, a delivery brush arranged within the delivery chamber, and compressed by a wall thereof adjacent the discharge opening by means of which the fuel is ejected directly into the combustion chamber, and of means for imparting rotary motion to the said brushes. 3rd. The combination with a combustion chamber, of a pulverulent fuel feeder comprising a feed chamber and a delivery chamber within which the fuel is delivered, rotary means arranged within the feed chamber for causing continuous delivery of the fuel to the delivery chamber, a resilient delivery brush arranged within said delivery chamber so as to contact with a part near the delivery opening causing the brush to spring and positively throw the fuel directly into the combustion chamber, and of means for imparting rotation to the delivery brush. 4th. In a fuel feeder, the combination with a combustion chamber, a fuel delivery chamber communicating therewith, a yielding delivery brush in the delivery chamber, and means for compressing the brush adjacent the delivery opening for throwing the fuel into the com-

bustion chamber, and means for rotating said brush, substantially as described. 5th. In a fire fuel feeder for furnaces, the combina-



tion of a casing having a feed chamber and a delivery chamber communicating by means of a passage, a rotary feed brush in said feed chamber and acting to cause a continuous feed of fuel to the delivery chamber, a rotary delivery brush so arranged in said delivery chamber that a space is afforded for the fuel from the receiving chamber and to engage a part of the wall near the delivery opening of the chamber to cause said brush to spring and positively throw the fuel from the delivery chamber, and means for rotating the brushes, substantially as described.

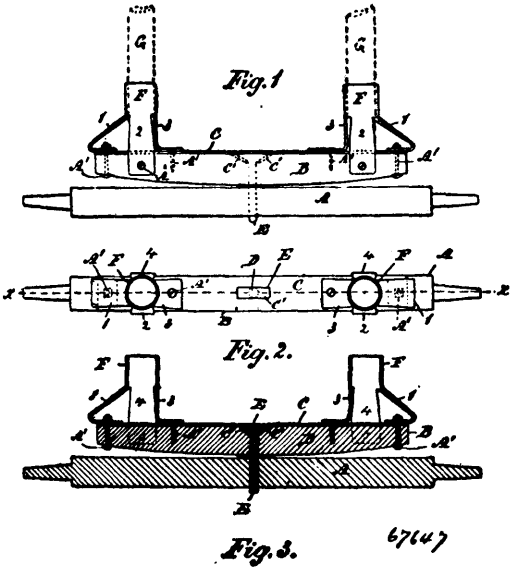
No. 67,646. Glass Ball Caster. (*Roulette de meuble en verre.*)



William Hess, Niagara Falls, Ontario, Canada, 6 years. (Filed 28th May, 1900.)

Claim.—1st. A glass ball caster, the end of a bedstead post cast into the upper part of the caster, a lower chilled circular ball socket formed by claws of the caster, said claws extending below the diametrical line of the ball, and capable of allowing ingress and egress to the ball, substantially as described. 2nd. A glass ball caster, a chilled circular socket formed by claws or walls of the caster to receive said ball, a rounded tit on the upper central part of the socket, similar tits on the said claws of the socket, to engage with the ball above the diametrical line thereof, said socket with the tits capable of affording ingress and egress to the ball, as described. 3rd. A ball caster, the end of a bedstead post cast into the upper part of the caster, a chilled circular ball socket in said caster, a tit on the central part of the socket, tits on the claws, or wall, of the socket above the diametrical line of the ball, said glass ball to revolve freely in the socket and against said tits, said claws extending below the said diametrical line of the ball and capable of affording ingress and egress to the ball, as described. 4th. A glass ball caster, a chilled circular socket in said caster to receive said ball, the walls of said socket extending below the diametrical line of said ball and capable of affording ingress and egress to said ball, the end of an iron bed post cast into the upper part of the caster, in combination with a chill in halves confo ming in shape to the caster, for casting said caster around said post, and a chill for forming said ball socket in the caster, substantially as described.

No. 67,647. Wagon Bolster. (*Coussinet de wagon.*)



Charles Sleeper, Union Center, Wisconsin, U.S.A., 6th June, 1900; 6 years. (Filed 28th March, 1899.)

Claim.—1st. A wagon bolster, having a bolt hole countersunk longitudinally, a plate on top of the bolster having slitted fingers bent into said hole, and a king bolt having a T-shaped head coinciding with said countersink, as set forth. 2nd. A tubular or pipe wagon standard, slitted longitudinally from one end to fork fingers, 1, 2, 3, 4, the two opposite fingers suitably bent and adapted to be bolted to the top of the bolster and the other two fingers adapted to be bolted to the vertical sides of the bolster, as set forth. 3rd. A wagon bolster having a king bolt hole countersunk in V-form longitudinally, a plate secured to the top of the bolster and having slitted fingers depressed into said countersunk portion, and tubular standards formed of pipe, slitted at one end to form sections 1, 2, 3, 4, said sections suitably bent and bolted to the bolster, as set forth.

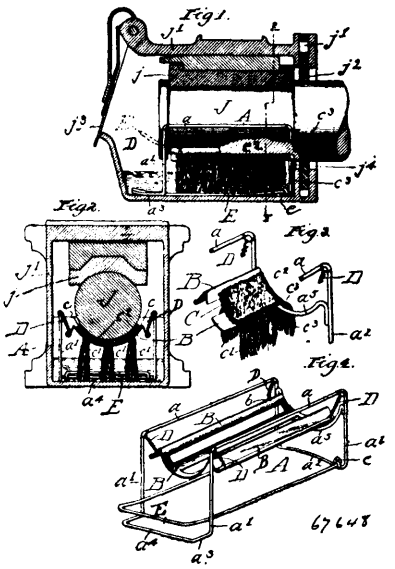
No. 67,648. Journal Lubricator.

(*Graisseur pour coussinets de tourillon.*)

Egbert B. Brown, Chicago, Illinois, U.S.A., 6th June, 1900; 6 years. (Filed 24th July, 1899.)

Claim.—1st. A journal lubricator, comprising a supporting frame, a trough-shaped basket, springs depending from the upper members of the frame and engaging the edges of the basket, a fibrous lining for the basket, and oil conducting wicks depending from said lining. 2nd. A journal lubricator, comprising a resilient flexible basket, supports arranged on opposite sides of the journal, means resiliently suspending the basket by its lateral edges from said support, a fibrous lining in said basket, and oil conducting wicks depending from said lining. 3rd. A journal lubricator, comprising a flexible trough-shaped basket made of sheet metal, springs engaging the lateral edges of the basket and resiliently suspending it from lateral support on opposite sides of the journal, a fibrous lining in said basket, and oil conducting wicks depending from said lining. 4th. A journal lubricator, comprising a framework removably inserted in the journal box and having lateral members on opposite sides of the journal, a trough-shaped basket, springs engaging the lateral edges of the basket and resiliently suspending it from said lateral members, a fibrous lining in said basket, and oil conducting wicks depending from said lining. 5th. A journal lubricator, comprising a supporting frame having upper horizontal reaches, lower transverse reaches, and corner standards connecting said reaches, a trough-shaped metallic basket, springs resiliently suspending said

basket by its edges from the upper horizontal reaches of said frame, a fibrous lining or mat in said basket, or oil conducting wicks



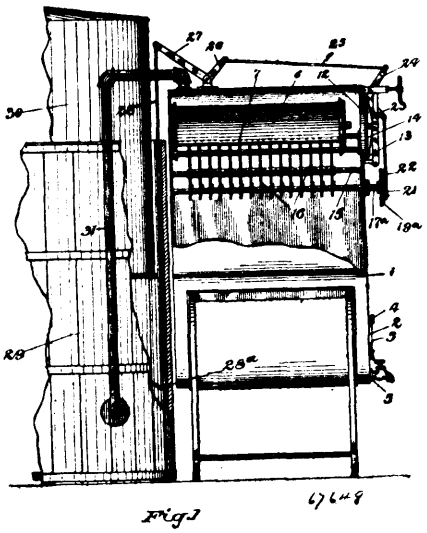
depending from said lining. 6th. The combination with a bearing box and an axle journalled therein, of a transversely extending mass or layers of fibrous material supported beneath the journal at the inner end of the box and serving as a dust guard for the opening through which the axle enters the box. 7th. The combination with a bearing box and an axle journalled therein, of a lubricator removably inserted in the box, and a transversely extending mass or layer of fibrous material supported on the inner end of the lubricator frame and serving as a dust guard for the opening through which the axle enters the box. 8th. The combination with a bearing box and an axle journalled therein, of a lubricating mat of fibrous material supported in contact with the journal and depending at the inner end of the journal in a transversely extending fibrous layer forming a dust guard for the opening through which the axle enters the box. 9th. The combination with a bearing box and an axle journalled therein, of a lubricator removably inserted in the box and having a lubricating mat of fibrous material engaging the journal and depending in a transverse fibrous layer at the inner end of the lubricator frame to form a dust guard for the opening through which the axle enters the box. 10th. A journal lubricator, comprising a frame adapted to be inserted in the journal box, a trough-shaped basket supported therein, and a fibrous mat lining said basket and depending in a transverse lever at the inner end of the basket to form a dust guard. 11th. A journal lubricator, comprising a frame adapted to be inserted in the journal box, a trough-shaped basket supported therein, a fibrous mat lining said basket and depending in a transverse layer at the inner end of the basket to form a dust guard, and a transverse bar on the frame over which said layer depends, substantially as described. 12th. A journal lubricator, provided with a frame adapted to be removably inserted in the journal box and consisting of upper longitudinally extending reaches, uprights supporting the end of the reaches and transverse connections between the lower ends of the uprights, a thrust frame pivoted to the lower front edge of the lubricator frame extending to the opposite end of the latter, a trough-shaped basket supported from the upper reaches, a fibrous lining in said basket, and wicks depending from said lining.

No. 67,649. Acetylene Gas Generator.

(Générateur de gaz acétylène.)

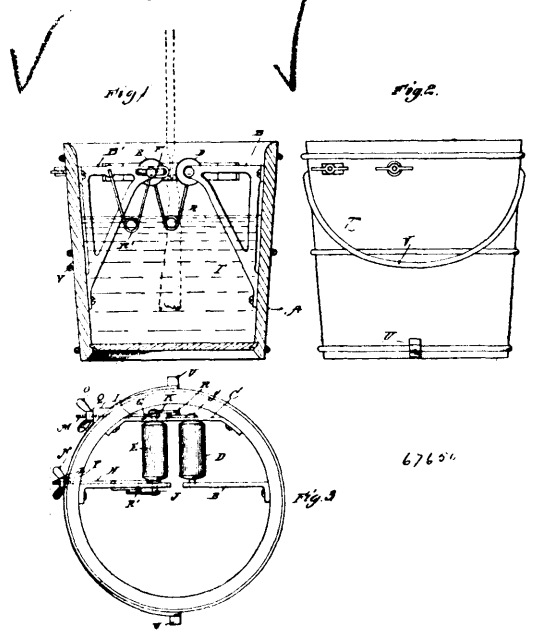
August Herman Deike, Guelph, Ontario, Canada, 6th June, 1900; 6 years. (Filed 24th April, 1899.)

Claim.—1st. The combination with the telescope gas holder and the gas generator having gas communicating pipe, of a carbide holder supported in the generator, a bottom on the holder composed of a plurality of hinged plates or sections, pivotally mounted supports adapted to hold the bottom sections closed, a shaft journalled in the generator and provided with pins arranged spirally to engage and release successively the bottom supports, a ratchet wheel on the end of said shaft, an arm pivotally secured to the shaft, a pawl on the arm to engage the ratchet wheel, a bell crank lever fulcrumed to the generater, a connecting rod between the lever and the pawl actuating arm, a second bell crank lever fulcrumed on the generator, a connecting rod uniting the two levers, and a rod connected to the outer arm of the second bell crank lever and extending down into the gas holder, substantially as specified. 2nd. The combination with the telescoping gas holder and a gas generator having an opening to admit a carbide holder, supporting rods extending across the generator, carbide holders mounted on the supporting rods, a bottom for the holder composed of a plurality of sections hinged



thereto, rocking supports for the bottom sections, shafts journalled in the generator and provided with spirally arranged pins to engage the rocking supports in succession, intermeshing gears on the said shafts, a pawl and ratchet mechanism on one of said gears, a series of levers and connections to operate the pawl and rotate the said shafts, and a rod depending from the system of levers connection into the gas holder, and having a hook on its free end arranged in the path of the bell of the gas holder substantially as specified. 3rd. The combination with the telescoping gas holder and the gas generator of the carbide holder and means for operating it comprising the depending hooked rod 28, in the path of the bell of the gas holder, the cell crank lever 27, 26 fulcrumed on the generator, the rod 25 connected thereto, the bell crank lever 24, 23, fulcrumed to the generator and connected to the rod 25, the rod 22, the pawl and ratchet mechanism, 21, 21a, shafts 17, 17a, journalled in the generator, and provided with spirally arranged pins, bottom supports 16, 16, the carbide holder 6, and hinged bottom sections 9, all arranged and combined substantially as specified.

No. 67,650. Mop Pail Wringer. *(Essoreuse de guipon.)*



John Alonzo White, Oxford, Ohio, U.S.A., 6th June, 1900; 6 years. (Filed 25th May, 1900.)

Claim.—1st. In a mop pail wringer, the combination with a mop pail, of a pair of brackets and a cross bar mounted therein, of a pair

of rollers having one end mounted in the respective brackets and their other end mounted in such cross bar, one of said rollers being slidably mounted in its bearings, adjusting rods engaging at one end with said slidably mounted roller, and means to adjust said rods to adjust said roller, whereby the space between the tow rollers is governed, all substantially as shown and described. 2nd. In a mop pail wringer, the combination with roller supports mounted therein, of a pair of rollers mounted in said supports, one of which is adjustable therein, means for adjusting said last-named roller to and away from said first-named roller to fixedly hold said roller in its adjusted position. 3rd. In a mop pail wringer, the combination with a mop pail, of a pair of brackets mounted in said pail opposite each other with a space between them, a supporting bar also mounted in said pail at one side of said brackets, a pair of rollers having one of their ends mounted in said bar their other ends mounted in the respective brackets, means for adjusting one of said rollers away from the other roller and holding it in such adjusted position, and a pair of springs for moving said adjustable roller toward said fixed roller on releasing said adjusting means, all substantially as shown and described. 4th. In a mop pail wringer, the combination with a mop pail having a pair of brackets mounted therein opposite each other with a space between them, a bar also mounted in said pail parallel to said brackets, said bar having a pair of holes therein for receiving one end of rollers, one of said holes being elongated, said brackets each having a hole therein for receiving the other ends of rollers, one of which holes is elongated, a pair of rollers mounted in said respective holes, a pair of rods connected at one end with one of said rollers, said rods extending through one side of said pail, wing nuts engaging with the respective rods outside of said pail for adjusting the roller to which they are connected in said elongated openings away from said first roller, and one or more springs adapted to return said adjustable roller toward said fixed roller when said wing nuts are loosened, all substantially as shown and described. 5th. In a mop pail wringer, the combination with a mop pail, of a pair of brackets mounted therein opposite each other with a space between them, a bar parallel to said brackets also mounted in said pail, a pair of rollers, one of which is non-rotatable and the other of which is adjustably mounted in said bar in said respective brackets, an adjustable rod secured to one end of said adjustable roller and projecting through the side of said pail and having its outer end screw-threaded, a wing nut mounted on said screw-threaded end for adjusting one end of said adjustable roller away from the stationary roller, a spring having one end secured to one said brackets and its other end secured to the adjustable roller to normally act upon said adjustable roller toward said fixed roller, another adjusting rod secured to the other end of said adjustable roller, and also formed into a spring, having its inner arm connected with a bearing of said stationarily mounted roller, said last-named rod also extending out through the side of the mop pail and having its outer end screw-threaded, a wing nut mounted on said outer end for adjusting said adjustable roller away from said fixedly mounted roller, while said last-named spring acts to move said adjustable roller toward said fixedly mounted roller on loosening said last-named wing nut, all substantially as shown and described. 6th. In a mop pail wringer, the combination with a mop pail, of a pair of brackets fixedly mounted therein opposite each other and with a space between them, a bar also mounted therein parallel to said brackets, said brackets and bar having bearings for rollers therein, the bearings for one of said rollers being elongated, whereby such roller may be adjusted, a pair of rollers mounted in said respective bearings, a spring having one end secured to said adjustable roller and its other end secured to the bracket carrying one end of said roller for normally acting to press said adjustable roller toward the other of said rollers at the other end, a pair of adjusting rods secured to the opposite ends of said adjustable roller and projecting through the sides of said pail and screw-threaded to receive wing nuts thereon, a pair of washers interposed between said pail and said wing nuts on said adjusting rods, one of said adjusting rods being adjacent to said bar, and also formed into a spring, acting to normally press the other end of said adjustable roller toward said fixedly mounted roller, all substantially as shown and described.

No. 67,651. Machine for Gumming or Pasting Wrappers and Labels. (*Machine pour gommer ou coller les étiquettes et enveloppes.*)

Robert Douglas Ross, Toronto, Ontario, Canada, 6th June, 1900; 6 years. (Filed 14th May, 1900.)

Claim.—1st. A machine for gumming or pasting wrappers or labels, consisting of a paste receptacle, a distributing roll at front of the paste receptacle, mandrels for the distributing roll, arms in which are journalled the mandrels, standards upon which the mandrels are vertically movable, stops connected to the standards, springs coiled on the standards between the stops and arms to normally depress them and friction wheels mounted on the mandrels to cause the rotation of the distributing roll, substantially as specified. 2nd. A machine for gumming or pasting wrappers or labels, consisting of a paste receptacle, a distributing roll at the front of the paste receptacle, mandrels for the distributing roll, arms in which are journalled the mandrels, standards upon which the mandrels are vertically movable, stops connected to the standards, springs coiled on the standards between the stops and arms to normally depress them, friction wheels mounted on the mandrels to cause the rotation

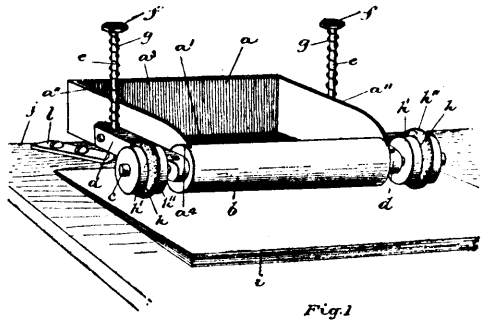


Fig. 1

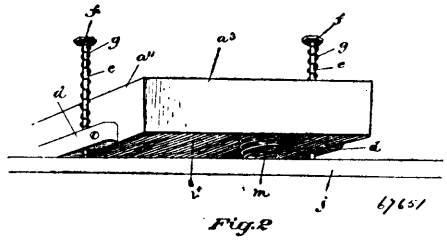
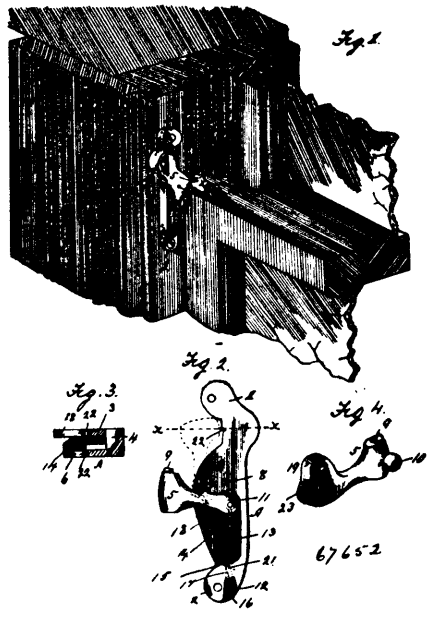


Fig. 2

of the distributing roll, and a spring beneath the rear end of the paste receptacle, substantially as specified.

No. 67,652. Burglar Alarm. (*Avertisseur à sonnerie.*)

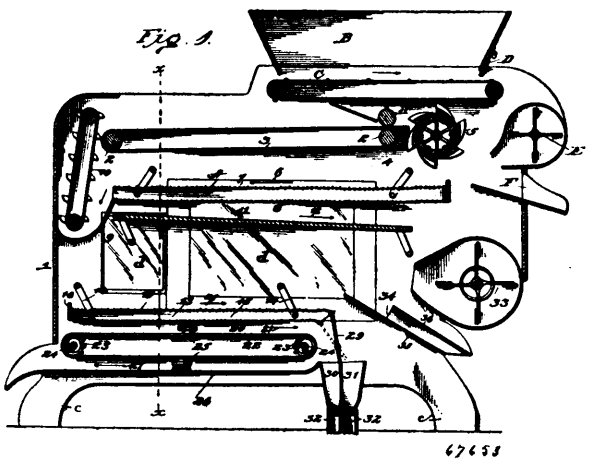


Clarence E. Spencer and John T. Pettick, both of Carbondale, Pennsylvania, U.S.A., 6th June, 1900; 6 years. (Filed 30th April, 1900.)

Claim.—1st. The combination with a frame constructed and adapted to receive a cap or cartridge therein, of a hammer substantially L-shaped at one end, and pivoted to the frame, a rod, one end of said rod being pivotally connected to the hammer at the angle of the L-shaped portion, and the other end having loose sliding connection with the frame, and a spring on this rod bearing upon the hammer in a direction out of direct alignment with the pivot of the hammer and the point where the rod is connected to the frame, whereby the hammer is held normally in its set position from which it is moved when struck by the sash and moved past its dead centre. 2nd. The combination in a burglar alarm, of a frame provided with ears and longitudinally slotted, one wall of said slot forming a shield and guard for the mechanism, a hole or socket formed in the body portion of the frame for the reception of the cap or cartridge and connected with a second hole which permits the smoke and noise to

escape, a hammer pivotally mounted in said slot and the head of which is provided with a knob for raising and setting the hammer, a projection upon the striking face of the hammer to facilitate the explosion of the cap or cartridge, the foot of the hammer formed in substantially L-shape, a cut-away portion, a spring mounted upon a rod operating therein, said spring movably connected with the foot of the hammer, a hole and slot in one end of the frame in which is loosely inserted one end of the rod.

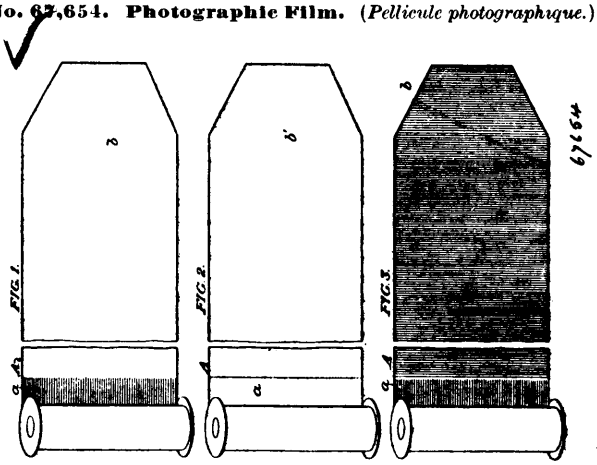
No. 67,653. Tobacco Cutting Machine.
(Machine à hacher le tabac.)



Nicholas P. Perkins, Roanoke, Virginia, U.S.A., 6th June, 1900; 6 years. (Filed 2nd October, 1899.)

Claim.—1st. In a tobacco cutter, the combination with the main frame, of a cutting mechanism, a vibratory separator located below said cutting mechanism, a second vibratory separator arranged below the first named separator, a deflecting chute arranged at the rear end of the machine at the rear of the second named vibratory separator and below the rear end of the first named vibratory separator, a shaker board located between the two separators and adapted to discharge the material at a point above the chute, and a blower arranged at the rear of the deflecting chute and under the rear of the first named vibratory separator, substantially as set forth. 2nd. In a tobacco cutter, the combination with the main frame, of a cutting mechanism, a vibratory separator located below said cutting mechanism, a pan or receptacle located at the forward or discharge end of said vibratory separator, a conveyer for removing the contents of said pan or receptacle, a second conveyer for receiving the discharge from the first conveyer and conducting it back to the cutting mechanism, a shaker board arranged below the vibratory separator, a second vibratory separator arranged below the shaker board, a deflecting chute arranged below the shaker board and at the rear of the second named vibratory separator, and a blower arranged below and at the rear of the shaker board and at the rear of the deflecting chute, substantially as shown and described. 3rd. In a tobacco cutter, the combination with the main frame, of cutting mechanism, a vibratory separator located below said cutting mechanism and consisting of two screens, the upper one of which is coarser than the lower one, a pan or receptacle located at the forward or discharge end of said vibratory separator, a conveyer for removing the contents of said pan or receptacle, a second conveyer for receiving the discharge from the first conveyer and conducting it back to the cutting mechanism, a shaker board arranged below the vibratory separator, a second vibratory separator arranged below the shaker board and consisting of two screens, the upper one of which is coarser than the lower one, said screens being of finer mesh than the screens of the first named separator, substantially as set forth. 4th. In a tobacco cutter, the combination with the main frame, of a cutting mechanism, and the upper separating mechanism, of the lower separating mechanism arranged below the upper separating mechanism, the lower separating mechanism consisting of a vibratory upper and lower screen, the former of larger mesh than the latter, and the latter terminating short of the rear end of the former, brushing mechanism located below the lower screen, a pan located below the brushing mechanism, a valve arranged at the discharge end of the screens and adapted either to direct the combined contents of the two screens into one receptacle, or separate the contents and direct them into separate receptacles, a deflecting chute at the rear end of the lower separating mechanism and below the rear end of the upper separating mechanism, and a blower arranged at the rear of the deflecting chute and below the rear end of the upper separating mechanism, substantially as set forth.

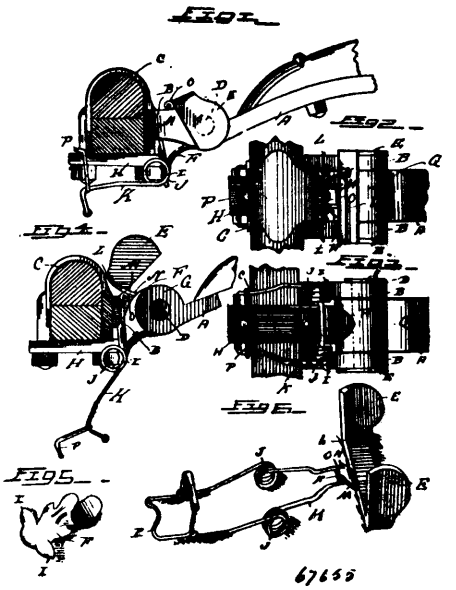
No. 67,654. Photographic Film. *(Pellicule photographique.)*



Arthur W. McCurdy, Washington, District of Columbia, U.S.A., 7th June, 1900; 6 years. (Filed 24th October, 1899.)

Claim.—1st. A film for photographic purposes having an image receiving section and an enveloping or light excluding section, the latter being free from any ingredient or constituent likely to affect injuriously the image receiving section under the conditions of storage or use, to which the film will under ordinary circumstances be subjected. 2nd. A film for photographic purposes comprising an image receiving section, and an eveloping or light excluding section, the latter being devoid of any agents or ingredients which through chemical or mechanical action in the solutions to which the film is subjected after exposure might injuriously affect the solutions. 3rd. A film for photographic purposes comprising an image receiving section and an enveloping or light excluding section, the latter being devoid of any agents or ingredients which through chemical action in the solutions to which the film is subjected after exposure might injuriously affect the film. 4th. A film for photographic purposes comprising an image receiving section and an enveloping or light excluding section, the latter being devoid of any agents or constituents capable of injuriously affecting the image receiving portion under ordinary variations of atmospheric conditions. 5th. A film for photographic purposes comprising an image receiving portion and a light excluding enveloping portion integral therewith. 6th. A cartridge film for photographic purposes having the portion which is threaded into the spool made of a material free from any ingredient or constituent likely to effect injuriously the image receiving portion of the film under ordinary conditions of storage use, development or fixing.

No. 67,655. Thill Coupling. *(Armon de limonière.)*

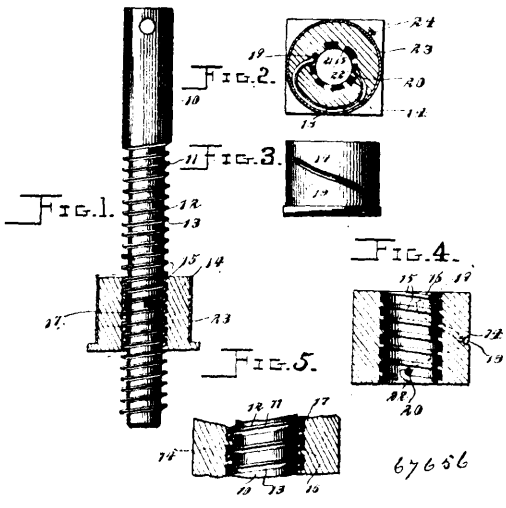


John Sykes, Greensburg, Pennsylvania, U.S.A., 7th June, 1900; 6 years. (Filed 28th March, 1900.)

Claim.—1st. In a thill coupling, the combination of the connecting cross plate L, the ears E E provided with tangs N N forming a

cam, M, and a bearing O, with the shoe F, and spring securing device, substantially as and for the purpose set forth. 2nd. As an article of manufacture, the thill coupling attachment comprising the cross plate L, the ears E E, the cam M, and the bearing O, stamped out of a single piece of metal, substantially as described.

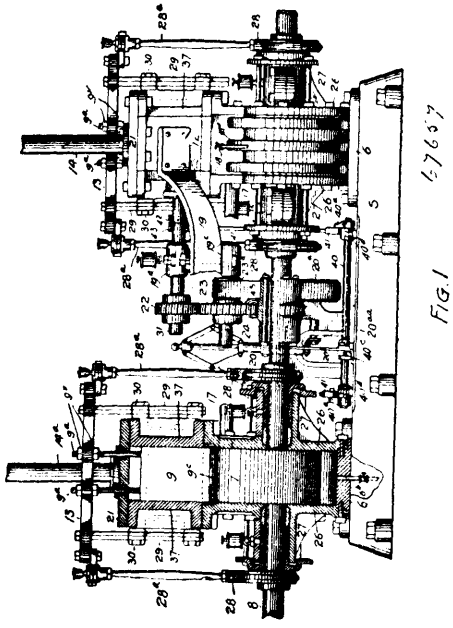
No. 67,656. Ball Bearing. (*Coussinet à roulette.*)



John A. Snyder, Leipsic, Ohio, U.S.A., 7th June, 1900 ; 6 years. (Filed 29th May, 1900.)

Claim.—In a power transmitting device, the combination of a screw nut provided with female threads having inwardly turned ends, said nut being provided with an inclined return conduit connecting the inwardly turned ends of the female threads and communicating with the space between the threads, the screw spindle provided with male threads having one inclined face, and the bearing balls interposed between the inclined face of the male threads and the female threads and retained in place by the former, said balls being adapted to pass through the return conduit and being directed into the same by the inwardly turned ends of the female threads, substantially as described.

No. 67,657. Rotary Steam Engine.
(*Machine à vapeur rotatoire.*)



David Matthew Dearing, Sandstone, Michigan, U.S.A., 7th June, 1900 ; 6 years. (Filed 28th May, 1900.)

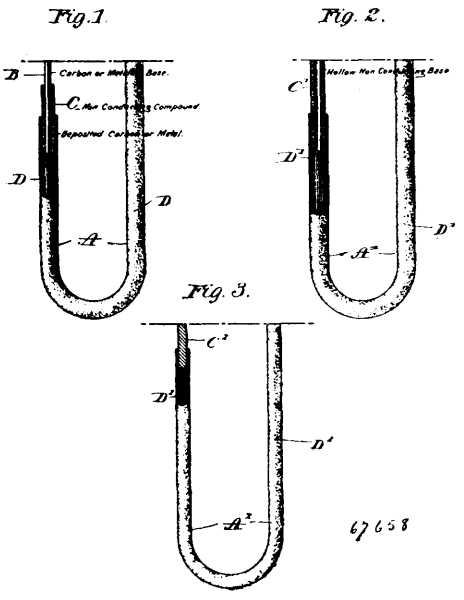
Claim.—1st. In a rotary engine, a substantially circular casing, a reciprocating cylinder head at one point therein, a steam inlet port on one side of said head, an exhaust, a core rotating within the casing and whose active face coacts with the cylinder head, a pipe for superheated air entering the steam inlet port and provided with an outwardly closing check valve, and means for admitting and cutting off the flow of steam at predetermined moments, as and for the purpose set forth. 2nd. In a rotary engine, the combination with a casing, a reciprocating cylinder head at the top thereof, a branched steam inlet entering the casing through ports at opposite sides of said head, and an exhaust, of a core rotating within the casing and coacting with the inner extremity of said cylinder head, pipes for superheated air entering said ports and having outwardly closing check valves in their bodies, rotary valves across said inlets and provided with suitable ports or heels, means for closing either inlet, and mechanism for simultaneously rotating said valves to open and close the ports at predetermined intervals, as and for the purpose set forth. 3rd. In a rotary engine, the combination with a substantially circular casing having an exhaust at its bottom, a reciprocating cylinder head at its top, a branched inlet communicating with said casing through ports at opposite sides of said head, and a truly circular core mounted within the casing eccentrically thereto. of pipes for superheated air leading into said ports and having outwardly closing check valves in their bodies, and means substantially as described for closing one inlet according to the direction of rotation desired and for opening and closing the other meanwhile at predetermined intervals, as and for the purpose set forth. 4th. In a rotary engine, the combination with a casing, a main shaft therethrough, a core set eccentrically within the casing upon said shaft, a reciprocating cylinder head, a removable point at its inner extremity coacting with the active face of the core, a yoke adjustably bolted to said head, eccentrics on said shaft exterior to the casing and truly parallel with the active face of the core, and connections between said eccentrics and yoke, of a steam chest on the casing provided with an inlet passage communicating with the inlet port to the casing, an exhaust from the latter, a rotary valve set in a cylindrical opening intersecting said passage, said valve having a port or heel removed from its face, and connections between the shaft of the valve and the main shaft, as and for the purpose set forth. 5th. In a rotary engine, the combination with the casing containing a core set on the main shaft, a reciprocating cylinder head, an inlet port at one side of the head, and an exhaust, of a rotary valve set in a cylindrical opening intersecting said passage, gearing between this valve and the main shaft, a governor valve also set in a cylindrical opening in said passage, a governor bolted to the main shaft, and connections between said governor and governor valve, as and for the purpose set forth. 6th. In a rotary engine, the combination with a casing containing a core set on the main shaft, a cylinder head reciprocated by said shaft, and an exhaust, of a steam chest having inlet passages leading to ports opening into the casing on opposite sides of said head, simultaneously moving valves in these passages, other valves for closing one passage and opening the other, governor valves set in cylindrical openings intersecting said passages, toothed segments connecting the shafts of these valves on the exterior of the chest, one of them having a crank arm, a governor driven from the main shaft, and a rod connecting said governor and crank arm, all as and for the purpose set forth. 7th. In a rotary engine, the combination with the casing, the main shaft, the core thereon, the cylinder head, and an inlet port and exhaust, of the steam chest containing a transverse cylindrical opening from which said port leads radially and an inlet passage leading tangentially thereinto, a cylindrical valve seated in said opening and having a heel cut from its exterior, and connection between the main shaft and the shaft of said valve for turning the latter so as to cause its heel to connect the passage with the port and to cut off such connection at predetermined intervals, substantially as described. 8th. In a rotary engine, the combination with the casing, the main shaft, the core thereon, the cylinder head, and an exhaust, of a steam chest on the casing having an inlet passage communicating with the inlet port, a rotary valve across said passage, connections between said valve and the main shaft, an emergency passage cored in the steam chest around said valve, and a valve in the emergency passage, as and for the purpose set forth. 9th. In a rotary engine, the combination with a plurality of casings, a main shaft extending through them, cores on the shafts within the casings, a reciprocating cylinder head for each casing, and inlets and exhausts, of a steam chest for each casing with an inlet passage leading to its port and a cylindrical opening intersecting such passage, rotary valves in such opening, a valve shaft driven from the main shaft, and clutch connections between the valve shaft and the shafts of the individual valves, as and for the purpose set forth. 10th. The combination with a rotary engine, having a casing, core and main shaft, a steam chest having an inlet passage communicating with the inlet port of said engine and a cylindrical opening intersecting such passage, a rotary valve within said opening, and connections between said valve and the main shaft, of a clutch interposed in said connections, as and for the purpose set forth. 11th. The combination with a rotary engine, having a casing, core and main shaft, and a rotary valve located within its inlet port, of a valve shaft in two parts, one of which if connected with the valve and the other geared to the main shaft, collars on said parts having teeth adapted to intermesh, one collar being fast and the other splined for longitudinal movement, and a pivoted lever for sliding the latter collar, as and for the purpose set forth. 12th. The combination with a rotary engine, having a casing, core and main shaft, and a rotary valve located within its inlet port, of a valve in two parts, one of which is con-

nected with the valve and has relatively fixed teeth at its extremity while the other part carries a sliding collar provided with intermeshing teeth and radial holes, a pivoted lever having a fork entering a groove in said collar for sliding it, and a rod on the lever operated by the thumb lever and adapted to enter one of said holes in the collar, as and for the purpose set forth. 13th. In a rotary engine, the combination with a casing and a steam chest, the latter cored with inlet passages to the former at each side of a vertical centre, valves controlling such inlet, a main shaft, and a circular core set eccentric on said shaft, of outlets from within the casing, an adjustable reciprocating cylinder head moving along said line of vertical centre, a removable point at its inner extremity, antifriction guides for said head, and means for adjusting them on a line at right angles to said vertical centre, as and for the purpose set forth. 14th. In a rotary engine, the combination with a casing and a steam chest, the latter cored with a passage to the former for the inlet of the fluid agent, a valve controlling the inlet, a main shaft through the centre of the casing, a truly circular core set eccentric on said shaft, and an outlet from within said casing, of a box set in the steam chest and comprising side pieces with bevelled ends, screws in the plane of said side pieces bearing against their ends for causing the approximation thereof, antifriction devices carried by the side pieces, and a reciprocating cylinder head moving between said antifriction devices and co-acting with the active face of the core, as and for the purpose set forth. 15th. In a rotary engine, the combination with the casing containing a core set on the main shaft, a reciprocating cylinder head, an inlet port at one side of said head and an exhaust, of a steam chest having an inlet passage communicating with said port, a valve in said passage connected with and operated from the main shaft, a governor valve also in said passage, a governor driven from the main shaft, and connections between said governor valve and the governor, as and for the purpose set forth. 16th. In a rotary engine, the combination with the casing, the main shaft, the core thereon, the reciprocating cylinder head, and an inlet port and exhaust, of the steam chest containing a passage communicating with said port and a cylindrical opening intersecting said passage, a rotary cylindrical valve seated in such opening and having a heel cut from its exterior so as to admit and cut off steam at predetermined intervals, and connections between the shaft of this valve and the main shaft, substantially as described. 17th. In a rotary engine, the combination with a casing, a reciprocating cylinder head at the top thereof, an inlet on one side, and an exhaust on the other side of such head, and a rotary valve within the inlet, of a shaft journalled through the casing, a substantially eccentric core fast on the shaft within the casing, and having an exterior active face co-acting with the cylinder head and with the interior of the casing, discs on said shaft exterior to the casing and having faces truly parallel with the active face of the core, and connections between such disc faces and said cylinder head and between such disc faces and the rotary valve, as and for the purpose set forth. 18th. In a rotary engine, the combination with a casing, having a circular inner face, a reciprocating cylinder head standing radial thereto, and an inlet at one side and an exhaust at the other side of said head, of a shaft journalled axially through the casing, a truly cylindrical core mounted eccentrically thereon with its point of greatest radius near said inner face, twin eccentrics on the shaft at the ends of the core, rods leading from their bands and connected by a cross bar, bolts leading from such bar to the cylinder head, the operative faces of said twin eccentrics standing truly parallel with the exterior active face of the core, upright guides depending from said cross bar, and ears through which the guides move, as and for the purpose set forth. 19th. In a rotary engine having a casing, core and main shaft, a steam chest having an inlet passage communicating with the inlet port of said engine and a cylindrical opening intersecting such passage, a rotary valve within said opening, and connections between said valve and the main shaft. 20th. In a rotary engine, a casing containing a core, provided with a piston head, an exhaust, a cylinder head, a steam chest having an inlet passage leading into the casing, a rotary valve intersecting this passage, an oscillating governor valve also intersecting this passage, and means for driving both valves from the shaft of the core. 21st. In a rotary engine, the combination with a casing, a cylinder head therein, an inlet at one side and an exhaust at the other side of said head, a core journalled within the casing and off centre, and means for causing the cylinder head to constantly co-act with the active face of the core, of a cut-off valve in the inlet, means for operating it from the main shaft, a cylindrical passage intersecting this inlet, a valve mounted for rotation within such passage, governor mechanism driven by the main shaft, and connections between such mechanism and said valve for oscillating the latter to govern the size of the inlet, substantially as described.

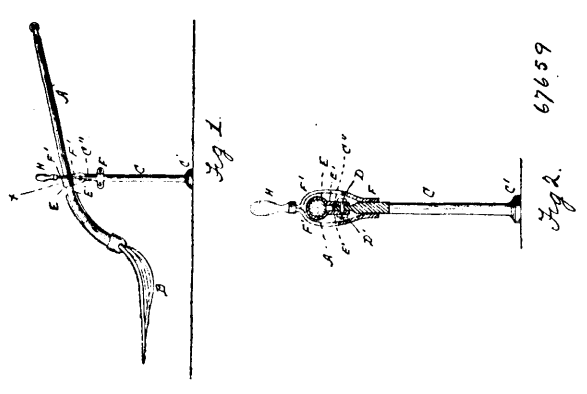
No. 67,658. Incandescent Electric Lamp.
(Lampe électrique incandescente.)

Henry E. Howland, New York City, New York, U.S.A., and Orlando M. Thowless, Newark, New Jersey, U.S.A., 7th June, 1900; 6 years. (Filed 20th March, 1899.)

Claim.—1st. A burner for incandescent or glow lamps, composed of an internal basic filament or strip covered with a layer of non-conducting material and a light giving surface deposited thereon. 2nd. A burner for an incandescent lamp, composed of a basic non-conducting filament having a loosely fitting conducting covering, designed to serve as the light giving portion of the burner. 3rd. The method of making burners for incandescent lamps, which consists in properly preparing the surface of an internal non-conducting core, solid or hollow, for receiving a layer of electrically deposited carbon, and then submitting the burner so prepared to the action of the flashing or other similar process. 4th. A burner for incandescent lamps, consisting of a hollow tube or cylinder of non-conducting substance covered with a layer of conducting material. 5th. A burner for incandescent lamps, composed of a hollow internal filament or strip, a coating of non-conducting substance and a layer thereon of conducting material. 6th. A burner for incandescent lamps, composed of a properly prepared non-conducting base, and having for its light giving portion a composite material composed of a mixture of conducting and poorly conducting substances. 7th. A burner for incandescent lamps, composed of an internal filament, a layer of non-conducting substance, and a covering of composite conducting material. 8th. A burner for incandescent lamps, composed of a hollow non-conducting base covered with a layer of composite material formed of a mixture of conducting and non-conducting substances. 9th. A burner for incandescent lamps having a properly prepared internal non-conducting base, upon which is deposited or coated a light giving portion of metallic carbide. 10th. A burner for incandescent lamps, having a properly prepared internal non-conducting core, and whose light giving portion is composed of conducting metallic oxides. 11th. The method of making burners for incandescent lamps, which consists in treating a chloride of platinum with proper essential oils, applying the resultant compound to a non-conducting basic filament, heating the filament thus covered, and subjecting the filament thus formed to the action of an electric current in the presence of a hydro-carbon gas or liquid.



No. 67,659. Potato Digger. *(Arrache-patates.)*

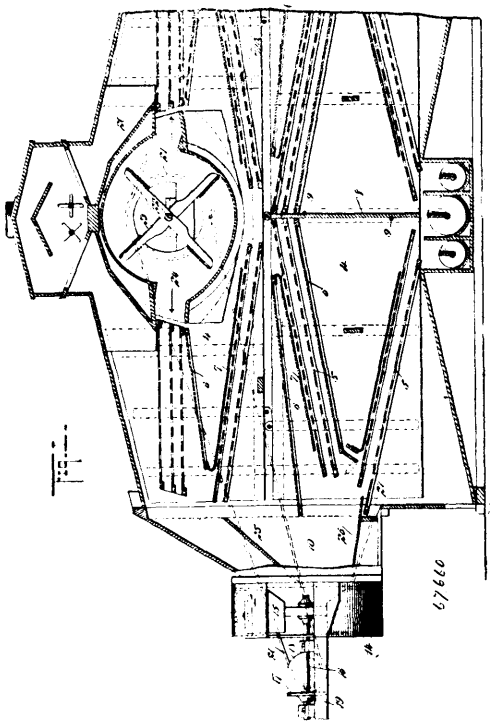


William T. Vose, Newtonville, Massachusetts, U.S.A., 7th June, 1900; 6 years. (Filed 29th May, 1900.)

Claim.—In a hand potato digger, the handle A provided with suitable tines, the fulcrum rod C pivotally connected at its upper end to the handle, and the rods F^1 rigidly secured at their lower

ends to the fulcrum rod, extending up above and clearing the handle A and provided with a suitable handle H, substantially as described.

No. 67,660. Separator. *(Séparateur.)*



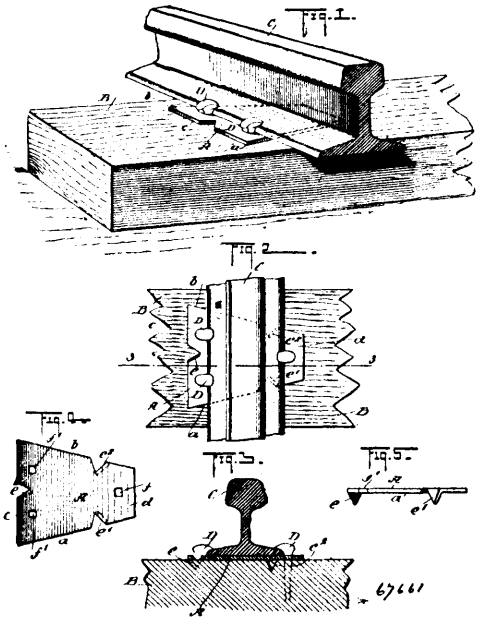
Jens Anderson, Walla Walla, Washington, U.S.A., 7th June, 1900; 6 years. (Filed 28th May, 1900.)

Claim.—1st. A separator, having a casing, an induction fan situated approximately in the middle thereof and having two discharge openings directed toward the ends of the casing, and eduction fans situated respectively in the ends of the casing. 2nd. A grain separator, having a casing, an induction fan situated approximately in the middle thereof and having oppositely directed discharge openings extended toward the ends of the casing, eduction fans situated respectively in the ends of the casing, and gearing for driving the several fans in use. 3rd. A grain separator, having a casing, an end cap movably mounted thereon, and a fan carried in said end cap. 4th. A grain separator, having a casing, an end cap movably mounted thereon, a fan carried in the casing, and gearing for driving the fan, such gearing being supported on the end cap. 5th. A grain separator, having a casing, an end cap movably mounted thereon, a fan box carried by and moving with the cap, and an eduction fan mounted in the fan box. 6th. A grain separator, having a casing, an induction fan therefor, an eduction fan removed from the induction fan, and a chute board mounted adjacent to the eduction fan, for the purpose specified, 7th. A grain separator, provided with a number of separating devices, an induction fan mounted adjacent to the upper portion of the separating devices, an eduction fan situated below the induction fan, and a chute board adjacent to the eduction fan and located midway the height of the separating devices. 8th. A grain separator having a casing with separating devices therein, an eduction fan at one end of the casing, and a chute board co-acting with the fan, as specified. 9th. A grain separator, having a casing, an end cap movably mounted thereon, a grain delivering board adjustably carried by the end cap, and an adjustable support for the grain delivering board. 10th. A grain separator, having a casing with separating devices therein, an end cap movably mounted on the casing, a fan box carried by the end cap, a fan mounted therein, a frame supported by the end cap adjacent to the fan box, and gearing for driving the fan, the parts of which gearing are carried on the frame.

No. 67,661. Compensation Tie Plate.
(Plaque de traverse de chemin de fer.)

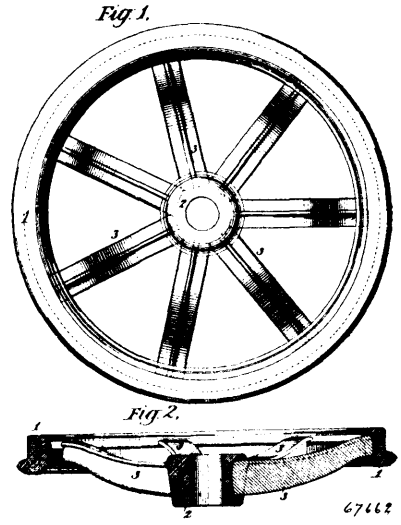
Henry Herden, Wellsboro, Pennsylvania, U.S.A., 7th June, 1900; 6 years. (Filed 28th May, 1900.)

Claim.—1st. A compensating tie plate, comprising a flat solid trapezoidal-shaped plate having a plain upper surface, and provided with apertures and with triangular-shaped lugs struck up from the plate, the width of the lugs being diagonal to the length and width of the plate, substantially as described. 2nd. A compensating tie plate, consisting of a thin trapezoidal-shaped plate having a plain flat upper surface, and provided with apertures, and with three



depending triangular-shaped lugs struck up from the plate, one lug being at the edge of the wider end and the other two at the converging sides of the plate and at one side of the centre of length of the said plate, the width of the lugs being diagonal to the length and width of the plate, substantially as herein shown and described.

No. 67,662. Car Wheel. *(Roue de chars.)*



Ferdinand Eugene Canda, Manhattan, New York, U.S.A., 7th June, 1900; 6 years. (Filed 18th June, 1898.)

Claim.—1st. A car wheel having a cast steel hub and rim connected by a series of spokes formed separately from the hub and rim, from a tough welding metal, and welded into the hub and rim so as to produce an integral wheel, substantially as described. 2nd. A car wheel having a cast steel hub and rim connected by a series of spokes formed separately from the hub and rim, from a tough welding metal, bent to offset the hub from the rim, and welded into the hub and rim so as to produce an integral wheel, substantially as described. 3rd. A car wheel having a cast steel hub and rim and T-section spokes, formed separately from the hub and rim, from a tough welding metal, and welded into the hub and rim so as to produce an integral wheel, substantially as described.

No. 67,663. Feeder for Perforating Machine.
(Alimentateur pour machines à perforer.)

Fig. 1.

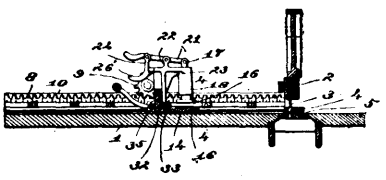
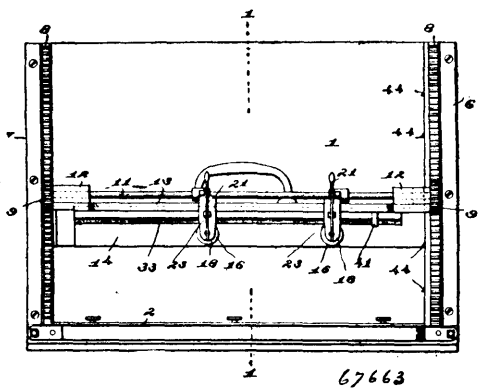


Fig. 2.



The P. and P. Feed Gauge Company, assignee of Charles S. Perkins, all of Chicago, Illinois, U.S.A., 7th June, 1900; 6 years. (Filed 9th October, 1899.)

Claim.—1st. A feeding device for perforating machines, having in combination a table or support for the sheets to be perforated, a gauge bar for trying the edges of the sheets, movable thereacross, a series of stops fixed with relation to said table or support and a dog or catch in connection with said gauge bar for engaging said stops, substantially as set forth. 2nd. A feeding device for perforating machines, having in combination a carriage, clamps on said carriage for holding thereon the edges of the sheets to be perforated, means for holding said clamps aloof from the sheets and means carried by the carriage for tripping and applying the clamps simultaneously, substantially as set forth. 3rd. A feeding device for perforating machines, having in combination a carriage, a shaft journalled therein and having wheels, a clamp for holding the clamp aloof from the sheets and a trip on said shaft for applying said clamp, substantially as set forth. 4th. A feeding device for perforating machines, having in combination a carriage, a clamp on said carriage for holding the edges of the sheets to be perforated, a thumb lever for lifting said clamp out of engagement, a dog secured to said thumb lever for holding the clamp out of engagement and having a tail piece, a shaft journalled in and rotating in unison with the movement of said carriage and a trip on said shaft for engaging said tail piece and releasing said dog, substantially as set forth. 5th. A feeding device for perforating machines, having in combination a table or support for the sheets to be perforated, a carriage having a foot flange or plate located close to the table and adapted to slip under the sheets to be perforated, means for clamping the edges of the sheets upon said foot flange, stops fixed with relation to the table and a catch on the carriage for engaging said stops, substantially as set forth. 6th. A feeding device for perforating machines, having in combination a carriage for supping the edges of the sheets to be perforated, provided with the foot flanges 14 having a rabbeted portion or groove, and an adjustable gauge bar set in said rabbeted portion or groove and having its ends independently movable, substantially as set forth. 7th. A feeding device for perforating machines, having in combination a carriage, clamps on the carriage for holding the edges of the sheets to be perforated, said clamps being adjustable transversely of the line of movement of the carriage, a shaft rotated by the movement of the carriage, catches for holding the clamps aloof and adjustable trips on said shaft for releasing said catches, substantially as set forth. 8th. A feeding device for perforating machines, having in combination a pair of rack bars, cogs or pinions engaging therewith, a shaft connecting said cogs or pinions, a carriage in which said shaft is journalled, adjustable stops and a catch on said carriage for engaging said stops, substantially as set forth. 9th. A feeding device for perforating machines, having in combination a carriage for holding the edges of the sheets to be perforated, one or more stops having beveled faces, and a deflectible catch or dog on the carriage for engaging with said stops, substantially as set forth. 10th. A feeding device for perforating machines, having in combination a carriage for holding the edges of the sheets to be perforated, a bar provided with one or more adjustable stops and having graduations marked thereon, each of said stops being provided with an index pointing to said graduations, and a catch on the carriage for engaging the stops, substantially as set forth. 11th. A feeding for perforating machines, having in combination two parallel bars having grooves in their opposed faces, a carriage having tongues engaging in said grooves, racks formed on said bars, a shaft mounted in said carriage and cogs on said shaft, resting in said racks, adjustable stops, and a catch carried by the carriage for engaging said stops, substantially as set forth. 12th. A feeding device for perforating machines, having in combination a carriage for holding the edges of the sheets to be perforated, a longitudinal gauge bar having its ends independently adjustable on said carriage, and a second gauge mounted on said carriage and being adjustable transversely of the line of movement of the carriage, substantially as set forth. 13th. A feeding device for perforating machines, having in combination a carriage for holding the edges of the sheets to be perforated, adjustable stops, a spring bolt carried by the carriage and adapted to engage said stops, a box containing said bolt and having the slot 55 and notch 56, the pin 54, the thumb piece 49, and a spring rod 53 connecting said thumb piece with said bolt, substantially as set forth.

No. 67,664. Book Case. *(Bois de bibliothèque.)*

Fig. 1.

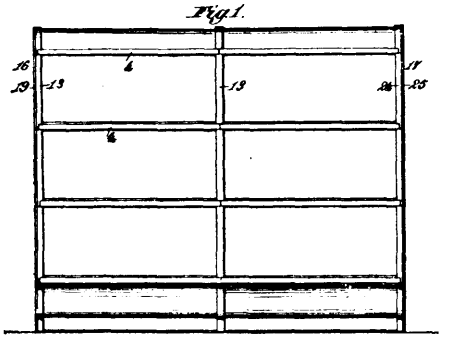


Fig. 2.

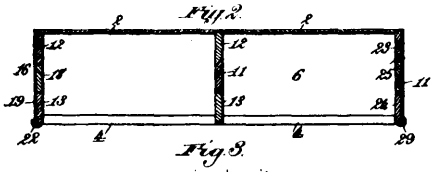
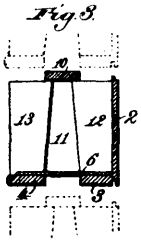


Fig. 3.

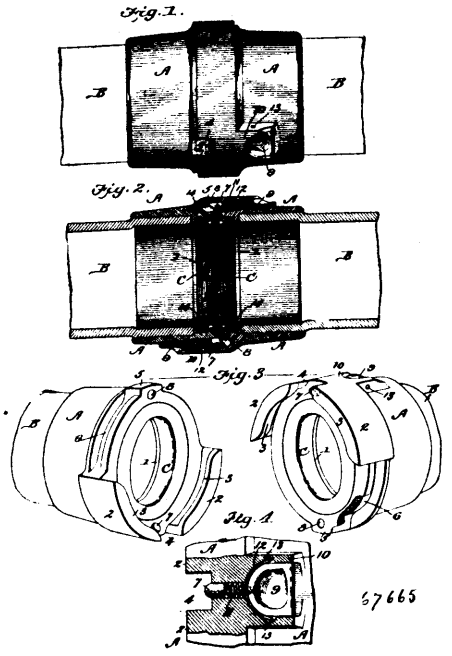


Reuben Hatch, Grand Rapids, Michigan, U.S.A., 7th June, 1900; 6 years. (Filed 28th May, 1900.)

Claim—1st. A book case made up of a plurality of separable sections arranged side by side, the vertical partition dividing said sections being of a single thickness of material and made in parts constructed to interlock one with the other. 2nd. A book case made up of a plurality of separable sections arranged side by side, the end of one section overlapping that of the adjacent section to form a vertical partition of a single thickness of material and constructed to interlock therewith to prevent independent lateral movement of said sections. 3rd. A book case made up a plurality of separable sections arranged side by side, the end of one section overlapping that of the adjacent section, and interlocking therewith, as and for the purpose set forth. 4th. A book ca-e made up of a plurality of separable sections arranged side by side, the end of one section overlapping the end of the adjacent section to form a vertical partition of a single thickness of material and interlocking therewith and end pieces detachably connected to the exposed ends of said sections. 5th. A book case made up of a plurality of separable sections, one end of each of said sections having a vertical slat dovetail in cross-section, and the other end of said section having a plurality of vertical slats separated from each other to form a space dovetail in cross-section, and co-relative parts adapted to receive said dovetailed slat and to be received by said dovetailed space.

6th. A book case made up of a plurality of separable sections, one end of each of said sections having a vertical wedge shaped slat dovetail in cross-section and the other having a plurality of slate separated from each other by a wedge shaped space dovetail in cross-section, the said wedge shaped slat and space tapering from the bottom of the section to the top, and co-relative parts adapted to receive said dovetailed slat and to be received by dovetailed space. 7th. A book case made up of a plurality of separable sections, one end of each of said sections having a plurality of vertical slats separated by a space dovetail in cross-section, an end piece for each of said sections consisting of a strip of thin material, a rib thereon dovetail in cross-section adapted to be inserted into said space, and a strip of molding secured to the front edge of said end piece extending inwardly therefrom and having a channel or groove on its inner surface adapted to receive the front edge of one of the slats on said section. 8th. A book case made up of a plurality of separable sections, one end of each of said sections having a vertical slat dovetail in cross-section, and having projecting lugs provided with inclined walls, and the other end of each of each of said stations having a plurality of vertical slats separated from each other to form a space dovetail in cross-section and having notches or cut away portions provided with inclined walls, and co-relative parts adapted to receive said dovetailed slat and lugs and to be received by said dovetailed space and notches.

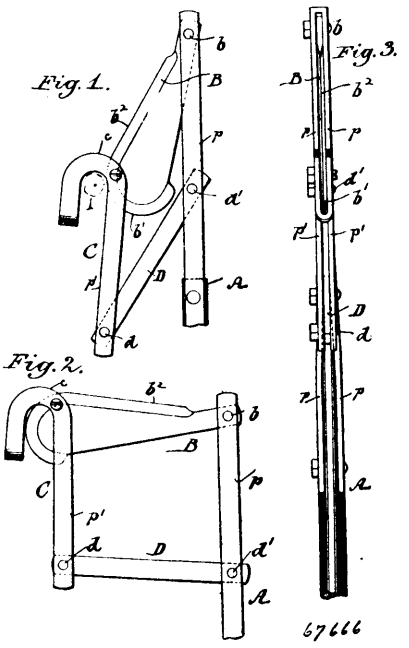
No. 67,665. Hose Coupling. (*Joint de boyaux.*)



Jens Christian Martin, Spokane, Washington, U.S.A., 7th June, 1900; 6 years. (Filed 1st May, 1899.)

Claim.—1st. In a hose coupling, the combination of the duplicate coupling sections each having engaging segmental flanges and grooves, and provided with a space between said flanges, and a corresponding tenon or boss on the opposite side, and means for locking the sections when duly engaged, substantially as shown and described. 2nd. In a hose coupling, the combination of the duplicate coupling sections, each having two projecting segmental clutch members, which are separated by a space, and on the opposite side two arc grooves and an intermediate boss, and slidable spring latches for automatically locking the sections together when laterally engaged, substantially as shown and described. 3rd. In a hose coupling, the combination of duplicate coupling sections, having segmental clutch members 2 and 3 which are separated as specified, and an opposite boss, which, when the sections are engaged by a sliding lateral movement, enters the space 4 between said members, and thus serves as a guide as shown and described. 4th. In a hose coupling, the combination with coupling sections, of a slidable locking latch, spiral spring encircling the same, and a curved plate, a finger pull forming part of the latch and a curved plate spring interposed, such spiral spring and the finger pull forming a part of the latch, substantially as shown and described. 5th. In a hose coupling, a coupling section provided with a lateral housing having internal lateral recesses, of a slidable locking latch, composed of a pin and finger piece, or pull, which parts are detachably connected, and a curved or segmental spring applied between said pin and pull, with ends resting in said recesses, all combined as shown and described. 6th. In a hose coupling, the combination with a coupling section having an internal dovetail rib, of an annular gasket which fits upon and is held in place by the ribs and has an exterior circumferential groove which is deeper than required to receive said rib, whereby an annular space or chamber is provided in the gasket adjacent to the rib, substantially as shown and described for the purpose specified.

No. 67,666. Pruning Implement. (*Sécateur.*)



Francis Henry Duesler, Sommonsville, New York, U.S.A., 17th June, 1900; 6 years. (Filed 10th May, 1899.)

Claim.—1st. An improved pruning implement, comprising a handle, an outer member having a hook shaped top end, a cutting blade pivoted at its inner end to the t op of the handle and pivotally connected at its outer end to the inner portion of the hook shaped top of the outer member, said cutting blade having a segmental or curved curring edge adapted to operate inwardly and upwardly with relation to said hook, and a straight cutting edge upon the top adapted to operate vertically and a connecting rod or link pivotally mounted and extending from the lower end of the outer member to the handle, substantially as and for the purpose set forth. 2nd. An improved pruning implement, comprising a handle, on outer member having a hook shaped top end, a cutting blade having a top cutting edge and a segmental or curved outer or cutting end, said blade being pivotally connected at its outer end at a point above and in rear of the segmental curved cutting edge to the inner portion of the hook shaped top end, whereby said blade is adapted to move inwardly and upwardly with respect to said hook as well as vertically with respect to the handle, and a connecting link or bar having its outer end pivoted to the lower end of the hook member and its inner end pivoted to the handle at a point opposite, substantially as and for the purpose set forth.

No. 67,667. Brazing Machine. (*Machine à braser.*)

Alden Aaron Steward, East Clarendon, Vermont, U.S.A., 17th June, 1900; 6 years. (Filed 13th June, 1899.)

Claim.—1st. In a brazing machine, the combination with an enclosed brazing chamber, of a heating device located adjacent thereto, and a carrier having a member travelling through said chamber to support the article to be brazed adjacent to said heating device, substantially as specified. 2nd. In a brazing machine, the combination with a brazing chamber, of a heating device located adjacent thereto, a carrier provided with fingers adapted to travel through said chamber and to support the article to be brazed adjacent to said heating device, substantially as specified. 3rd. In a brazing machine, the combination with a brazing chamber, of a heating device located adjacent thereto, a carrier adapted to support the article to be brazed in said chamber, and fingers travelling through said chamber, and provided with a refractory portion to contact with the article to be brazed, substantially as specified. 4th. In a brazing machine, the combination with a brazing chamber, of a heating device located adjacent thereto, an endless carrier travelling in a vertical plane and provided with vertically extending fingers adapted to support the article to be brazed adjacent to said burner, substantially as specified. 5th. In a brazing machine, the combination with a brazing chamber, of a heating device

located adjacent thereto and an endless carrier composed of links provided with fingers extending at an angle thereto and having

Fig. 1.

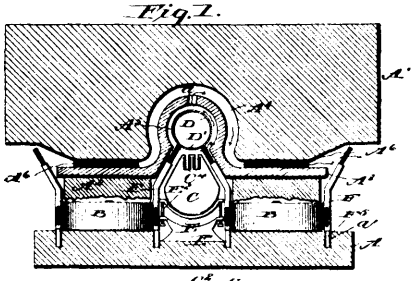
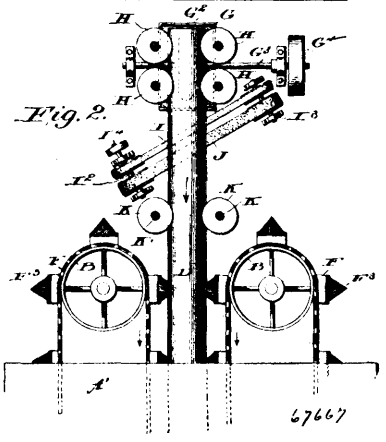


Fig. 2.



refractory tips to support the article to be brazed, substantially as specified. 6th. In a brazing machine, the combination with a brazing chamber, of a heating device located adjacent thereto, and a conveyer provided with extended fingers having removable refractory tips carried thereby, substantially as specified. 7th. In a brazing machine, the combination with a brazing chamber provided with an opening extending the length thereof, a heating device extending longitudinally of said opening, and means for conveying the material through said chamber, substantially as specified. 8th. In a brazing machine, the combination with a brazing chamber provided with an opening extending the length thereof, of a heating device extending longitudinally of said opening, means for conveying the material through said chamber, and means for vertically adjusting said heating device, substantially as specified. 9th. In a brazing machine, the combination with a brazing chamber, of a burner centrally located beneath said chamber and having downwardly projecting walls at the frame orifice of said burner, which walls are enclosed at their lower portions, substantially as specified. 10th. In a brazing machine, the combination with a brazing chamber, of a burner centrally located beneath said chamber, a horizontal top surface to said burner provided with downwardly projecting walls, and an enclosing cap surrounding the lower portion of said walls and extending adjacent to the top of said burner, substantially as specified. 11th. In a brazing machine, the combination with a brazing chamber, of a passage in communication with and surrounding said chamber, a heating device located beneath said chamber, and means for supporting the article to be brazed above said heating device, substantially as specified. 12th. In a brazing machine, the combination with a brazing chamber and a passage in communication with and surrounding said chamber, of a heating device located beneath said chamber, means for supporting the article to be brazed above said heating device, and an endless carrier provided with fingers projecting into said brazing chamber during a portion of its circuit and travelling across the hot air outlet from said passage during another portion of their circuit, substantially as specified. 13th. In a brazing machine, the combination with a brazing chamber, of a burner located adjacent thereto, an endless carrier provided with fingers to support the article to be brazed, a foundation for said heater provided with ways, and projecting lugs extending from said carrier and travelling in said ways, substantially as specified. 14th. In a brazing machine, the combination with a brazing chamber having an opening at its upper portion, of heat conducting flues traversing the outer surface of said chamber, a burner beneath said chamber, endless carriers located upon opposite sides of said chamber and provided with fingers extending thereinto, and means for moving said carriers, substantially as specified. 15th. In a brazing machine, the combination with a brazing chamber, of a burner beneath said chamber provided with flame orifices adapted to concentrate the heat therefrom at the central portion of said chamber, and a carrier provided with a refractory portion extending into said brazing chamber to support the article to be brazed, substantially as specified. 16th. A brazing machine, comprising a brazing chamber, a flux applying apparatus, a wiper, and a graphite applying device arranged between said wiper and chamber, substantially as specified. 17th. A brazing machine, comprising a brazing chamber, a flux applying apparatus, a wiper, and a graphite applying device arranged obliquely to the line of travel of the article to be brazed, substantially as specified. 18th. A brazing machine, comprising a brazing chamber, carriers travelling therein, a flux applying device, a wiper located to move in a path obliquely to the line of travel of said carriers, a graphiting device located parallel to said wiper, and means for guiding the article to be brazed into contact with said several devices, substantially as specified. 19th. A brazing machine, comprising a brazing chamber, a flux applying roller, a receptacle beneath said roller to contain liquid flux, and guiding sheaves located above said roller to engage the article to be brazed and hold it in contact with said roller, substantially as specified. 20th. A brazing machine, comprising a brazing chamber, a flux applying roller, a liquid flux receptacle beneath said roller, guiding sheaves located above said roller at opposite sides thereof and positively driven for moving the article to be brazed in contact with said roller, and a heater located beneath said flux receptacle, substantially as specified. 21st. A brazing machine, comprising a brazing chamber, a flux applying device, a wiper, comprising an endless belt located obliquely to the line of travel of the tube to be brazed, and means for guiding and holding said tube in contact with said wiping belt, substantially as specified. 22nd. A brazing machine, comprising a brazing chamber, a fluxing device, a wiping device, a graphite applying belt located above a graphite receptacle, means for applying graphite to the under side of said belt, and means for guiding and retaining the article to be brazed in contact with said belt, substantially as specified. 23rd. A brazing machine, comprising a brazing chamber, a burner beneath said chamber, an endless carrier adapted to support an article to be brazed in said chamber, a fluxing device, a wiper arranged adjacent thereto, and a graphite applying device located between said wiper and chamber, substantially as specified. 24th. A brazing machine, comprising a heater provided with a brazing chamber, a burner beneath said chamber, an endless carrier adapted to support an article to be brazed in said chamber, a fluxing device, a wiper arranged adjacent thereto, a graphite applying device located between the wiper and chamber, and concave guiding sheaves adapted to guide and retain the tube to be brazed in contact with said several devices, substantially as specified. 25th. A brazing machine, comprizing a brazing chamber, a flue extending adjacent to the outer surface of said chamber and discharging at opposite sides of said chamber, an endless carrier provided with refractory portions extending into said brazing chamber during a portion of their travel and travelling across the hot air outlets from said flue during another portion of their travel, a burner located beneath said brazing chamber, means to drive said endless carriers, a fluxing device, and means for transferring the article to be brazed from said fluxing device to said carriers, substantially as specified.

No. 67,668. Plough. (*Charrue.*)

Fig. 2

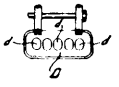
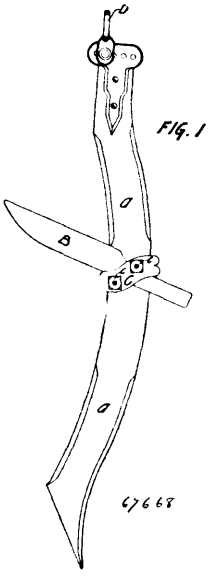


Fig. 3

Fig. 1



Jean Boisclair, St-Gabriel de Brandon, Québec, Canada, 7 juin 1900; 6 ans. (Déposé 24 avril 1900.)

Résumé 1° Dans une charrue agricole, une clavette métalique, reposant au haut et bas sur l'âge de la charrue et servant à retenir le couteau, substantiellement tel que montré et pour les fins mentionnées. 2° Dans une charrue agricole, une cheville d'attelage

métalique, perforée de plusieurs trous servant à recevoir le crochet du palonnier, substantiellement tel que montré et pour les fins mentionnées.

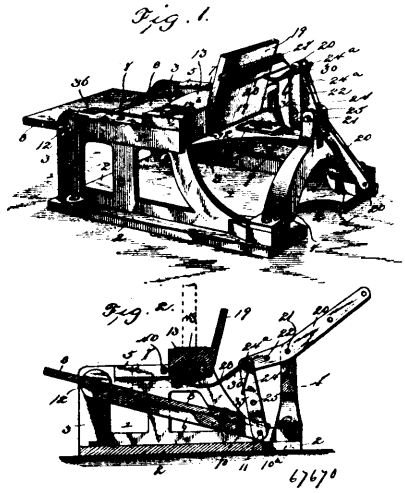
No. 67,669. Wood Pulp Treatment.
(*Traitement du bois de pulpe.*)

67669

Francis Charles Cream, Montreal, Quebec, Canada, 7th June, 1900; 6 years. (Filed 5th October, 1899.)

Claim.—1st. Paper pulp in disintegrated dry fibrous form, as described. 2nd. The treatment of wood pulp which consists in disintegrating and drying same after leaving the wet machine as described. 3rd. Paper pulp in a disintegrated dry fibrous form ready for use in the paper machine as described. 4th. The treatment of pulp to render it ready for use in the paper machine, which consists in disintegrating and drying same after leaving the wet machine as described.

No. 67,670. Photographic Press. (*Presse photographique.*)



William A. Billman, Colorado Springs, Colorado, U.S.A., 7th June, 1900; 6 years. (Filed 5th October, 1899.)

Claim.—1st. In a photgrapher's printing and embossing press, a fixed chambered chase having an opening in the lower face thereof, an embossing die and heating appliances therefor arranged removably within said chambered chase for the working face of the die to be exposed through the lower face of said chase, a printing plate interchangeable with the embossing die and the heating appliances therefor and adapted to be secured in said chase for the face of said plate to be exposed through the lower side of the die combined with a reciprocating bed arranged below the chase and movable toward the die or plate therein, a lever connected to said bed, a shiftable fulcrum for said lever to increase the leverage on the bed when used in connection with the heatable embossing die and an inking roller mounted detachably on the lever to be actuated thereby in unison with the platen when the printing plate is fixed in the chase, substantially as described. 2nd. In a photographer's printing and embossing press, a horizontal fixed, chambered chase having an opening in the lower side thereof and an inclined inking platen disposed above said chase, an embossing die and heating appliances thereof fitted detachably within said chambered chase for the working face of the die to be exposed through the lower side and a printing plate interchangeable with the embossing die and its heating appliance and adapted to be secured in a fixed position in the chase for its face to be exposed through the lower side of said chase, combined with a reciprocating bed hung for movement toward or from the lower side of the chase, a lever connected with said bed, a shiftable fulcrum for said lever to increase the leverage on the bed when used in connection with the heatable embossing die and a roller bail, mounted detachably on said lever to traverse the inking platen and the face of the printing plate and operated by the lever in unison with the reciprocating bed, substantially as described. 3rd. In a photographer's printing and embossing press, the combination with a chase, an embossing die and a heater therefor, and a printing plate interchangeable with the die and heater and adapted to be secured within the chase, of a lever arranged to be fulcrumed on a frame to secure variable power to said lever, a reciprocating bed hung for movement toward the chase and linked to said lever to be forced with considerable pressure towards the embosssing die and to be moved with less pressure against the printing plate and an inking device mounted detachably on the lever to be operated thereby in unison with the reciprocating bed, substantially as described. 4th. In a photographer's printing and embossing press, the combination with a frame, a chase, the interchangeable printing plate and heatable embossing die adapted to be fixed separately in said chase for the working face thereof to be exposed through said chase, an angular lever having a shiftable fulcrum connection with said frame, a reciprocating bed hung to the frame below the chase and having a link united by a shiftable pivotal connection with said lever, and an inking device mounted detachably on the lever to be operated thereby in unison with the bed when the printing plate is fixed in the chase, substantially as described. 5th. In a press combination with a frame, of a reciprocating bed hung to said frame, a horizontal chase having a chamber and an open lower side and fixed to said frame for adjustment toward or from the pivotal connection between the bed and frame, a lever having a shiftable fulcrum connection with said frame, and a link pivoted to the bed and having a shiftable pivotal connection with the lever, substantially as described. 6th. In a press, the combination with a chase and a reciprocating bed of an operating lever linked to said bed, a yieldable bail mounted on said lever and carrying an inking roller and a pressure spring actively fitted to the lever and bail to hold the inking roller in position to traverse the lower side of the chase as the bed recedes therefrom, substantially as described. 7th. In a press, the combination of a chase having an open lower side and an inclined inking platen projecting above said chase, a frame, a reciprocating bed arranged below the chase and hung to the frame, a lever having a short arm linked to the bed, a carrying bail mounted loosely on the short lever arm at the point of pivotal connection between the lever and link, an inking roll journalled in the free end of said bail, and a pressure spring actively fitted to the lever and the pivoted bail to normally hold the latter in a position for the roll to traverse the inking plate and the lower side of the chase, substantially as described. 8th. The combination with a reciprocating bed and an operating lever therefor, of a chase fixed above said bed and having an open lower side, a plate or die clamped in said base, a slotted plate fastened to the base and having the working surface of the die projected through the slot, and heating appliances mounted on said chase for heating the embossing die therein, substantially as and for the purpose described. 9th. The combination with a reciprocating bed of a chambered case having an open lower side, a slotted face plate fixed to said lower side of the chase, an interchangeable printing plate and embossed die adapted to be fitted in said chase to have the working face thereof exposed through the slot in said plate and means for actuating the bed, substantially as described. 10. In a press, substantially such as described, the combination with a bed, of a fixed chambered chase provided at its lower side with a slotted plate, a heater or burner situated in the chamber of said chase at one end thereof, a vent tube connected to said chase and communicating with the chamber thereof at the opposite end of the burner, for establishing a circulation through the chase chamber, an embossing die secured to the chase to project through the slotted plate thereon and extending into the chase chamber for exposure to the heat circulating therein, and a supply pipe connected to the burner, substantially as described. 11th. In a press the combination with a bed, a chase and an operating lever, of a carrying bail having a flexible shank and pivotally connected to said operating lever, an inking roller supported by said bail, a pressure spring seated against the lever and said bail and an inking platen mounted on the chase, substantially as and for the purposes described.

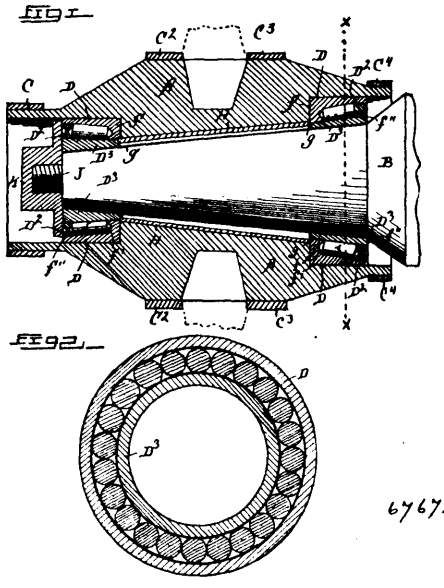
No. 67,671. Enamelling Iron. (*Fer à émailler.*)

The National Enamelling and Stamping Company, New Jersey, assignee of William F. Niedringhaus and G. W. Niedringhaus, both of St. Louis, Missouri, U.S.A., 8th June, 1900; 6 years. 25th May, 1899.)

Claim.—1st. In the process of enamelling steel and homogeneous iron, the sub-process of enamellizing the said metal, which consists in bringing steel or homogeneous iron into a molten state and introducing into the said molten steel or homogeneous iron any of the enamelling fluxes thereby adapting it to retain enamel having such or analogous fluxes, substantially as described. 2nd. In the process of enamelling steel or homogeneous iron the sub-process of enamellizing the metal which consists in bringing the steel or homogeneous iron into a molten state and introducing into the said molten steel or homogeneous iron a mixture of the enamel fluxes, thereby adapting it to retain enamel having such or analogous fluxes, substantially as described. 3rd. The process of producing enamelled articles, which consists in first enamellizing steel or homogeneous iron as set forth, and thereupon enamelling the same. 4th. As a new article of manufacture, a base of enamellized steel or homogeneous iron carrying an adherent superposed coating of enamel

substantially as described. 5th. As a new article of manufacture enamellized steel or homogeneous iron especially adapted for enamelling purposes. 6th. As a new article of manufacture, steel or homogeneous iron prepared for enamelling by enamellizing the same by pretreatment in a molten condition with an enamelling flux or fluxes whereby the said metal is specially adapted for retaining an adherent coating of enamel containing such or analogous fluxes. 7th. As a new article of manufacture, steel or homogeneous iron having its surface when in a solid state in an enamellized condition, the said steel having a great affinity for enamels containing a flux or fluxes of a character similar to the flux or fluxes producing the enamellizing of the steel, and adapted to receive and retain the adherent coat of enamel containing such fluxes, free from objectionable flaws and defects.

No. 67,672. Axle Box for Wheels. (*Boîte d'essieux.*)



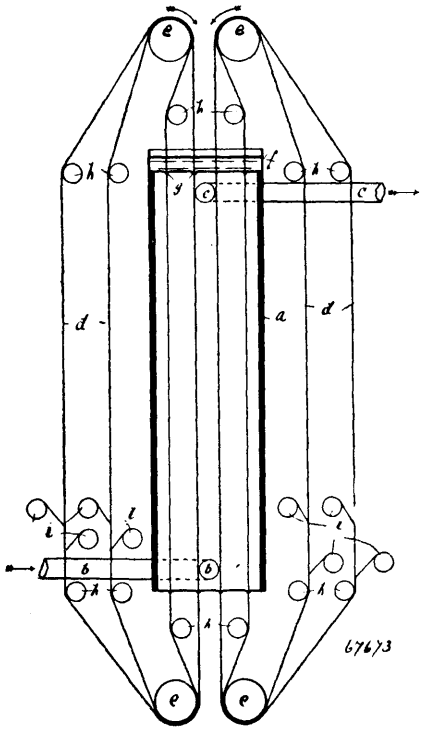
Lewis P. Rollins, Prescott, Ohio, U.S.A., 8th June, 1900; 6 years. (Filed 28th March, 1900.)

Claim.—1st. In a hub for wheels, a roller bearing comprising a metal ring-shaped member that has an internal continuous flange at one end, a continuous groove in the inside face of the flange, and an internal screw-thread at its other end, a mating member having an external screw-thread to engage said internal screw-thread and a continuous groove in its inner face and a plurality of rollers fitted in said grooves and the annular chambers produced by the combination of the said three distinct parts, for the purposes stated. 2nd. A hub for wheels comprising a roller bearing boxing at each end portion consisting of three distinct metal parts, to wit:—a ring-shaped part fitted in an annular cavity in the hub and having an internal flange at its inner end and a continuous groove in the inner face of the flange and an internal screw-thread at its outer end, a mating member having an external screw-thread to engage said internal screw-thread and a continuous groove in the inside face of the mating member and a ring that is wedge-shaped in longitudinal section and a metal cylinder fitted at its ends into continuous annular grooves in the inner faces of the boxes and rollers in the boxings, all arranged and combined to operate in the manner set forth for the purposes stated. 3rd. A hub for wheels comprising a roller bearing boxing at each end portion consisting of three distinct metal parts, to wit:—a ring-shaped part fitted in an annular cavity in the hub and having an internal flange at its inner end and a continuous groove in the inner face of the flange and an internal screw-thread at its outer end, a mating member having an external screw-thread to engage said internal screw-thread and a continuous groove in the inside face of the mating member and a ring that is wedge-shaped in longitudinal section and a metal cylinder fitted at its ends into continuous annular grooves in the inner faces of boxes and rollers in the boxings, in combination with an axle having an arm that terminates in a screw-thread, to operate in the manner set forth for the purposes stated.

No. 67,673. Method of Producing Useful Articles from Sea Weed. (*Méthode de production d'articles des plantes marines.*)

Axel Krefting, 18 Kort Adlersgade, Christiania, Norway, 8th June, 1900; 6 years. (Filed 10th May, 1899.)

Claim.—1st. A method of producing plates and different articles from sea weed consisting in giving the soluble tangates (either in a pure state or mixed with vegetable or mineral substances) a suitable form and after the drying process treating them with acids or solutions of metallic salts of suitable strength, substantially as described. 2nd. In the method of producing plates and different articles from sea weed as described, the adding of glycerine or sugar to the solution for the purpose of making the articles flexible and elastic, substantially as described. 3rd. In the method of producing plates and different articles from sea weed as described, the direct grinding of the alkali-treated sea weed with all its fibres and chemically treating the mass as hereinbefore described. 4th. In the method of producing plates and different articles from sea weed as described, the application of the stalks of the sea wood alone after having removed the outer skins of the same, substantially as described. 5th. In the method of producing plates and different articles from sea weed as described, the adding of suitable dye stuffs to the mass, substantially as described. 6th. In the method of producing plates and different articles of sea weed as described, the addition of fibrous or mineral substances (such as wood pulp, cork sawdust and the like or pumice, kaolin, clay asbestos and the like) to the mass, substantially as described. 7th. In the method of producing plates and different articles from sea weed as described incorporating metals in the articles, which are to be produced, by the treatment of the products with acid before the treatment with metal salts takes place, substantially as described. 8th. In the method of producing plates and different articles from sea weed as described, the addition of drying oils, metallic soaps or resinous materials to the mass, substantially as described. 9th. In the method of producing plates and different articles from sea weed, as described, the application of a drying apparatus consisting of endless plates which are to be moved against the drying air through a chamber, the endless plates taking up the tangate solution on one side of the chamber and carrying it through same and the prepared plates of the material produced being removed from the endless carrying plates and rolled up on the other side of the chamber, substantially as described.

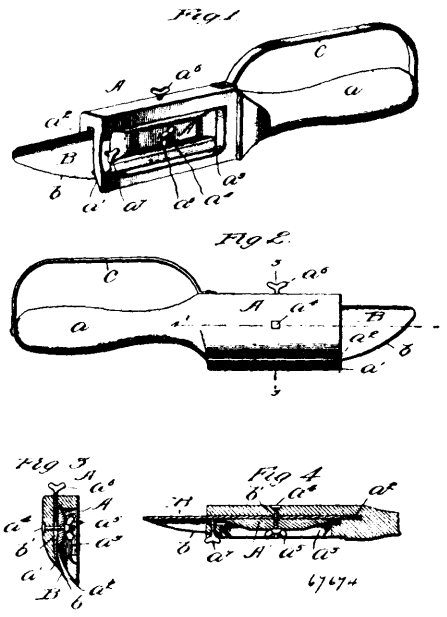


67,674. Potato Knife. (*Couteau à patates.*)

Joseph Phidime Bilodeau, St. Hénédine, Quebec, Canada, 8th June, 1900; 6 years. (Filed 5th July, 1899.)

Claim.—1st. A potato knife comprising a slotted body portion, and having an opening in one side, a removable blade adjustably secured in said slotted body portion, a clamping block arranged in said opening and adapted to clamp the blade in said body portion, a binding screw passing through said clamping block and blade and body portion, and an adjusting screw passing through said body portion and adapted to bear against the back of said blade, substantially as described. 2nd. A potato knife comprising a body portion provided in one side thereof with a recess, in one edge with a knife slot, and on its other side with a curved or beveled face, a knife

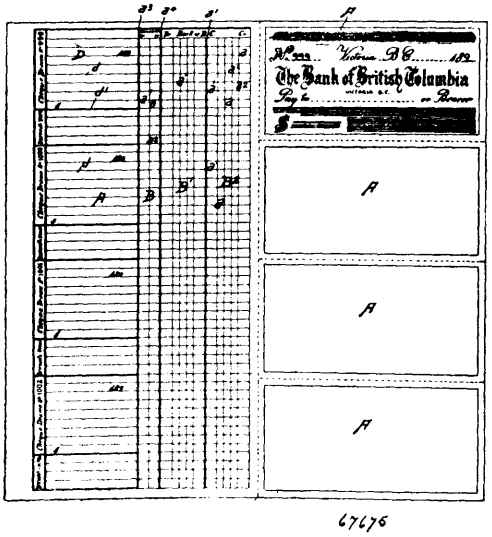
blade fitted in the recess and slotted portion of said body, means for clamping said knife blade firmly in place, and means for adjusting



said knife blade to vary the extent of projection of its working edge beyond the curved face of the body portion, substantially as described.

No. 67,675. Bank Cheque Book.

(*Livret de chèque de banque.*)

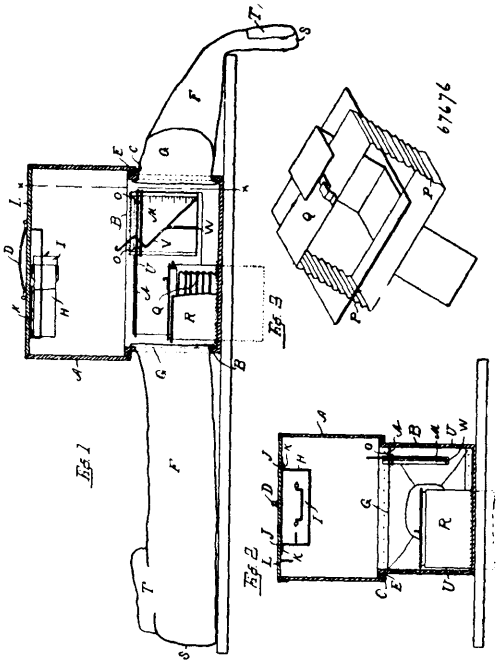


Fred Soues Maclure, Victoria, British Columbia, Canada, 8th June, 1900; 6 years. (Filed 9th October, 1899.)

Claim.—1st. A cheque book having stubs to which the cheques are detachably connected, each stub having a cheque number, a space for the data of the cheque, and also having a space designated "Discounts and Deposits" and each page of stubs having a space designated "Ledger Folios" said space having columns headed "Dr." and "Cr.", and having also Debit and Credit columns for the bank account, substantially as described. 2nd. A cheque book having stubs to which the cheques are detachably connected, each stub having a cheque number, a space for the data of the cheque, and also having a space arranged below the cheque data space and designated "Discounts and Deposits," and each page of stubs having a space arranged in juxtaposition to the cheque data space and the Discount and Deposit space, designated "Ledger Folios" said space having columns headed "Dr." and "Cr.", and having also Debit and Credit columns, arranged side by side, for the bank account, substantially as described.

No. 67,676. Photographer's Dark Room.

(*Chambre noire de photographe.*)



Frank L. Quatsoe, Green Bay, and Walter Beier, Janesville, both in Wisconsin, U.S.A., 8th June, 1900; 6 years. (Filed 12th May, 1899.)

Claim.—1st. In a portable dark room, the combination of an exterior telescoping case A, plate receptacle H, suspended by supporting ways from the inner upper wall or top of said receptacle, catch or button C, pivoted to the lower edge of said exterior case, interior case B, provided with a retaining notch or recess E, for the reception of said catch or button, said cases being adapted to be telescoped together and locked in both their closed and extended positions by said catch, substantially as and for the purpose specified. 2nd. In a portable dark room, the combination of an exterior telescoping case A, plate receptacle H, suspended by supporting ways from the inner upper wall or top of said receptacle, catch or button C, pivoted to the lower edge of said exterior case, interior case B, provided with a retaining notch or recess E, for the reception of said catch or button, oppositely arranged sleeves F, respectively secured at their inner ends to said interior case B, around the hand holes G G, said cases being adapted to be telescoped together and locked in both their closed and extended positions by said catch, substantially as and for the purpose specified. 3rd. In a portable dark room, the combination of an exterior telescoping case A, plate receptacle H, suspended by supporting ways from the inner upper wall or top of said receptacle, catch or button C, pivoted to the lower edge of said exterior face, interior case B, provided with a retaining notch or recess E, for the reception of said catch or button, oppositely arranged sleeves F, respectively secured at their inner ends to said interior case B, around the hand holes G G, oppositely arranged colored glass plates forming sides to said interior case, and a transparent developing tray located between said colored glass plates, all substantially as and for the purpose specified.

No. 67,677. Washing Compound for Clothes.

(*Composé pour laver le linge.*)

Robert Barnes, Toronto, Ontario, Canada, 8th June, 1900; 6 years. (Filed 4th July, 1899.)

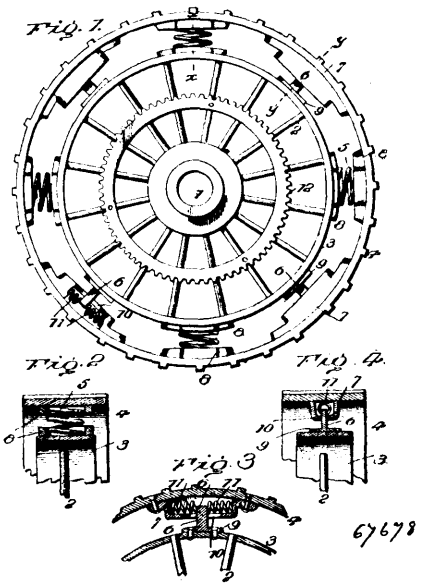
Claim.—The herein described composition of matter consisting of parafine wax, borax and sal soda in or about the proportions specified.

No. 67,678. Traction Wheel. (*Roue de traction.*)

Joseph D. Cullen, Sitka, and Andrew A. Harrison, Headlee, Indiana, U.S.A., 8th June, 1900; 6 years. (Filed 20th March, 1900.)

Claim.—1st. A traction wheel comprising spaced concentric rims having relatively independent radial and circular movement, supports interposed between the rims and yieldable radially and in the plane of motion of the wheel, and positive interlocking devices between the respective rims and movable radially and in the plane of the wheel and constructed to prevent lateral displacement of said rims, substantially as described. 2nd. A traction wheel comprising

spaced concentric rims having relatively independent radial and circular movement, supports interposed between the rims and yield-



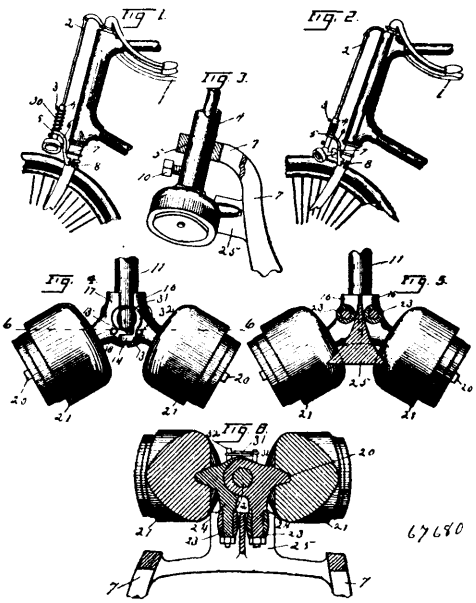
able radially and in the plane of motion of the wheel, positive interlocking devices having their elements rigidly attached to the respective rims and movable radially and in the plane of the wheel and constructed to prevent lateral displacement of said rims, and springs interposed between the said rims to compensate for sudden movements of either rim in a circular direction, substantially as specified. 3rd. A wheel comprising inner and outer rims, yielding supports interposed between the rims, interlocking devices telescopically related and having a limited circumferential movement and attached to the respective rims, and springs interposed between the interlocking devices to compensate for sudden movement of either rim in a circular direction, substantially as set forth. 4th. A wheel comprising inner and outer rims, yielding supports interposed between the rims, a box casting secured to one of the rims and having a longitudinal slot, a lug attached to the other rim and entering the slot of the box casting, and springs located in the front and in the rear of the lug and between it and the ends of the box and housed by the latter, substantially as specified. 5th. A wheel comprising inner and outer rims, yielding supports interposed between the rims, box castings attached to one of the rims and having longitudinal slots, lugs attached to the other rim and having a radial and a circumferential movement in the slots of the box castings, said boxes and lugs alternating with the yielding supports, and springs housed by the box castings and located in the front and in the rear of the lugs, substantially as described. 6th. A traction wheel comprising a central portion having a gear element for transmitting power, a rim encircling the central portion, yielding supports between the rims of the parts, longitudinally slotted box castings, and lugs attached to the respective rims, and springs housed by the castings and arranged between the ends thereof and the end portions of the lugs, substantially as and for the purpose specified.

No. 67,679. Method of Storing Acetylene.
(Méthode d'emmagasiner l'acétylène.)

Georges Claude, 2 Rue de Berulle, Saint Maude, and Albert Hess, 46 Rue Notre Dame de Lorette, Paris, both in France, 8th June, 1900; 6 years. (Filed 21st September, 1897.)

Claim.—1st. The herein described method of storing large quantities of acetylene gas in small volume, for lighting and other purposes, which consists in dissolving the acetylene gas under pressure in certain liquids so as to increase the quantity of gas dissolved per unit of volume of liquid, as specified. 2nd. The herein described method of process of storing large quantities of acetylene gas in a small volume, for transport lighting and other industrial purposes, which consists in dissolving the acetylene gas under pressure with solvents contained in the following groups of bodies belonging to the fatty series, liquid hydro-carbons, acetylenic hydro-carbons and the chlro, bromo, iodo and nitro derivatives of said hydro-carbons as well as the lower members of the acids and oxy-acids and their solutions, aldehydes mono-hydroxyl alcohols and incomplete alcohols of the fatty series, ethers (oxides, cyanides, cyanates), as specified. 3rd. The herein described process of storing large quantities of acetylene gas in small volume, for transport lighting and other industrial purposes, which consists in dissolving the acetylene gas under pressure with solvents contained in the following groups of bodies belonging to the aromatic series, benzenic hydro-carbons (benzene, toluene, xylene &c,) chloro, bromo, iodo and nitro derivatives of said hydro-carbons, phenols, aromatic amines, (aniline, toliudine &c), as specified. 4th. The herein described method or process of storing large quantities of acetylene gas in a small volume, for transport lighting and other industrial purposes, which consists in dissolving the acetylene gas under pressure with the solvents contained in the following groups of bodies belonging to the higher series, liquid hydro-carbons and their derivatives, trimethylene, furfurine, thiophenol, (pyrrol, furfurol, essences, etc), as specified. 5th. The herein described method or process of storing large quantities of acetylene gas in small volume, for transport lighting and other industrial purposes, which consists in dissolving the acetylene gas under pressure with solvents contained in mixtures or combinations of the solvents or bodies belonging to the fatty series, the aromatic series and the higher series, as specified. 6th. The herein described method of storing large quantities of acetylene gas in a small volume, for lighting and other purposes, which consists in dissolving the acetylene gas under pressure, the employment of a receiver containing a liquid charged with acetylene gas under pressure and from which the acetylene is evolved when required for use, as specified. 7th. The herein described method of storing large quantities of acetylene gas in small volume, for lighting and other purposes, which consists in dissolving the acetylene gas under pressure in a suitable liquid solvent such as described, from which it can be evolved when required for use.

No. 67,680. Bicycle Brake. *(Frein de bicycles.)*



Philip Watson Pratt, San Francisco, California, U.S.A., 8th June 1900; 6 years. (Filed 2nd April, 1900.)

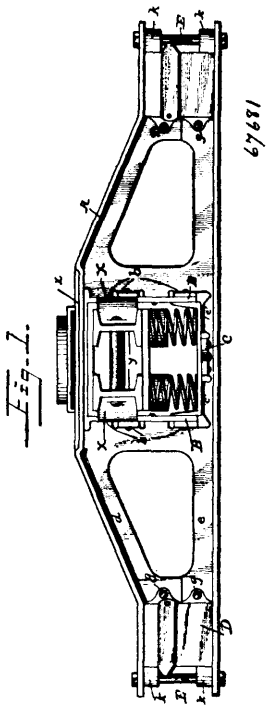
Claim.—1st. In a brake, the combination of rollers, downwardly extending axles therefor, said axles at the first contact of the rollers with the tire extending in a plane perpendicular to the direction of motion of the latter, and means for moving said axles into a forward direction, whereby said rollers then roll transversely to the motion of the tire, substantially as described. 2nd. In a brake, the combination of rollers, axles therefor, said axles at the first contact of the rollers with the tire extending in a plane substantially perpendicular to the adjacent portion of said tire, whereby said rollers then exert an inappreciable retardation thereon, and means for simultaneously pressing said rollers against the tires and changing the direction of the axles so as to become more and more oblique to said perpendicular plane, whereby said rollers then roll more and more transversely to the motion of the tire, substantially as described. 3rd. In a brake, the combination of rollers, downwardly diverging axles therefor, and means for simultaneously pressing said rollers against a tire and increasing the angle which their planes of rotation make with the plane of rotation of the tire, substantially as described.

No. 67,681. Car Truck Side Frame.
(Cadre de châssis de chars.)

William Peter Bettendorf, Davenport, Iowa, U.S.A., 8th June, 1900; 6 years. (Filed 3rd June, 1898.)

Claim.—1st. A blank for side frames for car trucks, consisting of a beam having a central opening, and having portions of the web removed from the ends thereof to near said central opening to form suitable arms, substantially as and for the purpose set forth. 2nd.

A blank for side frames for car trucks, consisting of a beam having a central opening and having portions of its web cut away from the

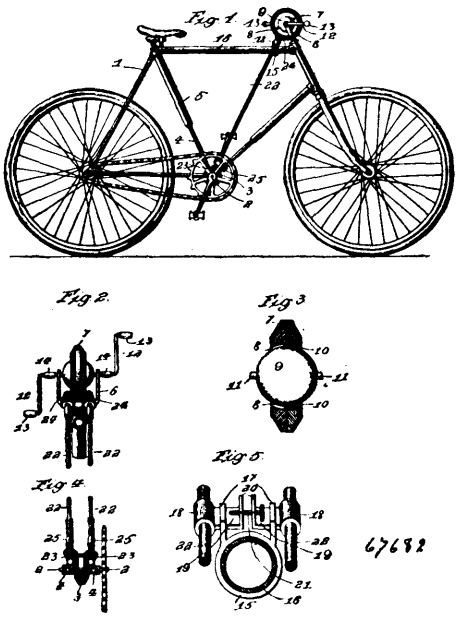


ends thereof and extending to near said central opening to form suitable arms that have clip bars extending from the extremities thereof. 3rd. A side frame for car trucks, made from metal beam, the web of which at its centre of length is provided with a rectangular opening, and portions of the web at each end of which are cut away leaving arms that are bent and meet and are united together, in combination with the truck bolster, the ends of which enter said central rectangular opening, and journal boxes secured between the ends of said arms. 4th. A side frame for car trucks, made from a metal beam having a rectangular opening made in the web thereof at its centre of length, and having portions of said web at each end cut away to form arms which latter are provided at their extremities with clip bars, said arms being bent to meet and be united together, in combination with a truck bolster the ends of which enter said central opening, and journal boxes secured at the ends of said beam having said clip bars. 5th. Side frames for car trucks consisting of a metal beam, which in the blank had portions of its web at each end removed so as to leave arms that are in the finished frames bent so as to meet and be united together, said frames being provided with an oblong opening at their centres of length, the vertical side edges of which are provided with a series of lugs that are bent laterally, in combination with journal boxes secured between said arms in the ends of said frames, guide plates secured to the lugs projecting from the vertical sides of said oblong opening, and a truck bolster having guide blocks on the ends which engage said guide plates, as set forth. 6th. Side frames for car trucks, consisting of a metal beam which in the blank had portions of its web removed at each end thereof, to form arms that are, in the finished frames, so bent as to meet and be united together, said frames each being provided with a rectangular opening at their centres of length, the lower edge of which is provided with laterally projecting lugs, in combination with journal boxes secured to the ends of said frames spring plank connecting said frame and having its ends secured to said lugs, and the truck bolster having its ends entering and cushioned in said central openings, as set forth.

No. 67,682. Bicycle Motor. (*Moteur de bicycles.*)

John D. Atkinson, Seattle, Washington, U.S.A., 8th June, 1900; 6 years. (Filed 2nd April, 1900.)

Claim.—1st. A driving gear for bicycles, comprising a driving shaft, a ball or sphere rigidly mounted on said shaft, a yoke for mounting the driving shaft on the steering gear of the bicycle, a beven gear mounted upon and having a pin and groove connection with said ball or sphere, a laterally extending lug integral with the bevel gear having a groove formed therein, a yoke secured to the frame of the bicycle, roller bearings secured within said yoke and adapted to work in the groove of the laterally extending lug, a crown gear wheel secured on the crank axle of the machine, and means for transmitting motion from the bevel gear wheel on the head of the machine to the crown gear wheel on the crank axle. 2nd. A driving gear for bicycles, comprising a driving shaft, a ball or sphere rigidly mounted on said shaft, a yoke for mounting the driving shaft on the steering head of the bicycle, a transmitting



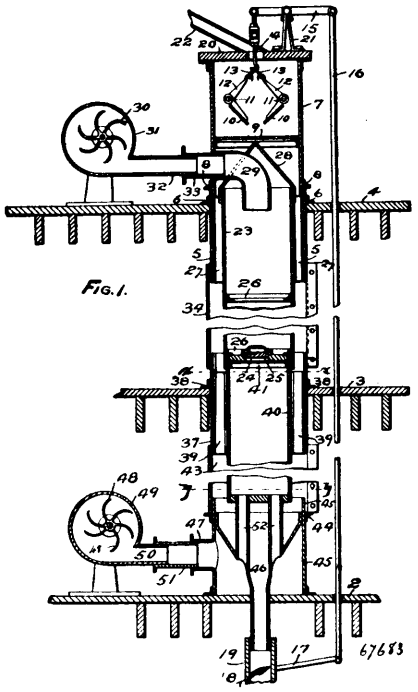
means, bevel gears mounted upon and having a pin and groove connection with said ball or sphere, with which the transmitting means meshes, substantially as described. 3rd. In a bicycle of the character described, the combination with a driving shaft, a yoke secured to the head of the machine, said shaft being journalled in said yoke, a ball rigidly connected on said shaft, of a bevel gear wheel mounted on said ball, and means connecting the ball to the gear wheel, whereby the gear may yield in every direction except in that of the rotation of the driving shaft, and means for transmitting motion from said bevel gear wheel to the driving wheel. 4th. In a machine of the character described, the combination with the head of the machine, of a yoke rigidly connected to said head, a shaft having bearings in said yoke and terminating in crank arms, a ball mounted on the shaft in the yoke and provided with two diametrically opposite pins or studs, a bevel gear wheel having a central opening with grooves for the reception of the said ball, gears meshing with the said gear wheel and having a suitable connection with the usual crank shaft of a bicycle. 6th. In a machine of the character described, the combination with the head of the machine, a yoke connected to said head, a shaft journalled in said yoke and terminating in crank arms, a ball rigidly mounted on said shaft and provided with two studs, a bevel gear wheel having a central opening in which said ball is secured by means of said studs of rods connecting said power mechanism with the usual crank shaft, of a collar secured to the frame of the machine, lugs extending upwardly from said collar and provided with rectangular openings, said tubular guides provided with inwardly extending arms, the ends of which are bent upwards at right angles and provided with screw threaded openings, the set screw engaging said openings, said tubular guides supporting the rods, while the arms of the guides slide in the rectangular openings in said lugs. 6th. In combination with the ball rotatably mounted on the head of the bicycle, a bevel gear wheel mounted on said ball and yielding in every direction except that of the rotation of the shaft, a gear of the character described, and rods or shafts carrying parts of said gear, a rod or shaft guide, comprising a collar having upwardly extending lugs provided with angular openings, sliding members, one end of which is provided with a tubular guide which receives one of the rods or shafts, while the other end is turned up at right angles and provided with a screw threaded opening, said sliding members adapted to work in the openings of said lugs, and a set screw adapted to connect the inner ends of said sliding members, as and for the purpose specified.

No. 67,683. Grain Drier. (*Sechoir à grain.*)

James McDaniel, Minneapolis, Minnesota, U.S.A., 8th June, 1900; 6 years. (Filed 24th March, 1899.)

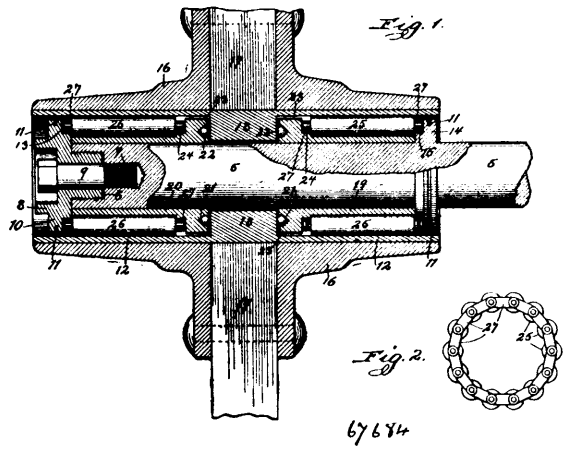
Claim.—1st. A grain drier, comprising in combination, inner and outer perforated cylinders arranged with an annular space between them, a transverse division extending across said inner cylinder and dividing the space within said cylinders into two separate compartments, and means for forcing air into each of said compartments and permitting the same to escape through said perforated cylinders and through the body of grain contained in the annular space be-

tween said cylinders, for the purpose set forth. 2nd. A grain drier, comprising in combination, inner and outer perforated cylinders



arranged with an annular space between them, a transverse division extending across said inner cylinder and dividing the space within said cylinders into separate compartments, means for forcing hot air into one of said compartments and means for forcing cold air into the other compartments, whereby the air from both compartments is permitted to escape through the perforated cylinders and through the body of grain contained within the annular space between said cylinder, for the purpose set forth. 3rd. A grain drier, comprising in combination, upright inner and outer perforated cylinders arranged with an annular space between them, a transverse division extending across said inner cylinder and dividing the space within said cylinders into an upper and a lower compartment, means for feeding the grain by gravity into the annular space between said cylinders, means for forcing hot air into said upper compartment and means for forcing cold air into the lower compartment whereby said air is permitted to escape through said perforated cylinders and through the body of grain contained within the annular space between said cylinders, for the purpose set forth. 4th. A grain drier, comprising in combination, upright inner and outer perforated cylinders arranged with an annular space between them, a transverse division extending across said inner cylinder and dividing the space within said cylinders into upper and lower compartments, means for feeding grain by gravity into the annular space between said cylinders, and means for regulating the flow of grain from said annular space whereby said space is kept full of grain while the device is in operation, means for forcing hot air into said upper compartment and means for forcing cold air into said lower compartment, whereby said air is permitted to escape through said perforated cylinders and through the body of grain contained within the annular space between said cylinders, for the purpose set forth. 5th. The combination, with the removable cylinders 5 and 7, of the removable perforated cylinder 23 arranged within the cylinder 5, the outer removable cylinder 34, means for feeding grain into the annular space between the inner cylinder 23 and the outer cylinders 5 and 34, and means for forcing air into the space within said cylinder 23, for the purpose set forth. 6th. The combination, with the inner and outer perforated cylinders arranged with an annular space between them, means for feeding grain into said annular space and means for forcing air into the space within the inner cylinder of the discharge pipe, a suitable valve located in said discharge pipe, a valve located below the inlet pipe comprising pivoted plates 10 and means supporting the same, and means connecting said valve with the valve in the discharge pipe whereby the flow of grain from the drier is automatically regulated, substantially as described. 7th. The combination, with a drier composed of the inner and outer removable perforated cylinders, of the fan provided with movable pipes arranged to connect with the space within said inner cylinders, and means for feeding grain into the annular space between said cylinders, substantially as described. 8th. A grain drier, comprising in combination, upright inner and outer perforated cylinders arranged with an annular space between them, means dividing the space within said cylinders into compartments, means for feeding grain by gravity into the annular space between said cylinders, and means for regulating the flow of grain from said annular space whereby said space is kept full of grain while the device is in operation, means for forcing hot air into one of said compartments and means for forcing cold air into another compartment, whereby said air is permitted to escape through said perforated cylinders and through the body of grain contained within the annular space between said cylinders, substantially as described.

No. 67,684. Bicycle Axle. (*Essieu de bicycles.*)



Archibald James Robertson, Chicago, Illinois, U.S.A., 8th June, 1900; 6 years. (Filed 2nd April, 1900.)

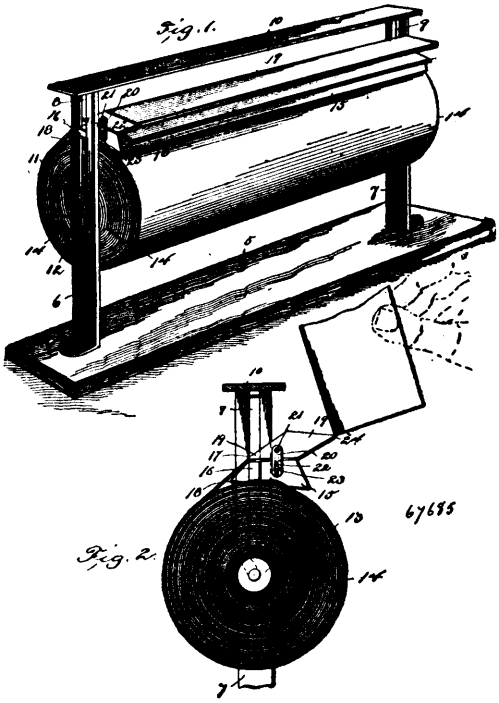
Claim.—1st. The combination with a hub, of a sleeve located in the hollow thereof and provided with an annular inner enlargement at about its middle, an axle extending into said sleeve and having an annular enlargement, a sectional or inner sleeve located on the axle on each side of the said enlargement of the outer sleeve, roller bearings interposed between the outer sleeve and the inner ones, anti-friction balls interposed between the enlargement of the outer sleeve and the ends adjacent thereto of the inner sleeves, and means secured to the outer or free end of the axle to adjust the parts and hold them in position, substantially as described. 2nd. The combination with a hub having centrally an annular inner enlargement, an axle extending into said hub and having an annular enlargement recessed on its inner surface, and provided on its periphery with a dust guard, the sectional or inner sleeves recessed on their peripheries and located on each side of the enlargement of the hub, roller bearings interposed between the hub and the inner sleeves, and having one of their ends located in the recess of the inner sleeves and their other ends in recessed portions on the axle, anti-friction balls located between the enlargement of the hub and the ends adjacent thereto of the inner sleeves, and means secured to the outer or free end of the axle to adjust the parts and hold them in position, substantially as described. 3rd. The combination with a hub, of a sleeve located in the hollow thereof, and provided with an annular inner enlargement at about its middle, an axle located in said sleeve and having an annular enlargement near the rear end of the hub, said axle having in its free end two sockets oppositely screw-threaded, an inner sleeve located on the axle on each side of the said enlargement of the outer sleeve and each having a groove in its end adjacent to the said enlargement, roller bearings interposed between the outer sleeve and the inner ones, anti-friction balls interposed between the enlargement of the outer sleeve and the ends adjacent thereto of the inner sleeves, a hollow nut secured to the free end of the axle, and a bolt passing through said nut and secured to the free end of the axle, substantially as described.

No. 67,685. Paper Mill Roll. (*Rouleau de moulin à papier.*)

William E. Blue, Niagara Falls, New York, U.S.A., 8th June, 1900; 6 years. (Filed 16th September, 1899.)

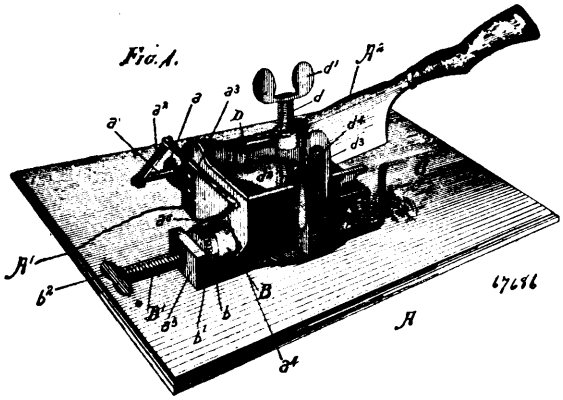
Claim—1st. In a device of the class described, the combination with a supporting frame comprising slotted uprights, having bearings therein adapted to receive a roll of paper, of a bar slidably mounted in the slots of the uprights, and a second bar pivotally connected with the first-named bar and adapted to receive between it and the first-named bar, the paper from the roller and to exert a gripping action thereon when moved upon its pivot. 2nd. The combination with a supporting frame adapted to receive a paper roll, of a bar slidably mounted in the frame, a second bar pivotally connected with the first bar and having a tearing edge, and adapted to exert a clamping action against the first-named bar when moved in one direction upon its pivots. 3rd. The combination with a supporting frame adapted to receive a paper roll, of a bar having a concaved face adapted to lie upon a roll within the frame, a second bar pivotally connected with the first-named bar, and adapted to exert a gripping action upon the paper from the roll passed between it

and the first-named bar, and a tearing edge arranged at one side of the pivotal connection of the second bar and adapted to receive



pressure during the tearing operation to cause it to exert a gripping face. 4th. The combination with a supporting frame adapted to receive a paper roll, of a bar slidably connected with the frame and having upwardly converging side faces, a second bar pivotally connected with the first-named bar, and having a tearing edge and adapted to exert a gripping action against the first bar, the adjacent front faces of the bars being disposed convergingly. 5th. The combination with a supporting frame adapted to receive a paper roll, of a bar slidably connected with the frame, a second bar slidably and adjustably connected with the first-named bar and adapted to exert a gripping action thereagainst, and a tearing edge carried by the second bar.

No. 67,686. Tobacco Cutter and Shaver. *(Hâche-tabac.)*



Alphonse Bernier, Lotbinière, Quebec, Canada, 8th June, 1900; 6 years. (Filed 16th September, 1899.)

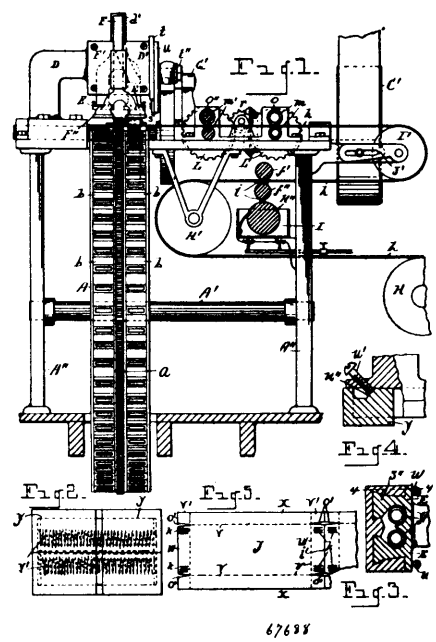
Claim.—1st. A tobacco cutter, comprising a box, a knife pivoted thereto, a feeding device connected with said box, and a feeding mechanism operatively connected with said knife and adapted to automatically advance said feeding device, substantially as described. 2nd. A tobacco cutter, comprising a box, a shaft X journalled in suitable bearings secured to said box, a knife fixed upon said shaft, a feed rod journalled in said box, a collar threaded on said feed rod, and a pawl and ratchet mechanism connecting said shaft with said collar for rotating the same, substantially as described. 3rd. A tobacco cutter, comprising a box, a shaft journalled in bearings mounted on said box, a knife fixed upon said shaft, a feed rod journalled in said box, a collar threaded upon said feed rod and having ratchet teeth thereon, a pawl connected with said shaft by means of a lever and link and adapted to engage said ratchet teeth, an adjustable cover plate hinged to said box, and a thumb screw for regulating the adjustment of said cover, substantially as described.

No. 67,687. Method of Preserving and Distributing Liquids. *(Méthode de preserver et distributer les liquides.)*

Henry Vincent Walker, Brooklyn, New York, U.S.A., 8th June, 1900; 6 years. (Filed 8th May, 1899.)

Claim.—1st. The method of preparing perishable viscous or semi-viscous liquids for preservation under conditions of gradual use which consists in charging the same together with a practically insoluble gas under pressure in a closed vessel having a suitable outlet valve which may be opened and closed without destroying the efficient pressure of said gas, and then sterilizing said liquid in said vessel. 2nd. As a package admitting of preservation of its contents under conditions of gradual use, an air tight vessel having an outlet valve, and containing a sterilized liquid affording support for germ propagation and a sterilized gas under a discharging pressure sufficient to allow for the expansion incident to discharge, said gas being practically insoluble in said liquid. 3rd. Preserving viscous and semi-viscous liquids for gradual use by bottling in siphons in a practically sterilized non-impregnated condition with a practically sterilized gas under efficient discharging pressure, said gas possessing little or no solubility in the particular liquid to be preserved.

No. 67,688. Match Box Making Machine.
(Machine à faire les boîtes à allumettes.)

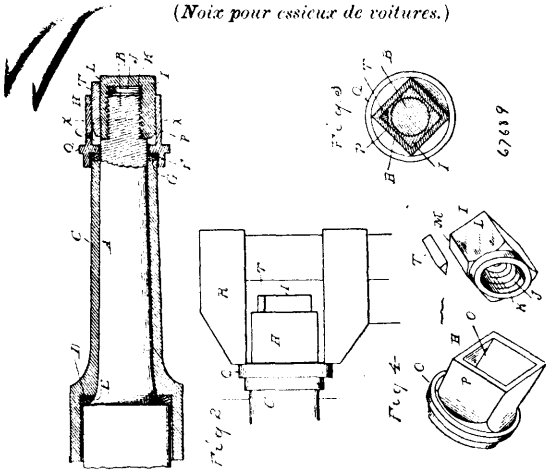


Frederick A. Marshall, Detroit, Michigan, U.S.A., 8th June, 1900; 6 years. (Filed 10th May, 1899.)

Claim.—1st. In a match box machine, the combination of the rotary wheel having opposed box receiving cells in the periphery thereof arranged in transverse alignment, the duplex plunger having its independent forming members mounted in alignment and adapted to enter simultaneously two of said opposed cells, means for feeding two strawboard blanks at a time into the path of the members of said plunger, means for reciprocating the members of said plunger simultaneously and means for discharging the formed boxes from the cells of said wheel in advance of said plunger. 2nd. In a match box machine, the combination of the rotary wheel having a central row of gear teeth and a row of box receiving cells on either side of said gear teeth, a duplex plunger adapted to simultaneously force two blanks of strawboard into the opposed cells of said wheel, a second duplex plunger adapted to discharge two formed boxes from the cells of said wheel at each operation thereof, and means for feeding the strawboard blanks to said plungers and for severing said blanks from the strawboard strip. 3rd. In a match box machine, the combination with the strawboard feeding mechanism of the rotary wheel having cells for the reception of the strawboard blanks, the plunger for forcing said blanks into said cells, of the face of said plunger comprising a series of movable blocks, a spring engaging said blocks to force them outward, and means for adjusting said blocks against the action of said spring to regulate the area of the face of the plunger.

No. 67,689. Vehicle Axle Nut.

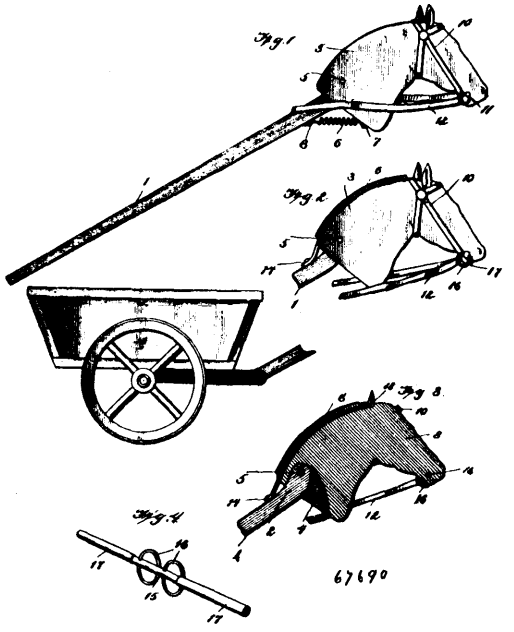
(*Noix pour essieux de voitures.*)



George W. Terry and Isaac E. Terry, both of Pontiac, Michigan, U.S.A., 12th June, 1900; 6 years. (Filed 5th April, 1900.)

Claim.—1st. An axle nut comprising two telescoping sections, the inner member being internally screw threaded to permit of its engagement with the spindle nipple and one of said members having a wrench hold formed thereon, and means for locking the ostensible member to and at any point along the complementary member. 2nd. An axle nut comprising two telescoping members or sections, the inner member being internally screw threaded to permit of its engagement with the spindle nipple, and the outer member having a wrench hold upon its exterior, and means for locking the ostensible member to and at any point along the complementary member. 3rd. An axle nut comprising two telescoping members or sections, the inner member being internally screw threaded to permit its engagement with the spindle nipple, and the outer member having a wrench hold formed upon its exterior, and a wedge adapted to be driven between the members after the lengthening of the nut has been affected to bind the sliding parts together. 4th. An extensible axle nut, comprising two telescoping members or sections, the inner member being recessed and threaded internally, and having a polygonal outer surface, and the outer or extensible member having an opening formed therein conforming in configuration to said polygonal surface and provided upon its exterior with a wrench hold, and a locking device in the form of a wedge adapted to be inserted and driven between the members to bind the same together.

No. 67,690. Toy. (*Jouet.*)

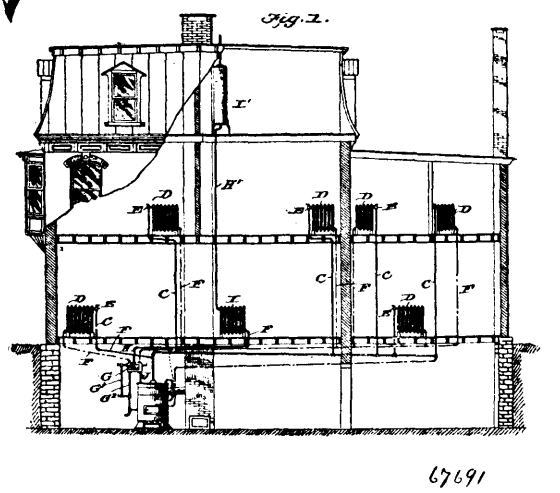


John P. Faherty, Rankin Station, Pennsylvania, U.S.A., 12th June, 1900; 6 years. (Filed 30th October, 1899.)

Claim.—1st. In a toy, the combination with a stick or pole, of an animal's head pivotally mounted thereon, a longitudinally arranged groove formed in the upper edge thereof, a coiled spring secured in said groove one end of which is secured to the stick or pole, the other end being secured to the head at the forward end of said groove, whereby the head will be held normally in an upright position. 2nd. In a toy, a block shaped to represent the head of an animal, a hallowed out portion or recess increasing in depth toward the top of the block and formed in the rear end of said block, a groove in the top edge of the block, and a stick or pole, one end of which is curved upward and pivoted in the said hollowed out portion or recess, and a coiled spring secured in the groove in the top edge of said block one end of which is rigidly secured to the block while the other end is rigidly secured to the pole or stick.

No. 67,691. Steam Heating Apparatus.

(*Appareil de chauffage à vapeur.*)

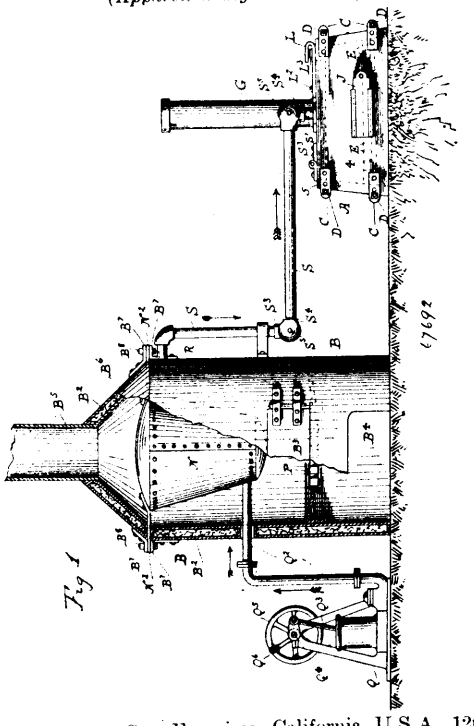


Albert P. Broomell, York, Pennsylvania, U.S.A., 12th June, 1900; 6 years. (Filed 30th May, 1900.)

Claim.—1st. In a heating apparatus, the combination of a boiler, the steam and return pipes, a receiver receiving the discharge of the return pipes and located above the water line of the boiler, a connecting pipe forming an unobstructed passage between said receiver and the boiler below the water line in the latter, a steam connection between said receiver and the boiler, a valve controlling such connection, and a float in the receiver for controlling said valve. 2nd. In a heating apparatus, the combination of the boiler, the steam and return pipes, a receiver above water line of the boiler and connected with the boiler below its water line, damper devices, a float in the receiver for operating said damper, a steam connection between the receiver and the boiler, a valve for controlling said steam connection and a float in the receiver for operating said valves. 3rd. In a heating apparatus, the combination with the boiler and damper of a receiver for the water of condensation, the return pipes for discharging such water to said receiver, connections between said receiver and the boiler, a float in the receiver, devices whereby the said float may operate the damper, a steam connection between the boiler and receiver and means in the receiver for operation by the water therein whereby to control such steam connection. 4th. The combination of the boiler, the damper, the steam circulating pipes, leading from the boiler, the receiver, the return pipes leading to the receiver, a pipe connection between the receiver and the boiler below the water line of the latter, the steam pipe connecting the steam space of the boiler with the receiver and extending upward within such receiver, the valve and its float within the receiver for controlling such connecting steam pipe, and the float in the receiver and connected with the damper by which to operate such damper. 5th. A heating apparatus, having a boiler, a receiver for the returned water of condensation, a steam pipe connecting said receiver with the steam space of the boiler, a float operated valve controlling the said steam pipe and an unobstructed water connection between the receiver and the boiler, substantially as set forth. 6th. The combination of the boiler, the receiver connected with said boiler below the water line in the latter, a steam connection between the boiler and receiver, a float operated valve controlling such steam connection between the boiler and receiver, a float operated valve controlling steam connection and arranged for operation by the water in the receiver, the damper, the float in the receiver, for operating said damper, the condencing radiator connected with the receiver, the connecting pipes and the heating radiators provided with a feed valve arranged to open a vent to the atmosphere when it is adjusted to shut off steam from the radiator, substantially as set forth. 7th. The apparatus herein described, comprising the boiler, the

receiver, connections between the boiler and receiver, such connections communicating with the boiler below its water line, a steam connection between the boiler and receiver, a valve controlling such connection, a float for controlling such valve such float being arranged for operation by the water in the receiver, the damper, a float in the receiver for operating the damper, the heating radiators provided with feed valves arranged to open a vent to the atmosphere when adjusted to shut off steam from the radiators and connecting pipes, substantially as set forth. 8th. In an apparatus, substantially as described, the combination with the boiler and a receiver above the water line of the boiler and connected with such boiler below its water line, of damper devices, a steam connection between the receiver and the boiler and independent floats arranged in the receiver and connected with and adapted to operate the damper devices and the controlling valve for the stem connection, and the controlling valve, substantially as set forth.

No. 67,692. Earth Thawing Apparatus.
(*Appareil à dégler la terre.*)



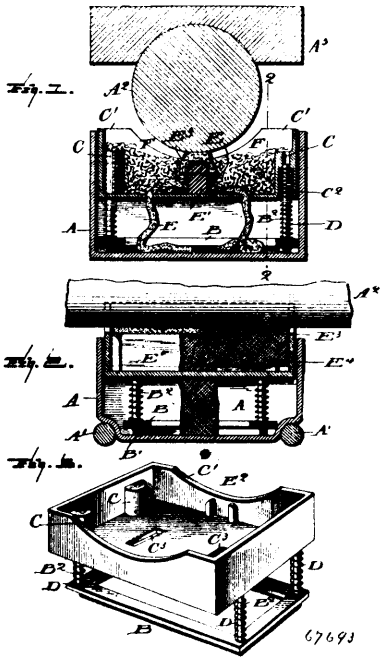
Alvie Heitzelmann, San Francisco, California, U.S.A., 12th June 1900; 6 years. (Filed 21st July, 1898.)

Claim.—1st. In an earth thawing apparatus, a stove adapted to be operated either in a horizontal or vertical position, a grate therefor and means for supporting said grate in two positions in the stove to hold the fuel in either position of the stove, substantially as described. 2nd. In an earth thawing apparatus, a stove having a filling opening in each of two sides thereof at an angle to each other, a grate, and means for supporting said grate in position to receive the fuel from either of said filling openings, substantially as described. 3rd. A bottomless stove comprising a top having a suitable filling door, and a smoke opening near one end, a side adjacent said smoke opening having a filling door, a grate, and means for supporting said grate in position to support the fuel whether the stove is placed on its bottom or with side uppermost, said stove having a suitable draft opening near the end opposite the smoke opening, substantially as and for purpose specified. 4th. In an earth thawing apparatus, the combination of a stove adapted to be operated in either a horizontal or a vertical position, a grate therefor, and means for supporting said grate in two positions in the stove to hold the fuel in either position of the stove, and means for supplying heated air under pressure to the stove, substantially as described. 5th. In an earth thawing apparatus, a stove comprising a top and sides detachably secured together, said top and one side having suitable filling openings, a detachable grate, means for supporting the grate in either of two different positions whereby it is enabled to support the fuel whether the stove is placed in a horizontal position or on end, said stove having suitable smoke and draft openings, substantially as described.

No. 67,693. Journal Lubricating Box. (*Boîte à graisse.*)

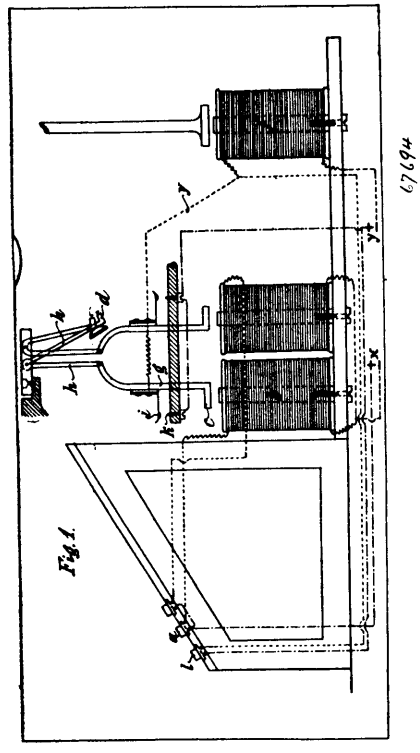
James G. Smith and George Hildenbrandt, both of Covington, and George W. Davy, Louisville, Kentucky, U.S.A., 12th June, 1900; 6 years. (Filed 31st March, 1900.)

Claim.—1st. In a journal box, an oil cellar or tank, the vertical guide pins, a wick tray having apertured lugs to fit said pins and having enlarged recesses, bearing springs extending into said enlarged recesses and surrounding said pins, and a feeding wick



extending from said cellar to said tray, substantially as described. 2nd. In a lubricating journal box, an oil tank or cellar, a tray supported therein and provided with apertured lugs at its opposite sides and holding lugs at its opposite ends, springs extending into said side lugs, a block held by said end lugs, and a wick extending from said cellar to said tray, substantially as described.

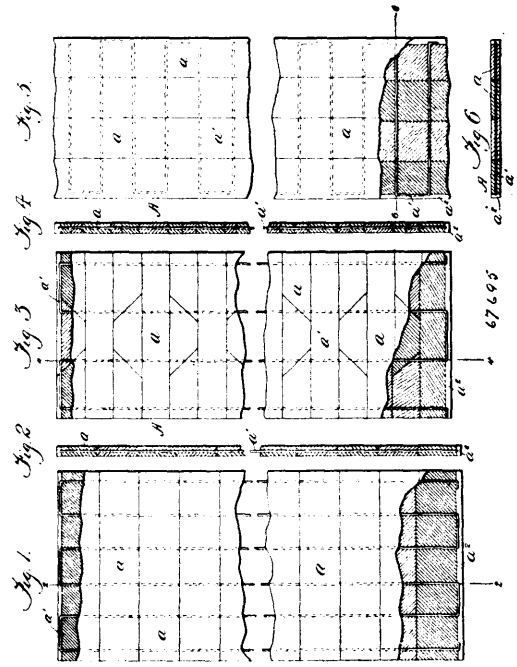
No. 67,694. Typewriter Machine. (*Clavigraphe.*)



Jean Günther, 108 Mockern Strasse, Berlin, Germany, 12th June, 1900; 6 years. (Filed 11th September, 1899.)

Claim.—1st. In a typewriting machine, a series of bell crank type levers, an electrical circuit for each type lever, including a common source of energy, and an electro-magnet and armature for actuating the type levers, said armature consisting of a curved bar depending from the shorter arm of the type lever, an electro-magnet *f* in circuit with said source for attracting a carriage advancing armature, a stationary guide carrying a contact, a brush upon each type actuating armature adapted to engage said contact when the respective magnet is energized, and a separate connection with the electro-magnet *f* for advancing the carriage, independent of the movement of the type bars, substantially as described.

No. 67,695. Floors, Wainscoting, Stair, Etc.
(*Planchers, escaliers, etc.*)



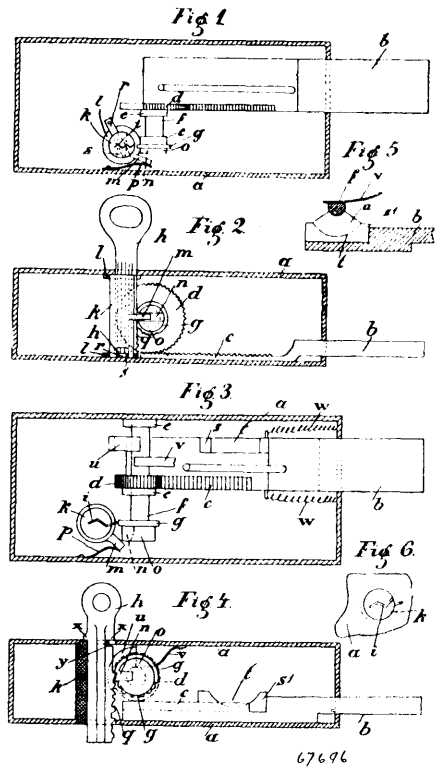
Victor Lahais, Montreal, Quebec, Canada, 12th June, 1900; 6 years. (Filed 30th May, 1900.)

Claim.—A flooring constructed of a plurality of sections, adapted to be matched together, each section comprising a plurality of perforated boards jointed together, and a wire passed through said perforations and serving to permanently and rigidly secure said boards, substantially as described.

No. 67,696. Lock. (*Serrure.*)

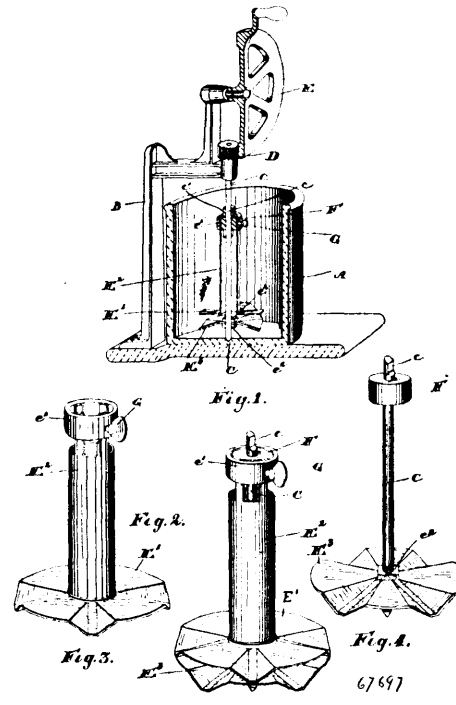
Axel Petersen, Hellerup, Denmark, 12th June, 1900; 6 years. (Filed 30th May, 1900.)

Claim.—1st. In locks in which the bolt is provided with a rack gearing into a cog wheel that may be turned by the pushing in or withdrawing of a key, the arrangement that the lock cylinder into which the key is inserted is made to turn and is provided on its side partly with an open slit and partly with an arm actuated by a spring, which arm, when the lock is closed, catches into a notch in the spindle of the gear wheel whereby such a position is given to the cylinder that the key gets disengaged from a cog wheel fixed upon the spindle and provided with teeth corresponding with those on a rack on the side of the key. 2nd. The cylinder indicated in claim 1 having a notch *s* in the lower end of the cylinder in combination with a spring *r* in the case so placed that it catches into the said notch when the cylinder takes up a suitable position in which its slit is not in line with the cog wheel. 3rd. The combination with the lock described in claim 1 of one or several springs *w* placed in such a manner they have a tendency to pull out the lock in order to render difficult the picking of the lock by the introduction into the keyhole of a crooked instrument. 4th. In connection with the one or several springs *w* indicated in claim 3 the arrangement on the bolt *b* of a lug s^1 with a notch *t* in combination with a disc *u* placed upon the spindle *f* so that the disc may fill up the notch *t* when the bolt is drawn in all for the purpose of automatically keeping the bolt in the drawn-in position. 5th. The spindle *f* having a flattening on the one side of the spindle in combination with a spring *r* on



the casing, which spring may rest upon the flattening and thus prevent the turning of the spindle when the bolt is drawn in.

No. 67,697. Churn. (*Baratte.*)

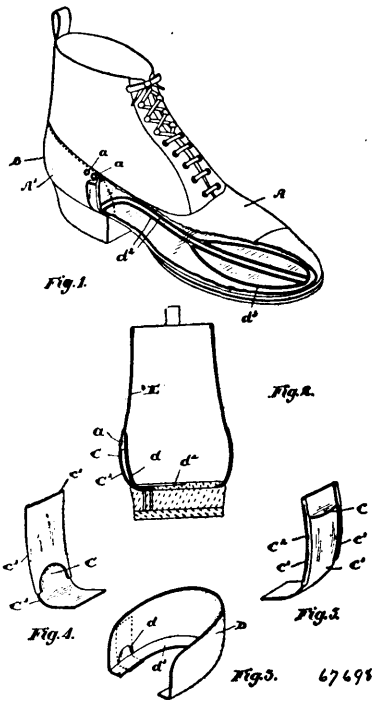


The Miller Hardware Specialty Company, assignee of William Talbert Gartley, all of Toronto, Ontario, Canada, 12th June, 1900; 6 years. (Filed 23rd May, 1900.)

Claim.—1st. In a churn, the combination with a dasher and spindle having a break joint intermediate of its length and above

the dasher, of a slip collar designed to cover such joint, as and for the purpose specified. 2nd. In a churn, the combination with the spindle, of the lower section of the dasher fastened in place by nuts screwed on to the spindle both above and below such section and the upper section of the dasher independent of the lower section and suitably held in position on the spindle, as and for the purpose specified. 3rd. In a churn, the combination with the spindle, of the lower section of the dasher fastened in place by nuts screwed on to the spindle both above and below such section, the collar on the spindle, the upper section of the dasher provided with a sleeve and a set screw fastening sleeve to the collar, as and for the purpose specified. 4th. In a churn, the combination with the spindle and the lower section of the dasher and means for securing it to the spindle at the lower end, of the upper section or portion of the dasher provided with a sleeve and means for securing such upper section to the spindle independently of the lower section, as and for the purpose specified. 5th. In a churn, the combination with the spindle and the lower section of the dasher and means for securing it to the spinule at the lower end and the collar on the spindle, of the upper section of the dasher provided with a sleeve and a set screw fastening such sleeve to the collar on the spindle, as and for the purpose specified. 6th. In a churn, a dasher made in two parts with a tubular portion and detachable means for connecting the two parts together, as and for the purpose specified.

No. 67,698. Ventilated Shoe. *(Chaussure ventilée.)*



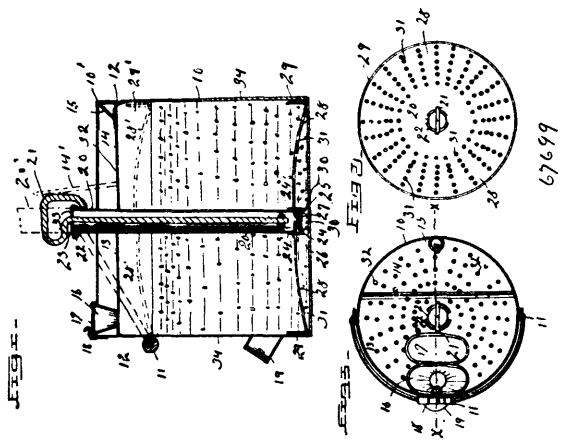
Robert Edward Snell, Toronto, Ontario, Canada, 12th June, 1900; 6 years. (Filed 30th May, 1900.)

Claim.—1st. In a ventilated shoe, the combination with the insole and opening to the inside of the shoe at the heel portion, of eyelet holes in the quarter communicating with the opening and channels leading from such opening along the top of the insole, as and for the purpose specified. 2nd. In a ventilated shoe, the combination with the insole and counter having an opening therethrough, of eyelet holes in the quarter, the channel leading from the eyelet holes to the opening in the counter and channels in the insole leading from the opening in the counter along the top of the insole, as shown and for the purpose specified. 3rd. In a ventilated shoe, the combination with the eyelet holes to the inside of the quarter and the channel located inside of the quarter and formed of the metal plates C having the lower end bent over the heel and secured thereto, the upper plate having the side heads retaining the major portion of the plate C^1 in shape and the front recessed portion C^2 and the insole, of the channels leading along the top of the insole from the opening in the plate C, as and for the purpose specified.

No. 67,699. Minnow Pail. *(Seau à vérons.)*

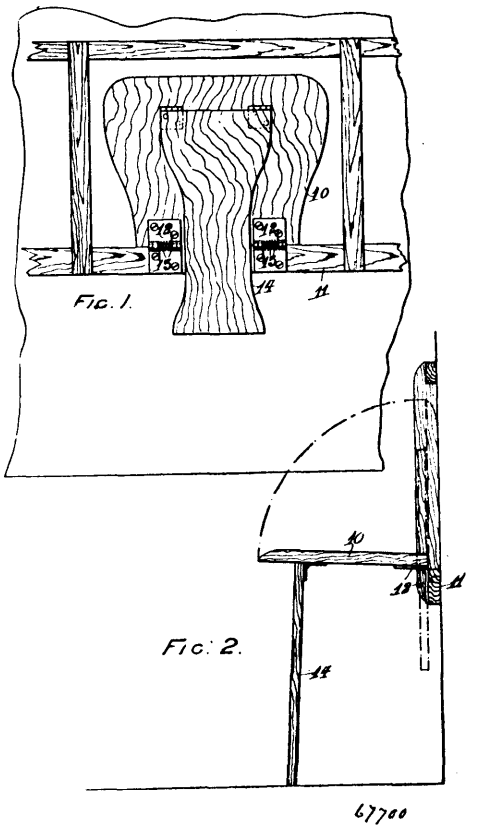
Charles H. Gray, Celeron, New York, U.S.A., 12th June, 1900; 6 years. (Filed 29th May, 1900.)

Claim.—1st. In a minnow pail, the combination with the water receptacle of an air pump having a valve at its lower end, a lift to raise the minnows attached to the lower end of said air pump, as shown and described. 2nd. In a minnow pail, the combination of the water receptacle having a part of its perforated top in a hinged



lid to remove the minnows, a funnel with a hinged cover inserted in said perforated top, as shown and for the purpose specified. 3rd. In a minnow pail, the combination with the water receptacle of an air pump having a perforated lift attached thereto, said lift having a downward bend near its outer edge and an upturned edge to hold the minnows, said perforations in said lift being at a distance from its centre, as shown and for the purpose specified. 4th. In a minnow pail, the combination with the water receptacle of a perforated top having part in a hinged lid, a funnel with cover in said perforated top, an air pump having a valve at its lower end working in said perforated top, a lift attached to the pump, as shown and for the purpose specified.

No. 67,700. Folding Chair. *(Fauteuil pliant.)*

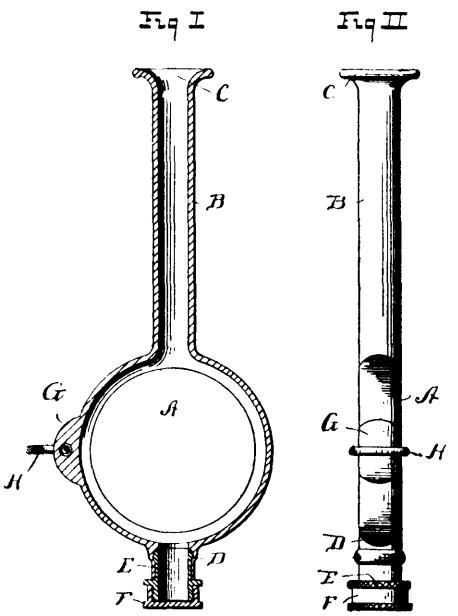


John Sumpter Povah, Vancouver, British Columbia, Canada, 12th June, 1900; 6 years. (Filed 29th May, 1900.)

Claim.—In an article of manufacture, a seat hinged to a convenient rail fixed to a wall, having springs in such hinges for holding the seat in a vertical position against the wall, and a leg

hinged to the underside of the seat designed to hold said seat down and provide a suitable support therefor.

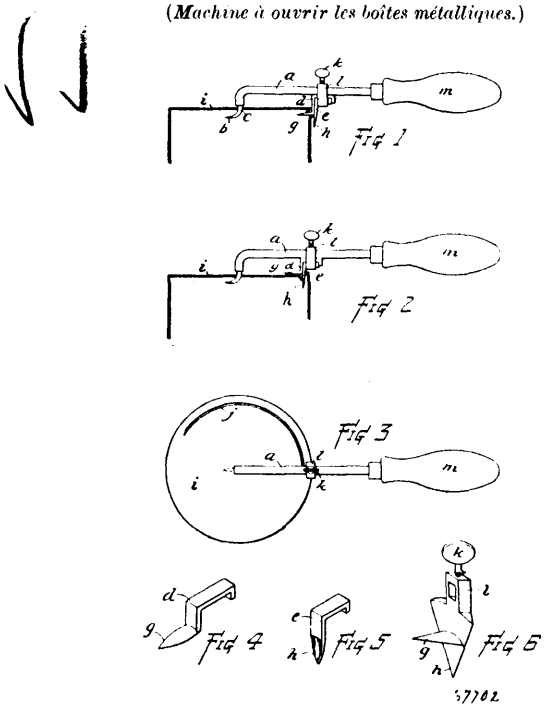
No. 67,701. Menstruator. (*Menstruateur.*)



Byron Bernard Shea, Kansas City, Missouri, U.S.A., 12th June, 1900; 6 years. (Filed 3rd January, 1899.)

Claim.—A menstruator comprising a receiving chamber provided with a lateral projection having a transverse hole, an inlet tube provided with an enlarged mouth, and an outlet tube provided with a removable cap, substantially as described.

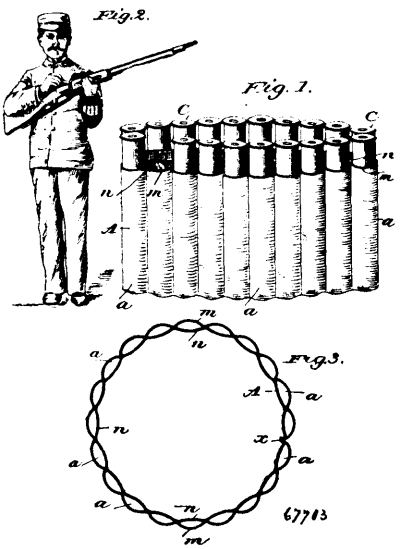
No. 67,702. Can Opener.
(*Machine à ouvrir les boîtes métalliques.*)



Harry W. Thurlow and James T. Epler, both of Seattle, Washington, U.S.A., 12th June, 1900; 6 years. (Filed 29th May, 1900.)

Claim.—1st. In a can opener, the combination with the shank *a*, having a point *b*, adapted to enter the can and serve as a pivot of a blade, and means for adjustably securing the blade on said shank, substantially as set forth. 2nd. In a can opener, the combination with shank *a*, having point *b*, of blades *g* and *h*, and means for adjustably securing said blades on said shank, substantially as set forth. 3rd. In a can opener, the combination with a shank *a*, having point *b*, of independently separable blades *g* and *h*, a block slidable on said shank and securing said blades thereon, and a clamp screw for securing said block and blades in place, substantially as set forth.

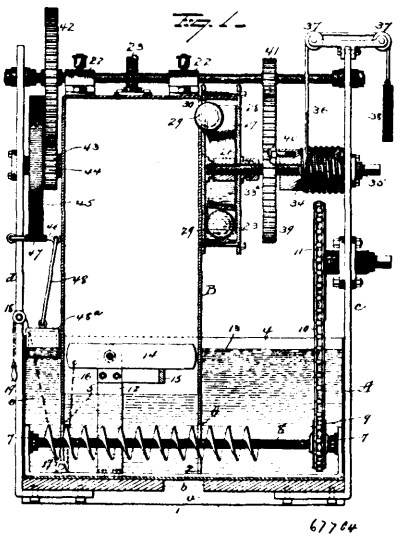
No. 67,703. Ammunition Carrier. (*Porte-cartouches.*)



Thomas Corwin Orndoff, Worcester, Massachusetts, U.S.A., 12th June, 1900; 6 years. (Filed 14th October, 1899.)

Claim.—As a new article of manufacture, an ammunition wristlet consisting of an endless band of pliable material, of a size to conveniently slip over the hand and wear upon the wrist, and provided with pockets for the reception of cartridges, substantially as and for the purposes hereinbefore set forth.

No. 67,704. Gas Generator. (*Générateur à gaz.*)

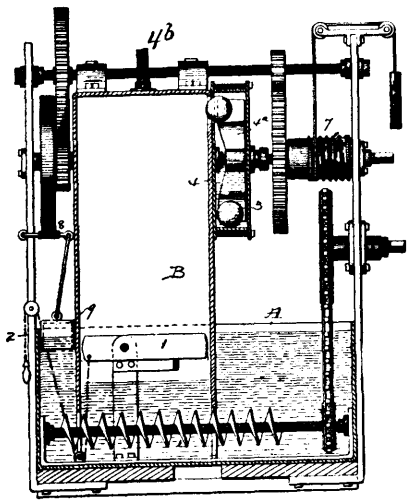


Thomas Gilpin Turner, New York City, New York, U.S.A., 12th June, 1900; 6 years. (Filed 21st November, 1899.)

Claim.—1st. The combination with a tank or receptacle and a fragile carbide container, of means for automatically mutilating said container after it shall have entered said tank or receptacle. 2nd. A gas apparatus comprising a tank or receptacle, a fragile container for gas producing material and means within the tank or receptacle adapted to receive said container after it shall have entered the tank or receptacle and break it to liberate its contents. 3rd. The com-

bination with a tank or receptacle and sealed fragile devices containing carbide, of a feeding device for said fragile devices and means in the tank for breaking said fragile devices when they are discharged into the tank. 4th. The combination with a tank and sealed fragile devices containing carbide, of a feeding device for said fragile devices, means for automatically controlling said feeding device and means within the tank for breaking the fragile containers as they are fed into the tank. 5th. The combination of a tank, fragile devices containing carbide, a feed device for the fragile containers, means in the tank for breaking said fragile containers and a liquid seal in the feed device, through which said containers pass. 6th. The combination in an acetylene gas apparatus of a tank, a breaker therein, and impervious fragile devices containing carbide adapted to be discharged upon the breaker in the tank. 7th. The combination in an acetylene gas apparatus, of a tank, a breaker therein, sealed impervious fragile devices containing carbide and means for feeding said impervious devices to the upper part of the tank and permit them to drop upon the breaker. 8th. The combination in an acetylene gas apparatus, of a tank, a grate or breaker therein, a water seal in the feed device and hermetically sealed glass devices containing carbide adapted to be passed through said water seal by the feed device and dropped upon the grate or breaker in the tank. 9th. The combination in a gas apparatus, of a generator tank, a float chamber communicating directly therewith, a feed device, a friction brake, a float for the feed device and gearing between the motor and brake. 10th. The combination in a gas apparatus, of a generator tank, a feed device, a motor for the feed device, a friction brake, gearing between the motor and brake, and means actuated by gas pressure within the generator for applying said brake. 11th. In an acetylene gas apparatus, the combination with a generator tank, of a feed wheel having pockets with bottoms bevelled toward the generator, said generator having an inlet opening for the passage of charges of carbide from the pockets of the feed wheel. 12th. In an acetylene gas apparatus, the combination with a gas tank, fragile carbide containers and means for feeding said containers as they are fed into the tank and means for shaking said grate. 13th. In an acetylene gas apparatus, the combination with a generator tank, of a grate pivotally supported to one side of its centre in said tank, a support for the heavier side of said grate, a flexible device attached to said grate for shaking it and fragile carbide containers adapted to be discharged upon said grate. 14th. In a gas apparatus, the combination of a basin, a generator tank having its lower end open and seated in said basin, standards extending upwardly from the ends of the basin and a shaft connecting the upper ends of said standards and serving to hold the tank in place in the basin.

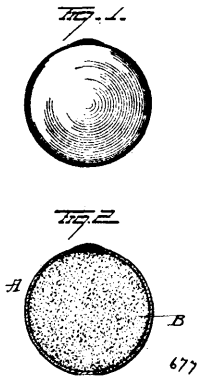
No. 67,705. Acetylene Gas Making Process.
(Procéde pour la fabrication du gaz acétylene.)



Thomas Gilpin Turner, New York City, New York, U.S.A., 12th June, 1900; 6 years. (Filed 21st November, 1899.)

Claim.—1st. The herein described process consisting in hermetically sealing calcium carbide in a water and fire proof breakable container, discharging the package into the generator and automatically liberating the whole charge of carbide by breaking said container within the generator. 2nd. The herein described process consisting in hermetically sealing calcium carbide in a water and fire proof fragile container, discharging the package into a generator and automatically liberating the carbide by fracturing said container within the generator. 3rd. The herein described process consisting in hermetically sealing a charge of calcium carbide in a container and subsequently destroying said container to liberate the whole of said charge at once within an acetylene gas generator. 4th. The herein described process consisting in sealing calcium carbide in a fragile container and subsequently dropping the package on to a breaker in a tank containing water. 5th. The herein described process consisting in sealing calcium carbide in a fragile water and fireproof container and subsequently breaking said container within a tank and over a body of water therein.

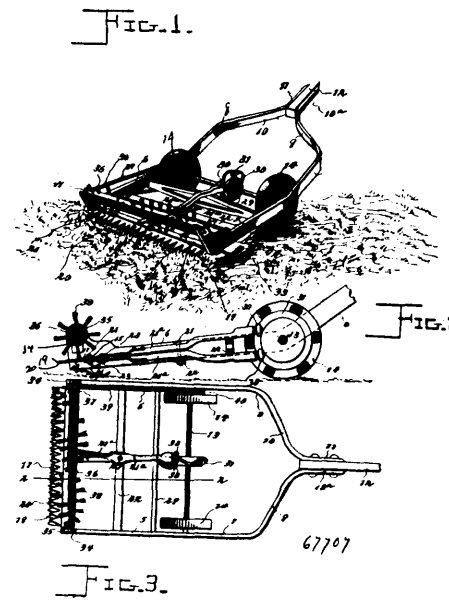
No. 67,706. Carbide Cartridge. *(Cartouche de carbine.)*



Thomas Gilpin Turner, New York City, New York, U.S.A., 12th June, 1900; 6 years. (Filed 21st November, 1899.)

Claim.—1st. As a new article of manufacture, a package for use in making gas, consisting of a water and fireproof hollow body of fragile material and gas producing material sealed within the hollow body. 2nd. As a new article of manufacture, a package for use in the manufacture of acelytene gas consisting of a hollow body of fragile material and calcium carbide within said fragile body.

No. 67,707. Lawn Mower. *(Fauchcuse.)*

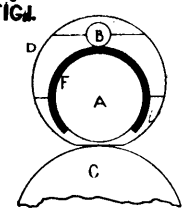


Jerry Stair, Pipestone, Minnesota, U.S.A., 12th June, 1900; 6 years. (Filed 19th May, 1900.)

Claim.—In a mowing machine, the combination with a frame comprising side pieces having their forward ends projected upwardly, said plates extending inwardly and rearwardly and having a handle connected thereto, parallel rods having their ends fixed in the side pieces, blocks slidably mounted upon the rods, cutting knives fixed to the blocks, cross pieces connected with the frame, levers mounted on the cross pieces, and pivotally connected with the knives, said levers having rollers at their rear ends, an axle mounted in the frame and having supporting wheels, a cam wheel upon the axle and lying between the rollers of the levers to oscillate the levers, a sprocket wheel upon the axle, a shaft adjustably mounted upon the upwardly projected forward ends of the frame, and provided with a brush, a sprocket wheel mounted upon said shaft, and a chain connecting the sprocket wheels.

No. 67,708. Printing Apparatus for Paper Rolls.
(*Appareil à imprimer pour roulcaux de papier.*)

FIG.I.



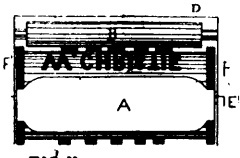


FIG.II.

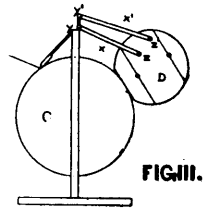


FIG.III.

FIG.IV.

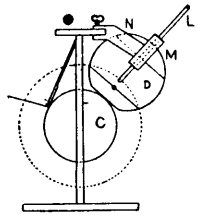
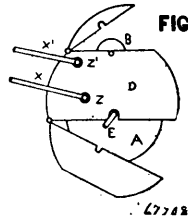


FIG.V.



William Anthony Christie, Guelph, Ontario, Canada, 12th June, 1900; 6 years. (Filed 30th November, 1899.)

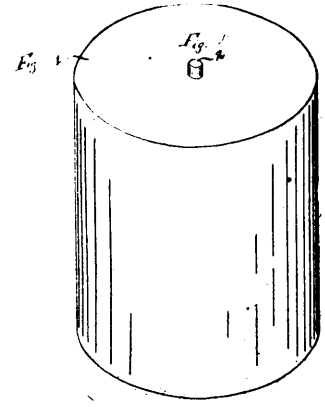
Claim.—1st. The printing apparatus for printing on rolls of wrapping paper intermittently at the will of the separator, consisting of a type cylinder provided with suitable friction bands on its extreme ends, for engaging the paper roll which do not completely encircle the cylinder, but only so far as is necessary to bring all the matter to be printed into contact with the paper roll, in combination with a suitable ink roller and containing case, together with suitable means for attaching the same to the frame of the paper roll, as hereinbefore described and illustrated in the drawings. 2nd. The combination with a printing apparatus for printing on rolls of wrapping paper intermittently at the will of the operator, of bars attached at one end to pivots on the frame of the paper roll, and at the other end to corresponding pivots on the printing apparatus, for the purpose of controlling the direction of, and attaching the same to the frame of the paper roll, as hereinbefore described and illustrated in the drawings. 3rd. The combination with a printing apparatus for printing on rolls of wrapping paper intermittently at the will of the operator, of bracketed slides, clamped to the frame of the paper roll, in which rods, mounted on the printing apparatus slide until the face of the printing apparatus comes in contact with the surface of the paper roll, for the purpose of attaching the printing apparatus to the frame of the paper roll, as hereinbefore described and illustrated in the drawings.

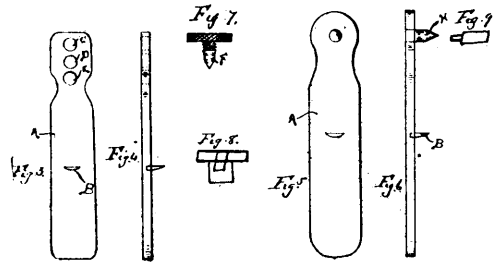
No. 67,709. Can Opener.
(*Machine à ouvrir les boîtes métalliques.*)

Louis Lefebvre, Montreal, Quebec, Canada, 12th June, 1900; 6 years. (Filed 21st February, 1900.)

Claim.—1st. A means for opening metallic vessels, comprising a plate or shank, a cutter pointed and rounded as described, and made fast with the plate or shank at a point intermediate of the length thereof, and a suitable pivot for the shank, substantially as and for the purpose set forth. 2nd. A means for opening metallic vessels, comprising a plate or shank having a cutter made fast therewith at a point intermediate of its length, a series of openings in said plate and at different distances from the cutter thereof, and a pivot pin adapted to fit either of said openings, substantially as described

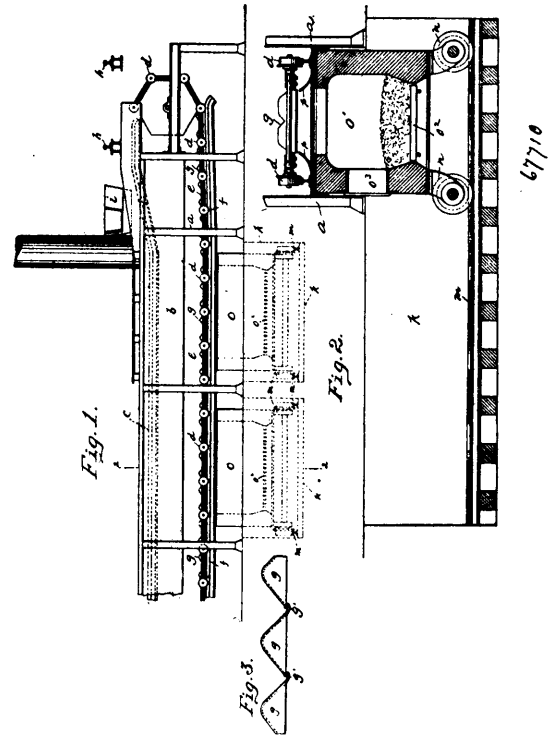
3rd. A means for opening metallic vessels, comprising a plate or shank, a cutter fast with said plate at a point intermediate of its





length, a pin attached to the plate near one end thereof, and a bushing into which the pin may be fitted, substantially as described.

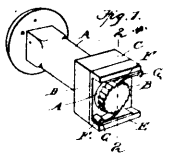
No. 67,710. Method of Coating and Drying Moulds.
(*Méthode d'enduire et secher les moules.*)

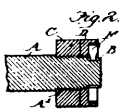


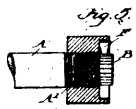
The Firm of Heyl & Patterson, assignee of A. Wickland and William Joshua Patterson, all of Pittsburg, Pennsylvania U.S.A., 13th June, 1900; 6 years. (Filed 12th June, 1899.)

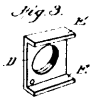
Claim.—1st. In metal casting apparatus, a suitable frame, an endless chain movably supported in said frame, moulds carried by said chain, and fuel burning apparatus beneath said moulds, substantially as set forth. 2nd. In metal casting apparatus, a suitable frame, an endless chain movably supported in said frame, moulds carried by said chain, and a furnace beneath said moulds, substantially as set forth. 3rd. In metal casting apparatus, a suitable frame, an endless chain movably supported in said frame, moulds carried by said chain, said moulds having overlapping lips, and fuel burning apparatus beneath said moulds adapted to deposit a coating of carbon on said lips, substantially as set forth. 4th. In metal casting apparatus, a suitable frame, an endless chain movably supported in said frame, moulds carried by said chain, fuel burning apparatus having a flue extending up to said moulds, said moulds in their mounted position acting substantially to close said flue, substantially as set forth. 5th. In metal casting apparatus, a suitable frame, an endless chain movably supported in said frame, moulds carried by said chain, means for wetting said moulds, and fuel burning apparatus beneath said moulds, substantially as set forth. 6th. In metal casting apparatus, a suitable frame, an endless chain movably supported in said frame, moulds carried by said chain, a tank containing liquid through which said moulds pass, and fuel burning apparatus beneath said moulds, substantially as set forth.

No. 67,711. Nut Lock. *(Arrête-écrou.)*









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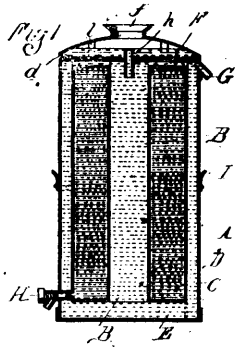
William N. Hall, Lenox, Missouri, U.S.A., 13th June, 1900; 6 years. (Filed 1st June, 1900.)

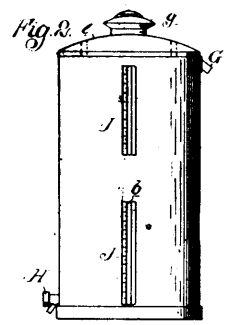
Claim.—1st. A nut lock, consisting of a bolt having longitudinal ratchet serrations at the end and a jamb nut carrying oppositely disposed spring locking pawls adapted to engage said serrations, substantially as described. 2nd. In a nut lock, the combination with the bolt having longitudinal ratchet serrations at the end, of a jamb nut having upwardly turned flanges, and the spring locking pawls arranged against the said flanges and adapted to engage the ratchet serrations, substantially as described. 3rd. In a nut lock, the combination with the bolt and nut, said bolt having the ordinary threads and also longitudinal ratchet serrations at the end, of the jamb nut having upwardly turned flanges at its opposite edges, the spring pawls formed of a single piece bent centrally upon itself and securely fastened to the jamb nut, one member bearing against the flange and the opposite member engaging the ratchet serrations, substantially as described.

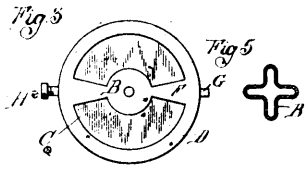
No. 67,712. Cream Separator. *(Séparateur pour la crême.)*

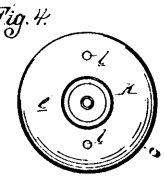
Hugh L. Minds, Detroit, Michigan, U.S.A., 13th June, 1900; 6 years. (Filed 2nd June, 1900.)

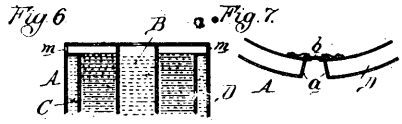
Claim.—1st. A separator, composed of a cam divided by vertical partitions extending from the top to near the bottom of the can into a central, a middle and an outer compartment, the central and outer compartments being closed on top and communicating with each other at the bottom, and the middle compartment being closed at the bottom and open on top, an overflow at the top of the outer compartment, and a discharge pipe at the bottom of the middle compartment. 2nd. A separator, composed of a can divided by vertical partitions extending from the top to near the bottom of the can into a central, a middle and an outer compartment, the central and outer compartments being closed on top and communicating with each other at the bottom, and the middle compartment being











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closed at the bottom and open on top, an overflow at the top of the outer compartment, a discharge pipe at the bottom of the middle compartment, and a closed passage extending across the milk space to connect the inner and outer compartments at their upper ends. 3rd. A separator, composed of a can divided by concentric vertical partitions extending from the top to near the bottom thereof into a central, a middle and an outer compartment, the central and outer compartments being closed on top and communicating with each other at the bottom, closed passages connecting the same at or near the top thereof, the middle compartment being closed at the bottom and open on top, an overflow at or near the top of the outer compartment, a valve controlled discharge pipe at the bottom of the middle compartment, and a hollow cover forming a water receptacle adapted to set on top of the can, having inlet and discharge openings, said discharge opening projecting above and below the bottom of the cam, and adapted to discharge into the top of the inner compartment. 4th. A separator, composed of a can divided by concentric vertical partitions extending from the top to near the bottom thereof into a central, a middle and outer compartments, the central and outer compartments being closed on top and communicating with each other at the bottom, and the middle compartment being closed at the bottom and open on top, an overflow at the top of the outer compartment, a discharge pipe at the bottom of the middle compartment, and a closed cover forming a water receptacle adapted to set on top of the can and provided with a water inlet and discharge, said discharge projecting into the inner compartment and forming a centreing device for the cover, and vent tubes projecting through said cover to carry off the animal heat from the middle compartment. 5th. A separator, composed of a can divided by vertical partitions extending from the top to near the bottom of the can into a central, a middle and an outer compartment, the central and outer compartments being closed on top and communicating with each other at the bottom, the middle compartment being closed at the bottom and open on top, an overflow at the top of the outer compartment, a discharge pipe at the bottom of the middle compartment, a passage connecting the inner and outer compartments at their upper ends, a hole in the top of the inner compartment, and a hollow cover forming a water receptacle and having a discharge spout adapted to project through said hole into said inner compartment. 6th. A cream separator, composed of a can having an outer and an inner wall, the outer wall of which is formed with an aperture extending from the bottom to near the top of the can, and the inner wall of which forms the wall for the milk receptacle, and having the portion opposite the opening in the outer wall formed of transparent material, and a connecting web surrounding said opening in the outer wall and the transparent material in the inner wall.

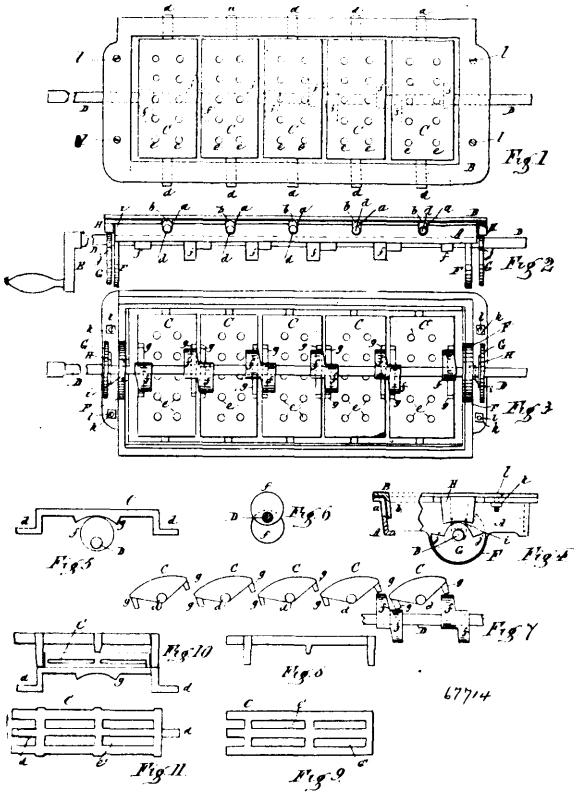
No. 67,713. Varnish and Drying Oil.

(Vernis et huile siccative.)

John Vaughan Sherrin, Westminster, Middlesex, England, 13th June, 1900; 6 years. (Filed 28th December, 1899.)

Claim.—1st. The process for the manufacture of an oleaginous product consisting in heating linseed oil to about 600 degrees Fahrenheit (315 degrees Centigrade), sprinkling gradually thereon Kauri gum dust or the like while agitating, adding gradually a suitable drying agent, mixing gradually the aforesaid mixture with rosin while agitating, said rosin having previously been heated to about 400 degrees Fahrenheit (203 degrees centigrade), then cooling down the mixture to about 90 to 100 degrees Fahrenheit (32 to 38 degrees centigrade), and finally adding petroleum for thinning it down, then leaving the mixture to settle, and then drawing off the clear product, substantially as and in the proportions stated. 2nd. The process for the manufacture of a varnish consisting in heating linseed oil to about 600 degress Fahrenheit (315 degrees centigrade), sprinkling gradually thereon Kauri gum dust or the like while agitating, adding gradually acetate of manganese, mixing gradually the aforesaid mixture with rosin while agitating, said rosin having previously been heated to about 400 degrees Fahrenheit (203 degrees centigrade), then cooling down the mixture to 90 or 100 degrees Fahrenheit (32 to 38 degrees centigrade), and finally thinning it down with refined petroleum, then leaving the mixture to settle, and then drawing off the clear liquid, substantially as and in the proportions stated. 3rd. The process for the manufacture of a substitute for boiled oil consisting in heating linseed oil to about 600 degeees Fahrenheit (315 degrees centigrade), sprinkling gradually thereon Kauri gum dust or the like, adding gradually acetate or borate of manganese, mixing gradually the aforesaid mixture with rosin, said rosin having previously been boiled to about 400 degrees Fahrenheit (203 degrees centigrade), then cooling down to 90 to 100 degrees Fahrenheit (32 to 38 degrees centigrade), and finally thinning it down with refined peroleum, then leaving the mixture to settle, and then drawing off the clear product, substantially as and in the proportions stated.

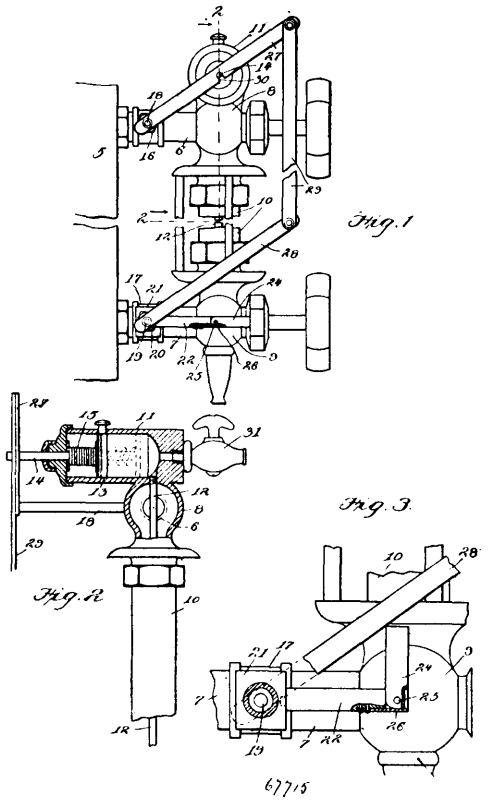
No. 67,714. Stove Grate. *(Grille de poêle.)*



Thomas Partridge, Hamilton, Ontario, Canada, 13th June, 1900; 6 years. (Filed 31st May, 1900.)

Claim.—1st. In a grate, a series of grate bars journalled in a frame double or single and operated by a series of cams or eccentrics, substantially as specified. 2nd. In a grate, an outer and an inner frame provided with grate bearing openings, and a series of grate bars journalled in the said openings, a cam rod with a series of cams attached thereto, made to operate on the under side of the grate bars to elevate and depress their sides to shake them by a crank haudle, substantially as and for the purposes specified. 3rd. In a grate, in combination with a single or double frame, a series of oscillating grate bars journalled therein, and a series of cams or eccentrics on a cam rod to operate the grate bars, of stop mechanism to allow the grate bars to attain a vertical position, without upsetting, for allowing the contents of the fire chamber to be dumped between the grate bars to the ash pan when required to clean it out, substantially and for the purpose specified. 4th. In a grate, a series of short grate bars constructed with gudgeons at their ends and placed at right angles to the front of a stove, in a single or double frame and oscillated by a series of cams on a cam rod by means of a crank handle, and stop mechanism to prevent the upsetting of the grate bars when the fire chamber is to be dumped or cleaned, substantially as and for the purpose specified.

No. 67,715. Water Gauge. *(Robinet-jauge.)*

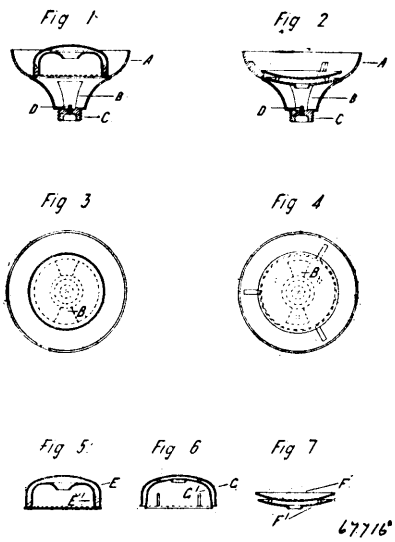


Parish John Macdonald, Zacatecas, Mexico, 13th June, 1900; 6 years. (Filed 1st June, 1900.)

Claim.—1st. The combination with the water gauge glass, of a steam boiler provided with steam and water cocks, of a gravity lever secured to the stem of one of the cocks in position, when raised, to hold the steam cock open, and when lowered to close it, a stop to hold the lever raised in the gauge glass, and means whereby a continuously operated force is supplied to withdraw the stop when the pressure is lessened or dissipated, substantially as described. 2nd. The combination with the water gauge glass, of a steam boiler provided with steam and water cocks, of a gravity lever secured to the stem of one of the cocks in position, when raised, to hold the steam cock open, and when lowered to close it, a stop to hold the lever raised and said stop being held in position by the steam pressure in the gauge glass, in a spring acting upon the stop in the opposite direction to withdraw it and permit it to fall and close the cock when the steam pressure is lessened or cut-off, substantially as described. 3rd. The combination with a water gauge glass, of a steam boiler provided with the usual steam and water cocks, of gravity levers secured to the stems of the cocks, a link connecting the levers, a stop held in the path of one of the levers by the pressure of steam in the gauge glass, and means whereby a continuous force is exerted upon the stop to withdraw it from under the lever when the pressure is cut off, substantially as described. 4th. The combination with a water gauge glass, of a steam boiler provided with the usual steam and water cocks, of gravity levers secured to the steams of the cocks, a link connecting the levers, a stop held in the path of one of the levers by the pressure of steam in the gauge glass and a spring whereby a continuous force is exerted upon the stop to withdraw it from under the lever when the pressure is cut off, substantially as described. 5th. The combination with the water gauge glass of a steam boiler, and the usual steam and water cocks, of a gravity lever on the stem of one of the cocks arranged to hold the cock open when raised and closed when lowered, a cylinder, a piston head therein

forced in one direction by the pressure of the steam in the gauge glass into the path of the gravity lever to hold it raised, and a spring arranged to force the piston in the opposite direction, out of the path of the lever when the steam pressure is removed, to permit the levers to fall and close the cocks, substantially as described. 6th. The combination with a water gauge glass of a steam boiler provided with the usual steam and water cocks, a link connecting the levers, a stop held in the path of the levers by the pressure of steam in the gauge glass, a spring exerting a continuous force against the stop to remove it from the path of the levers when the pressure is removed, and a stop manually operable to hol the levers up while steaming up, substantially as described.

No. 67,716. Lamp Burner. *(Bec de lampes.)*



William Thomas Pearce, South Melbourne, Victoria, Australia 13th June, 1900; 6 years. (Filed 31st May, 1900.)

Claim.—In a burner for connection to, and use wfth a Primus heating lamp, a cup or shell such as A, with a removable dividing disc and two or more air inlets in its annular wall near its base such as B, so that when the cap is loosely seated therein a gas generating and air and gas mixing chamber is formed immediately below and communicating with the combustion cup carrying the cap so as to feed the mixed gas thereto as before described and illustrated in figures 1, 2, 3 and 4, of the accompanying drawings.

No. 67,717. Electric Battery Solution.
(Solution pour batteries électriques.)

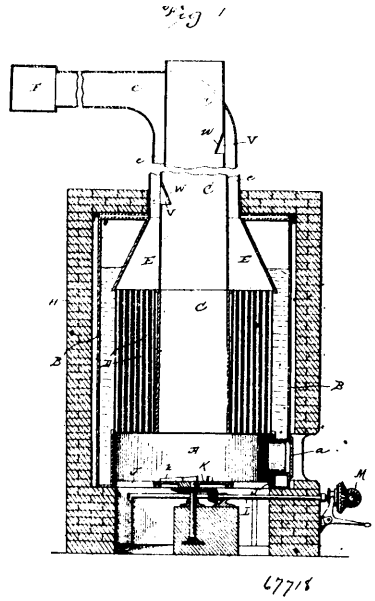
Henry Blumenberg, Wakefield, New York City, New York, U.S.A., 13th June, 1900; 6 years. (Filed 30th May, 1899.)

Claim.—1st. A compound tor a battery solution consisting of a sulphate of aluminum, bi-sulphate of the metals of the alkalies or alkaline earths, and a chlorate of the metals of the alkaline earths, substantially as set forth. 2nd. A battery solution, consisting of sulphate of aluminum eight ounces, chlorate of soda eight ounces, bi-sulphate of soda ten ounces, and water one gallon, substantially as set forth. 3rd. A battery compound consisting of sulphate of aluminum, as contained in the sulphate of ammonia, potash or soda alums, a bi-sulphate of the metals of the alkalies or alkaline earths and a chlorate of the metals of the alkalies or alkaline earths, substantially as set forth.

No. 67,718. Apparatus for Burning Garbage or other Refuse Matter. *(Appareil pour bruler les tripailles.)*

Charles Thomas Whedon, Whitefield, New Hampshire, U.S.A., 13th June, 1900; 6 years. (Filed 2nd June, 1900.)

Claim.—1st. In a refuse burning apparatus, the furnace having a central rotatable grate and a stationary annular grate at the base of the fire pot, a central vertical feeding tube for the refuse material, and vertical flues surrounding the lower portion of said tube above the fire pot, and an annular smoke chamber above said flues, in combination with the water and steam space surrounding the fire box, flues and smoke chamber, and with a funnel surrounding the feeding tube above the smoke chamber, so as to heat and dry the material in said tube and promote its combustion, substantially as set forth. 2nd. In a refuse burning apparatus, a boiler or furnace having a central grate and fire pot, a vertical feeding tube leading to said fire pot and formed with a series of vent openings, each provided with an internal deflecting shield, in combination with vertical flues and a water space surrounding the lower part of said feeding tube, and



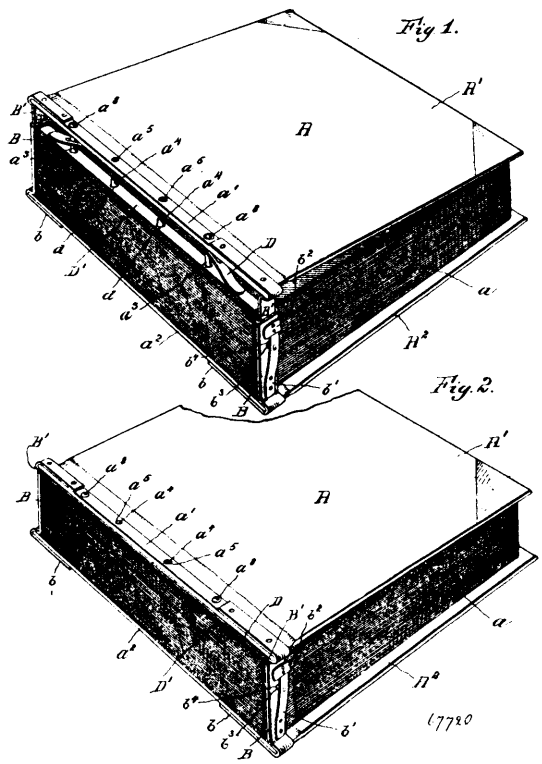
with an annular smoke passage into which said vents open through the upper part of such tube, substantially as set forth.

No. 67,719. Steel for Making Tools.
(Acier pour fabriquer les outils.)

Henri Chavot, Paris, France, 13th June, 1900; 6 years. (Filed 31st May, 1899.)

Claim.—The improved steel produced by means of iron, ferro manganese, fero-silicium, aluminium and ferro-chromium in the proportions given above, and in the manner explained in the preceding description.

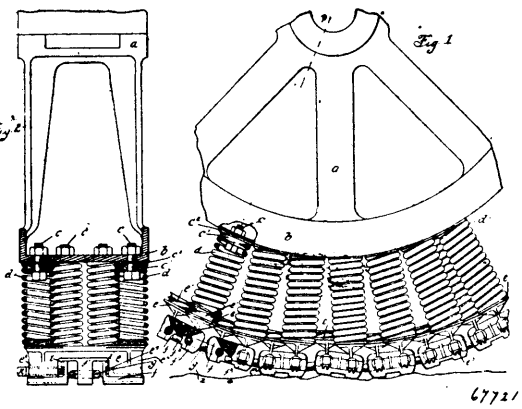
No. 67,720. Ledger Holder. *(Attache pour grand livre.)*



Francis W. Briggs, Lewiston, Maine, U.S.A., 13th June, 1900; 6 years. (Filed 18th January, 1900.)

Claim. 1st. A binder comprising two strips, means for adjustably locking the strips in variable relation, two series of pins, each series of which is fastened to one strip in staggered or alternate relation to the pins of the other series on the other strip, a perforated bar slidably fitted to the pins of both series, and a spring attached to one strip and seated on the bar, substantially as described. 2nd. A binder comprising a perforated strip provided in the intervals between its perforations with the pins, socket pieces secured to the end portions of said strip, another strip having pins to enter the perforations of the first named strip, lock bars secured to the end portions of the second named strip and slidably fitted to the socket pieces, and means for adjustably fastening the lock bars to the socket pieces, substantially as described 3rd. A binder comprising the strips, the hollow pins fitted in said strips and having the internally threaded ends, caps screwed into the pins and bearing against the strips, the socket pieces on one strip, the lock bars on the other strip, and alternative latches on the socket pieces and engaging with the lock bars, substantially as described.

No. 67,721. Vehicle Wheel. (*Roue de vehicules.*)

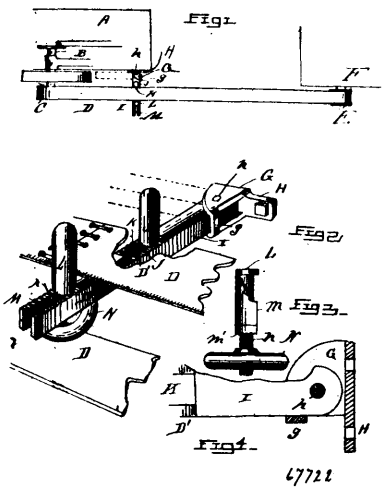


George K. Davol, Chicago, Illinois, U.S.A., 13th June, 1900; 6 years. (Filed 5th April, 1900.)

Claim.—1st. A wheel having an endless flexible outer tread comprising a plurality of separate shoes or bearing blocks adapted to bear directly upon the surface travelled over, said shoes being joined to each other by connections constructed to permit free flexure in all directions, an inner structure and a plurality of springs separate from said shoes interposed between said shoes and the said inner structure. 2nd. A wheel having an outer tread comprising a plurality of separable shoes or bearing blocks adapted to bear independently and directly upon the surface travelled over and flexibly connected or linked together by connections constructed to permit free flexure in all directions, to form an endless chain or belt of constant length, an inner structure and a plurality of springs interposed between the said shoes and the said inner structure. 3rd. A wheel having an outer tread, comprising a plurality of separate shoes or bearing blocks adapted to bear independently and directly upon the surface travelled over and flexibly connected or linked together by connections arranged in circumferential alignment with the shoes or bearing blocks and constructed to permit free flexure in all directions, said connected shoes or bearing blocks forming an endless chain or belt of constant length, an inner structure and a plurality of springs interposed between the said shoes and said inner structure. 4th. A spring wheel having an outer flexible tread comprising a plurality of separate shoes or bearing blocks adapted to bear directly upon the surface travelled over, a single line or series of links or equivalent connecting means which flexibly join the said shoes or bearing blocks one to another in such manner as to afford free flexure in all directions and to form together with the said shoes an endless chain or belt of constant length, an inner structure and a plurality of springs separate from said shoes and interposed between said shoes and said inner structure. 5th. A spring wheel comprisiag a plurality of springs arranged around an inner structure and exerting an ontward pressure or tension against an endless chain of constant length which forms the tread of the wheel, said endless chain surrounding the outer extremities of said springs and embracing a series of separate bearing blocks or shoes adapted to bear directly upon the surface travelled over and flexibly connected together by a single series of links or other connections arranged in circumferential alignment with the shoes and which permit free flexure in all directions. 6th. A wheel having an outer tread comprising a plurality of shoes or bearing blocks adapted to bear independently and directly upon the surface travelled over and flexibly connected or linked together to form an endless chain or belt of constant length by a single line of links or flexible connections uniting the said blocks or shoes, which connections freely permit flexure in all directions, an inner structure, a plurality of springs interposed between the said shoes and the said inner structure, feet, one or more for each shoe attached to said springs and bearings upon said shoes, substantially as described. 7th. A spring wheel having an outer flexible tread comprising a number of separable shoes or bearing blocks adapted to bear directly upon the surface travelled over and joined one to another to form an endless chain or belt of constant length by a single line or series of connecting links or other flexible connections allowing flexure in all directions, an inner structure, a plurality of springs separate from said tread and interposed between said shoes and said inner structure, and feet one or more for each shoe, attached to said springs and bearing upon said shoes, substantially as described. 8th. A spring wheel comprising a plurality of springs arranged around an inner structure and exerting an outward pressure or tension against an endless chain of constant length which forms the tread of the wheel, said endless chain surrounding the outer extremities of said springs and being composed of a series of separate bearing blocks or shoes flexibly connected together by a single line or series of links or other flexible connections which freely permit flexure in all directions, and feet, one or more for each shoe, attached to said springs and bearing upon said shoes, substantially as described. 9th. In a wheel, the combination with an outer flexible tread of an inner structure, a plurality of springs between said outer tread and said inner structure, spring feet attached to the outer extremities of said springs and having a rocking engagement with said tread, substantially as described. 10th. In a wheel the combination with an outer tread comprising a plurality of shoes flexibly connected together, of an inner structure, a plurality of springs between said tread and said inner structure, spring feet attached to the outer extremities of said springs and bearing upon said shoes, the contact between the said spring feet and the said shoes being a rocking or oscillating bearing, and teeth formed in said shoes and said spring feet and adapted to mesh with each other and to allow a rocking movement, substantially as described. 11th. In a wheel, the combination with an outer flexible tread of an inner structure, and a plurality of helical springs interposed between said tread and said inner structure, a plurality of spirally grooved lugs or blocks secured to the said inner structure and adapted to engage said springs, and spring feet adapted to engage the outer extremities of said springs and to bear upon said outer flexible tread, substantially as described. 12th. In a wheel, the combination with an outer flexible tread of an inner structure, a plurality of helical springs interposed between said tread and said inner structure, spring feet adapted to bear on said outer flexible tread, and spirally grooved lugs provided on said spring feet and adapted to engage with the outer extremities of said springs, substantially as described. 13th. In a wheel, the combination with an outer flexible tread of an inner structure, helical springs interposed between said tread and said inner structure, spring feet bearing upon said outer tread, and spirally grooved lugs upon said inner structure and upon said spring feet and adapted to hold securely the ends of the said springs, substantially as described. 14th. In a wheel having an outer flexible tread, the combination with a plurality of separate shoes provided with hooks, of links adapted to engage said hooks and to unite said shoes into a continuous flexible tread for said wheel, substantially as described. 15th. In a wheel having an outer flexible tread, the combination with a plurality of separate shoes or bearing blocks provided with suitable hooks, of a plurality of separate links adapted to engage with the said hooks and to connect the said shoes one to another to form a continuous flexible tread, and means for retaining said links in engagement without preventing the flexure of said tread, substantially as described. 16th. In a wheel, the combination with a rigid inner structure, of a universally flexible outer structure and an outer rim, comprising separate shoes linked together to form a continuous tread, substantially as described. 17th. In a wheel, the combination with a rigid inner structure, of a flexible tread and helical springs in transverse rows interposed between said inner structure and said flexible tread, the springs in adjacent rows being in different planes parallel to the plane of the wheel, substantially as described. 18th. In a wheel, the combination with a rigid inner structure of an outer flexible tread, and springs interposed between said structure and said tread, said tread being composed of separate shoes having sides curved so that they preserve their normal separation from each other in all positions which they can assume, substantially as described. 19th. In a wheel, the combination with the rigid inner structure a, of a rim b, bolt c provided with spirally grooved lug or block e, the feet e provided with spirally grooved lugs or blocks e, the spring d adapted to engage the lugs or blocks e^1 and e^1, the shoes f and the link g, substantially as described. 20th. In a wheel, the combination with the inner rigid structure a, of the rim b, bolt c provided with the spirally grooved lug or block e^1, the feet e provided with spirally grooved lugs or blocks e, the spring d adapted to engage the lugs or blocks e^1 and e^1, the shoe f and the link g, the stop f^2, substantially as described. 21st. In a wheel, the combination with the inner rigid structure a, of a rim b, bolt c provided with threaded lug or block e^1, the feet e provided with threaded lugs or blocks e^1, the spring d adapted to engage the threaded lugs or blocks e^1 and e^1, the shoe f and the link g, the stop f^2, and the teeth e^3 upon the foot engaged with the teeth f^3 on the shoe, whereby a bearing along one line is afforded between the shoe and foot, substantially as described. 22nd. In a wheel, the combination of an outer flexible tread, comprising a plurality of flexibly connected shoes, of an inner structure, springs interposed between said tread and said inner structure, spring feet attached to the outer extremities of said springs and bearing upon said shoes, and means

for preventing said shoes becoming detached from said spring feet, comprising suitable lips formed in said shoes and suitable projections on said spring feet, which engage with or hook under said lips. 23rd. A wheel having an outer tread, comprising a plurality of separate shoes or bearing blocks adapted to bear independently and directly upon the surface travelled over, a single series of connections which flexibly join the said shoes or bearing blocks one to another, the said connections being adapted to allow free flexure in all directions and also to permit a torsional flexibility which permits any two adjacent shoes so connected to occupy positions in different planes, the said connections forming together with the shoes an endless chain or bolt of constant length, an inner structure, and a plurality of springs interposed between said shoes and said inner structure.

No. 67,722. Belt Guide. *(Guide de courroie.)*



John C. Nofsinger, Washington, Illinois, U.S.A., 13th June, 1900; 6 years. (Filed 5th April, 1900.)

Claim.—1st. In a belt guide, the combination of a bracket, for attachment to an engine, or other apparatus, for the purposes set forth, an arm pivoted, at one end, to said bracket, there being slots in the arm, adjustable guide pins in the slots, and means for securing such pins in place, substantially as set forth. 2nd. In a belt guide, the combination of a bracket G, for attachment to an engine or other apparatus, for the purposes set forth, an arm *l*, pivoted at one end to such bracket, a stop *g*, on the bracket for limiting the movement of the said arm *l*, in one direction, there being slits K and M, in the latter, adjustable pins J and L, in such slots, means on the pins for securing them in the desired position, there being serrations on the under side of the slots for engaging the serrations on the said pins, all substantially as specified. 3rd. In a belt guide, an arm pivoted at one end to the engine, for the purposes set forth, and adapted to swing on its pivot to open and close as set forth, a stop for limiting the opening movement whereby the said arm is located at right angles to direction of movement to the belt, and a pin in such pivotal arm at each side of the belt, substantially as set forth.

No. 67,723. Explosive. *(Explosif.)*

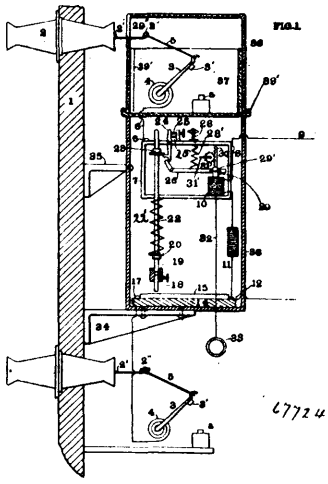
Filipp Hess, and Johan, Schwab, both of Vienna, Austria, 13th June, 1900; 6 years. (Filed 5th June, 1899.)

Claim.—The herein described improvement in the manufacture of explosives, especially so called safety explosives containing ammonium nitrate, which consists in intimately mixing 1 to 25 parts of artificially or naturally rotted or decayed and subsequently carbonized cellulose or carbonized hydro cellulose, such as wood, wood meal or wood flour, leaves, broken flax, or other vegetable fibrous material or vegetable materials which occur in such a rotted and carbonised state in nature, such as peat in all its varieties, wholly or partially decayed leaves, with 99 to 75 parts of ammonium nitrate either alone or with the addition of 0·5 to 30 parts of other nitrates such as nitre or saltpetre, or other carriers of oxygen as specified.

No. 67,724. Electric Protector for Buildings.
Protecteur de fil électrique pour édifices.

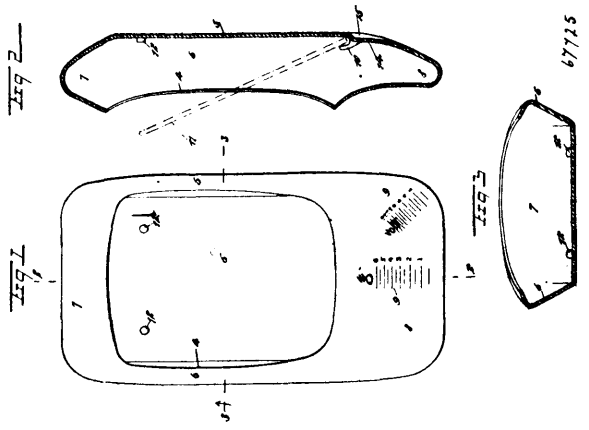
Joseph Arthur Poché, New Orleans, Louisiana, U.S.A., 13th June, 1900; 6 years. (Filed 18th December, 1899.)

Claim.—1st. A protector for automatically cutting out the interior wiring in a building from the outside wiring, consisting of the combination with fuses, of means for producing a sound by concussion, alarms located in the paths of said means and adapted to produce a signal by the action of said means, short circuiting terminals included in circuit between said fuses and normally separated, and an electro-magnetic device of high resistance included in circuit across the main line of the interior wiring for operating said terminals, and a manual device for adjusting said terminals. 2nd.



A protector for automatically cutting out the interior wiring in a building from the outside wiring, consisting of the combination with fuses, in a circuit with the outside and inside wiring, of levers held against the action of springs by said fuses, concussion sounders in the path of said levers, a short circuiting device in circuit between said fuses, and an electro-magnet for operating said device and located in circuit across the main line of the interior winding. 3rd. A protector for automatically cutting out the interior wiring in a building from the outside wiring, consisting of the combination with fuses, in circuit with the outside and inside wiring, of levers held against the action of springs by said fuses, electric terminals normally separated and one of them movable and in circuit between said fuses, a spring tending to press the terminals together, means for holding said terminals apart against the action of said spring, a tripping lever for operating said means, a solenoid in the electric circuit, and having a core provided with a pin which is located in a slot in said lever, and an indicator for showing the position of said core. 4th. A protector for automatically cutting out the interior wiring in a building from the outside wiring, consisting of the combination with fuses, in circuit with the outside and the inside wiring, of terminals normally separated and adapted to come together, a tripping collar on one of the terminals, a lever upholding said terminal, a tripping device for releasing said lever from said collar and an electro-magnet in circuit across the main line of the interior winding controlling said tripping device, said lever being adjustable relatively to said collar and to said device.

No. 67,725. Photographic Developing Trays.
(Plateau à développer les photographies.)

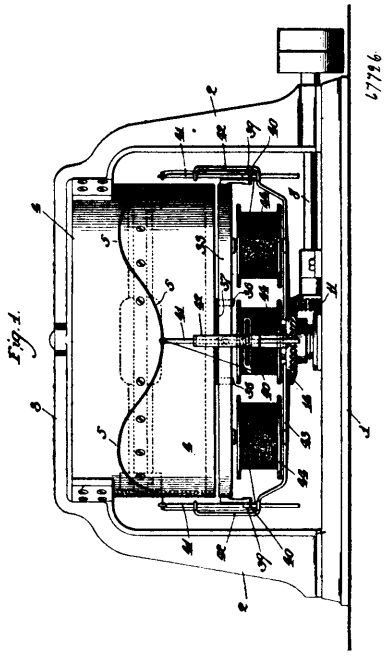


Auley Biddle Sheppard and James Pressly Leech, both of South Burgettstown, U.S.A., 14th June, 1900; 6 years. (Filed 27th March, 1899.)

Claim.—1st. A developing tray having overhanging sides forming a partial top for the tray, the opening in the top of the tray being at one end of less width than that of the plate to be held, said tray being provided with lugs on its bottom at the end having the top opening contracted, whereby the plate can be tilted and held in an

inclined position, as set forth. 2nd. A developing tray, having portions of its sides overhanging the bottom of the tray and forming an opening in the top of the tray through which a plate may be inserted, the bottom of the tray having hook-shaped spurs thereon adapted to be engaged by one edge of the plate so as to hold the plate in an inclined position in the tray when the tray is moved to a vertical position. 3rd. A developing tray provided near one end in its bottom with a spur having an overhanging portion and against which spur one edge of a photographic plate is adapted to rest, and at the opposite end with a projection upon which the other end of the plate is adapted to rest, substantially as described. 4th. A developing tray having a raised portion in the bottom thereof, causing the solution to flow off of said raised portion, and a downwardly extending rib formed on the under side of the bottom of the tray at the raised portion thereof, such rib merging into the main portion of the bottom. 5th. A developing tray having overhanging sides to form a partial cover for the same, the ends of the bottom being gradually curved upward in the form of a rocket, whereby the tray may be rocked back and forth to properly dispose the solution and without spilling the same, as set forth. 6th. A developing tray having overhanging sides forming a cup at one end of the tray and provided in its bottom at the end having the cup with a spur having an overhanging portion, substantially as and for the purpose set forth.

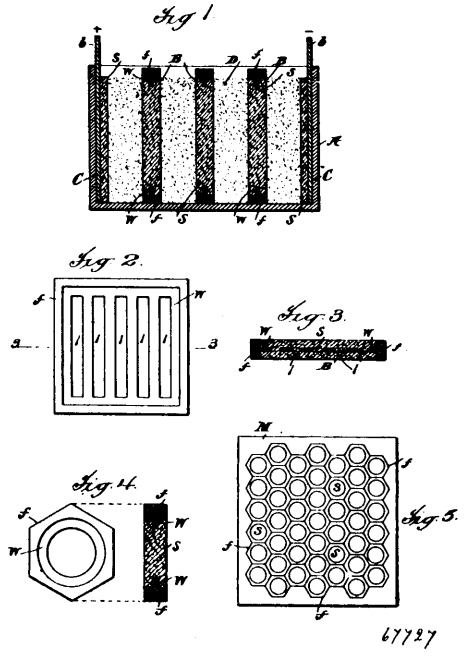
No. 67,726. Braiding Machine. (*Machine à tresser.*)



Thomas Kerr Ober, Elleson Munroe Cooper and Harry Davolt Beaston, all of Philadelphia, Pennsylvania, U.S.A., 14th June, 1900; 6 years. (Filed 27th May, 1899.)

Claim.—1st. In a braiding machine, a stationary gear track, a gear-wheel revolved by said gear track, a reciprocating pin, a carrier arranged to be engaged by said pin, and eccentric mechanism operated by said gear wheel for reciprocating said pin, in combination with a revoluble spider which carries said mechanism, through which said pin reciprocates, substantially as specified. 2nd. In a braiding machine, a fixed circular gear track, a journalled gear wheel revoluble upon said track, a reciprocating pin revoluble with said gear wheel, mechanism operated by said gear wheel for reciprocating said pin, and a movable carrier alternately engaged and disengaged by said pin, substantially as specified. 3rd. In a braiding machine, a fixed circular gear track, a pair of journalled gear wheels revoluble upon said track, a pair of reciprocating pins revoluble with said gear wheels, eccentric mechanisms connecting said gear wheels with said pins, whereby said pins are reciprocated oppositely, and a movable carrier alternately engaged and disengaged by each of said pins, substantially as specified. 4th. In a brading machine, a journalled shaft, a spider fixed thereon, a journalled gear wheel supported by said spider, a fixed circular gear track upon which said gear wheel revolves, a movable carrier, a pair of oppositely reciprocating pins for operating said carrier, mechanism operated by said gear wheel for reciprocating one of said pins, and means for effecting the opposite reciprocation of the other of said pins, substantially as specified. 5th. In a braiding machine, a stationary gear track, a gear wheel revolved by said gear track, a reciprocating thread guide, and mechanism operated by said gear wheel for reciprocating said thread guide, in combination with a revoluble spider which carries the said mechanism, and a bobbin carried by said spider, substantially as specified. 6th. In a braiding machine, a fixed circular gear track, a journalled gear wheel revoluble upon said gear track, a reciprocating thread guide, ways for controlling the movements of said thread guide, and mechanism operated by said gear wheel for reciprocating said thread guide, substantially as specified. 7th. In a braiding machine, a sectional raceway, a bobbin carrier movable thereon, a revoluble spider, a pair of alternately reciprocating pins passing through said spider and engaging with said carrier, a yoke in each of said pins, a crank and pin connection for each of said yokes, a shaft for revolving each of said cranks, and means for revolving said shafts, substantially as specified. 8th. In a braiding machine, a fixed circular gear track, a revoluble frame, a series of gear wheels journalled in said frame and revoluble upon said gear track, a series of pins arranged in pairs passing through said frame, mechanism connecting said gear wheels with said pins for reciprocating said pins, a series of movable bobbin carriers, each operated by a pair of said pins, a sectional raceway for said bobbin carriers, in combination with a second fixed circular gear track, a second revoluble frame, a second series of gear wheels journalled in said second frame and revoluble upon said second gear track, a series of reciprocating thread guides, mechanism operated by each of said second series of gear wheels for reciprocating each of said thread guides, and mechanism for revolving said frames in opposite directions, substantially as specified.

No. 67,727. Storage Battery and Electrode.
(*Accumulateur d'électricité et électrode.*)



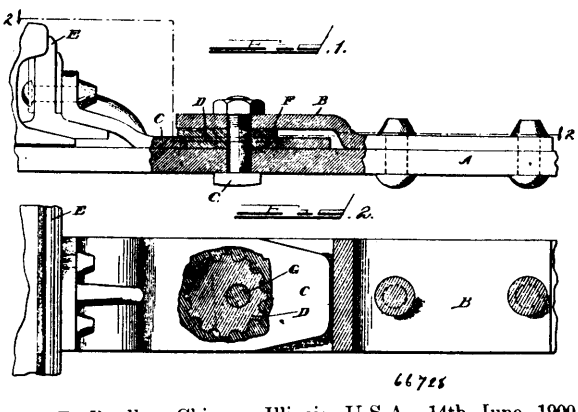
The Knickerbocker Trust Company, assignee of Leonard Paget, all of Manhattan, New York, U.S.A., 14th June, 1900; 6 years. (Filed 13th June, 1899.)

Claim.—1st. A storage battery electrode in which finely divided active material forms the sole conducting connection between the opposite sides of the electrode, the opposite sides of said active material consisting of oxidized and oxidizable material, substantially as described. 2nd. A storage battery electrode, having an integral body of finely divided active material constituting the sole conducting connection between the opposite sides of the electrode, the opposite sides of said active material consisting of oxidized and oxidizable material, substantially as described. 3rd. A storage battery electrode, having a support of non-conducting material and finely divided active material on said support constituting the sole conducting connection between the opposite sides of the electrode, the opposite sides of said active material consisting of oxidized and oxidizable material, substantially as described. 4th. A storage electrode, having a support of non-conducting material and an integral body of finely divided active material on said support constituting the sole conducting connection between opposite sides of the electrode, the opposite sides of said active material consisting of oxidized and oxidizable material, substantially as described. 5th. A storage battery electrode having a frame of elastic non-conducting material and finely divided active material supported in said frame and constituting the sole conducting connection between opposite sides of the electrode, the opposite sides of said active material consisting of oxidized and oxidizable material, substantially as described. 6th. A storage battery electrode, having a frame of elastic non-con-

ducting material and an integral body of finely divided active material supported in said frame and constituting the sole conducting connection between opposite sides of the electrode, the opposite sides of said active material consisting of oxidized and oxidizable material, substantially as described. 7th. A storage battery electrode, having an integral mass of active material consisting of lead peroxide and electrolytically reduced lead on opposite sides, said lead peroxide and electrolytically reduced lead constituting the sole conducting connection between the opposite sides of the electrode, substantially as described. 8th. A storage battery plate, having a support of non-conducting material and a homogeneous integral body of finely divided material adapted to become active and constituting the sole conductor of the plate, substantially as described. 9th. A storage battery plate, having a frame of non-conducting material and finely divided material adapted to become active, supported in said frame and constituting the sole conductor of the plate, substantially as described. 10th. A storage battery plate having a frame of elastic non-conducting material and finely divided material adapted to become active, supported in said frame and constituting the sole conductor of the plate, substantially as described. 11th. A storage battery plate, having a frame, of non-conducting material and a homogeneous integral body of finely divided material adapted to become active, supported in said frame and constituting the sole conductor of the plate, substantially as described. 12th. A storage battery plate, having a frame of elastic non conducting material and homogeneous integral body of finely divided material adapted to become active, supported in said frame and constituting the sole conductor of the plate, substantially as described. 13th. A storage battery plate, having a support of non-conducting material and a homogeneous integral body of lead oxide on said support constituting the sole conductor of the plate, substantially as described. 14th. The method of preparing a bi-polar storage battery electrode which consists in passing a forming or charging current from one face to the other through a body of finely divided material adapted to become active and a suitable electrolyte on the opposite faces of said body with said finely divided material constituting the sole conducting connection between the opposite sides of the electrode, substantially as described. 15th. The method of preparing a bi-polar storage battery electrode, which consists in passing a forming or charging current from one face to the other through a homogeneous integral body of finely divided material adapted to become active, and a suitable electrolyte on the opposite faces of said body with said finely divided material constituting the sole conducting connection between the opposite sides of the electrode, substantially as described. 16th. The method of preparing a bi-polar storage battery electrode which consists in filling a supporting frame of non-conducting material with finely divided material adapted to become active and passing a forming or charging current from one face to the other through said finely divided material and a suitable electrolyte on the opposite faces of said material with said finely divided material constituting the sole conducting connection between the opposite sides of the electrode, substantially as described. 17th. The method of preparing a bi-polar storage battery electrode which consists in filling a supporting frame of elastic non-conducting material with finely divided material adapted to become active and passing a forming or charging current from one face to the other through said finely divided material and a suitable electrolyte on the opposite faces of said material with said finely divided material constituting the sole conducting connection between the opposite sides of the electrode, substantially as described. 18th. The method of preparing a bi-polar storage battery electrode which consists in filling a supporting frame of non-conducting material with a homogeneous integral mass of finely divided material adapted to become active and passing a forming or charging current from one face to the other through said mass of finely divided material and a suitable electrolyte on the opposite faces of said material with said finely divided material constituting the sole conducting connection between the opposite sides of the electrode, substantially as described. 19th. The method of preparing a bipolar storage battery electrode which consists in peroxidizing one side of an integral body of lead oxide and reducing the other side of said body by passing an electrical current from one face to the other through said body and a suitable electrolyte on the opposite faces of said body with the lead oxide constituting the sole conducting connection between the opposite sides of the electrode, substantially as described. 20th. A storage battery having end electrodesof different polarity and one or more bi-polar intermediate electrodes, each of said bi-polar intermediate electrodes having finely divided active material or finely divided material adapted to become active constituting the sole conducting connection between the opposite sides of the electrode, substantially as described. 21st. A storage battery having end electrodesof different polarity and one or more bi-polar intermediate electrodes, each of said bi-polar intermediate electrodes having an integral mass of finely divided active material or finely divided material adapted to become active constituting the sole conducting connection between the opposite sides of the electrode, substantially as described. 22nd. A storage battery having end electrodes of different polarity and one or more bi-polar intermediate electrodes, each of said bi-polar intermediate electrodes having a support of non-conducting material and finely divided active material or finely divided material adapted to become active supported thereon and constituting the sole conducting connection between the opposite sides of the electrods, substantially as described. 23rd. A storage battery having end electrodes of different polarity, and one or more bi-polar intermediate electrodes, each of said bi-polar intermediate electrodes having a supporting frame of non-conducting material and an integral mass of finely divided active material or finely divided material adapted to become active supported in said frame and constituting the sole conducting connection between the opposite sides of the electrode, substantially as described. 24th. A storage battery having end electrodes of different polarity, and one or more bi-polar intermediate electrodes of different polarity, and one or more bi-polar intermediate electrodes, each of said bi-polar intermediate electrodes having a supporting frame of elastic non-conducting material, and finely divided active material or finely divided material adapted to become active supported in said frame, and constituting the sole conducting connection between the opposite sides of the electrode, substantially as described. 25th. A storage battery having end electrodes of different polarity, and one or more bi-polar intermediate electrodes, each of said bi-polar electrodes having finely divided active material or finely divided material adapted to become active constituting the sole conducting connection between opposite sides of the electrode, and an electrolyte contained or held in a mass of absorbent material in the spaces between the electrodes, substantially as described. 26th. A storage battery having end electrodes of different polarity, and one or more bi-polar intermediate electrodes, each of said bi-polar intermediate electrodes having an integral mass of, before forming or charging, lead oxide constituting the sole conducting connection between the opposite sides of the electrodes, substantially as described. 27th. A storage battery having end electrodes of different polarity, and one or more bi-polar intermediate electrodes, each of said bi-polar intermediate electrodes consisting of a frame of non-conducting material filled with an integral mass of, before forming or charging, lead oxide, said lead oxide constituting the sole conducting connection between the opposite sides of the electrodes, substantially as described. 28th. A storage battery consisting of a containing vessel, end electrodes of different polarity, one or more bi-polar intermediate electrodes, each of said bi-polar intermediate electrodes consisting of an integral mass of, before forming or charging, lead oxide supported in a frame of non-conducting material, said lead oxide constituting the sole conducting connection between the opposite sides of the electrode, and an electrolyte contained or held in a mass of absorbent material in the spaces between the electrodes, substantially as described. 29th. As an element of a plate or electrode in a storage battery, a hexagonal frame of elastic non-conducting material containing active material or material adapted to become active, substantially as described. 30th. A storage battery plate or electrode support constructed of hexagonal frames of elastic non-conducting material, said frames being surrounded and held together by non-conducting material, substantially as described. 31st. A storage battery plate or electrode constructed of hexagonal frames of elastic non-conducting material, each containing active material or material adapted to become active, said frames being surrounded and held together by moulded non-conducting material, such as an asphalt compound, substantially as described. 32nd. A storage battery having end electrodes with conducting lugs and intermediate electrodes constructed of hexagonal frames of elastic non-conducting material, each containing active material or material adapted to become active, said frames being surrounded and held together by non-conducting material, substantially as described.

No. 67,728. Switch Rod.

(*Triangle de connexion d'un changement de voie.*)



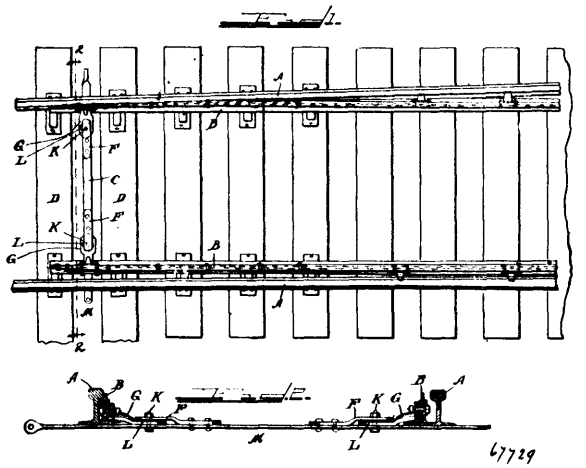
Frank B. Bradley, Chicago, Illinois, U.S.A., 14th June, 1900; 6 years. (Filed 4th June, 1900.)

Claim.—1st. In a switch rod adjustment, the combination with the switch rod provided with a jaw, of a block fitting in said jaw having a regularly disposed series of teeth on the periphery thereof, a chair having a socket therein with correspondingly toothed walls to receive the toothed portion of the block and a bolt passing eccentrically through the jaw, substantially as described. 2nd. In a switch rod adjustment, the combination with a switch rod provided

with a jaw and a block fitting in said jaw and provid ed with a regularly disposed series of teeth on the periphery thereof, of a chair having a socket therein having correspondingly toothed walls to receive the toothed portion of said block, and a bolt passing eccentrically through said block and through the jaw, the centre of said block to a point between the centres of two of the teeth thereon, substantially as described. 3rd. In a switch rod adjustment, the combination with a switch rod provided with a jaw and block fitting in said jaw and provided with a regularly disposed series of teeth on the periphery thereof, of a chair having a socket therein having correspondingly toothed walls to receive the toothed portion of said block, a bolt passing eccentrically through said block and through the jaw, the centre of said bolt being intersected by a radial line extending from the centre of said block to a point between two of the teeth thereon, an index mark on the chair and a series of characters on the block corresponding with the adjustments of the block and indicating the successive steps of such adjustments when brought to register with the index on the chair, substantially as described.

No. 67,729. Switch Rod.

(*Triangle de connexion d'un changement de voie.*)



Frank B. Bradley, Chicago, Illinois, U.S.A., 14th June, 1900; 6 years. (Filed 4th June, 1900.)

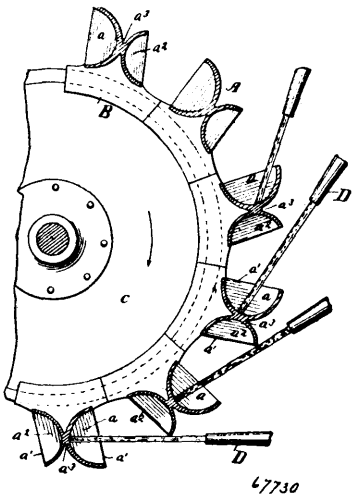
Claim.—1st. The combination with a switch rail and a switch rod, provided with a jaw, of a chair rigidly secured to the switch rail at one end and having its other end extending longitudinally of the switch rod into the jaw and provided with a polygonal opening therein, an adjustable block shaped to correspond with the opening in the chair and adapted to be arranged therein and provided with an eccentric bolt hole, said block being also located in said jaw and a bolt extending through the jaw of the switch rod, the chair, and the eccentric hole in the adjusting block, substantially as described. 2nd. The combination with a switch rail and a switch rod, of a plate fastened to the switch rod and extending longitudinally thereof to form a jaw with the rod, a chair secured at one end to the switch rail and having its other end provided with a polygonal opening and adapted to be adjusted in said jaw, an adjusting block of polygonal shape arranged in the jaw adapted to be snugly fitted in the opening in the chair and provided with an eccentric hole and a bolt passing through the switch rod, the plate and the eccentric hole in the block for holding said chair and block in place between the switch rod and the plate, substantially as described. 3rd. The combination with a switch rail and a switch rod, of a jaw formed on the switch rod, a chair secured at one end to the switch rail and provided with a polygonal opening in its other end, an adjusting block of polygonal shape adapted to be arranged in the opening chair and within the jaw, a flange on said block, the block being provided with an eccentrically disposed bolt hole and a bolt passing through the switch rod, the plate and the opening on the block, substantially as described.

No. 67,730. Bucket or Vanes for Water Wheels.

(*Seau ou godets pour roues d'eau.*)

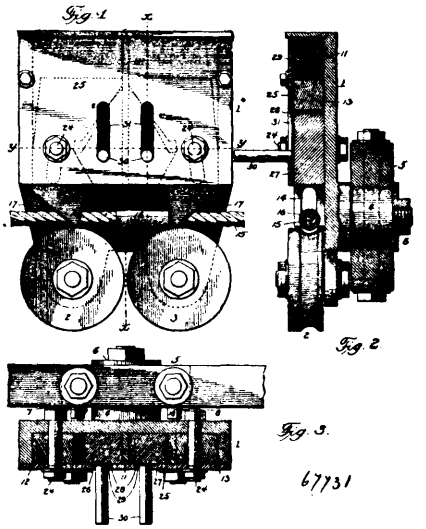
Almerin H. Lighthall, New York City, New York, U.S.A., 14th June, 1900; 6 years. (Filed 6th April, 1900.)

Claim.—1st. A bucket or vane for water wheels comprising two oppositely arranged pairs of concave surfaces, the surface on one side being less in width than those on the other, substantially as described. 2nd. A bucket or vane for water wheels comprising two oppositely arranged pairs of concave surfaces forming cups, the walls of the cups converging forming an exterior indention or pocket, substantially as described. 3rd. A bucket or vane for water wheels comprising two oppositely arranged pairs of concave surface forming cups and provided with grooves and ridges, the outer walls o the cups being lower than the remaining walls, substantially as described. 4th. A bucket or vane for water wheels comprising two



oppositely arranged pairs of concave surfaces forming cups, the inner face of the outer wall of each cup being provided with ridges, the members of each pair of cups being separated by a rib or projection sharp at its upper edge and gradually increasing in thickness from the edge, substantially as described. 5th. Buckets or vanes for water wheels having concave surfaces, forming cups, the outer walls of the cups being provided with ribs having concave sides extending from the bottom of the cups, forming grooves, substantially as described.

No. 67,731. Tramway Clutch. (*Embrayage de tramway.*)



Chipman L. Crawford, Kellogg, Idaho, U.S.A., 14th June, 1900; 6 years. (Filed 4th June, 1900.)

Claim.—1st. In a cable tramway clutch, the combination with independent and separate clutches or grips adapted for independent action, of separate and independent lifters for raising said grips, said lifters being adapted for independent action. 2nd. In a cable tramway clutch, the combination with a casing having guides, of independent and separate clutches or grips adapted for independent action, and separate and independent lifters for raising said grips, said lifters moving in and being guided by the respective guides and being adapted for independent action. 3rd. In a cable tramway clutch, the combination with independent clutches or grips for engaging the cable, of independent wedges adapted to engage said clutches and raise them. 4th. In a cable tramway clutch, the combination with clutches or grips for engaging the cable which have inclined surfaces and a shoulder, of wedges having similar inclined surfaces and shoulders which are adapted to first tilt the clutches by the co-action of the inclined surfaces and then lift them by the engagement of the shoulders. 5th. In a cable tramway clutch, the combination with a casing, of tilting clutches or grips for engaging the cable which have shoulders adapted to lock against the casing, and lifters adapted to tilt the clutches to disengage them and then

to positively engage said clutches and raise them. 6th. In a cable tramway clutch, the combination with a casing, of tilting clutches or grips for engaging the cable which have shoulders adapted to lock against the casing, and wedges having shoulders, said wedges being adapted, when moved, to first tilt the clutches by their wedging action and then to have their shoulders engage said clutches and positively raise them. 7th. In a cable tramway clutch, the combination with a casing having guide grooves and slots, of cable clutches or grips and wedges for operating said clutches which are provided with raised portions sliding in said guide grooves and have trip pins movable in the slots.

No. 67,732. Harrow Teeth. *(Dents de herse.)*

FIG. 1.

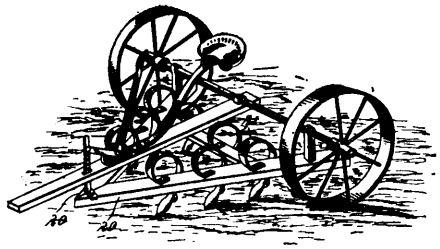
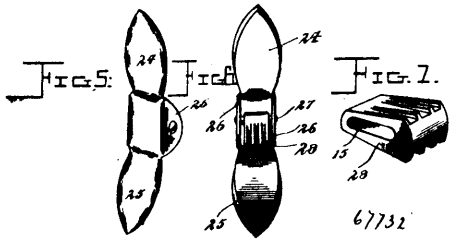


FIG. 5. FIG. 6. FIG. 7.



67732

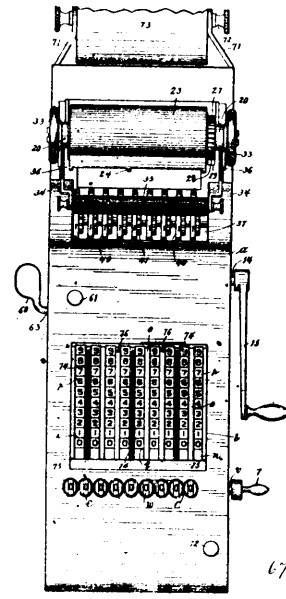
Willie DeLano Whitney, Clarendon, New York, U.S.A., 14th June, 1900; 6 years. (Filed 5th June, 1900.)

Claim.—1st. A harrow tooth, comprising a body portion, the material of which is bent at its sides to form parallel flanges, a pin mounted in the flanges, and a wedge block having a longitudinal slot through which the pin is passed and adapted for oscillation upon the pin to project in opposite directions longitudinally of the tooth. 2nd. A harrow tooth, comprising a body portion having the material thereof bent at its edges to form parallel flanges, a pin mounted in the flanges, and a wedge block having a longitudinal slot through which the pin is passed and upon which it is adapted for oscillation to lie longitudinally of the tooth in opposite directions, the exterior of the wedge being corrugated. 3rd. A harrow tooth, comprising a body portion having the material thereof bent at its edges to form parallel flanges, a pin mounted in the flanges, and a wedge block having longitudinal corrugations and provided with a transverse slot through which the pin is passed and upon which pin the wedge is reversible and movable to project in opposite directions and exert a clamping action against the tooth.

No. 67,733. Calculating Machine. *(Machine à calculer.)*

James Mallmann, Sheboygan, Wisconsin, U.S.A., 14th June, 1900; 6 years. (Filed 6th April, 1900.)

Claim.—1st. In a calculating machine, the combination of a casing, a longitudinal bar within the casing, said bar provided with a series of teeth, means for actuating the bar, means for limiting the movement of the bar, calculating mechanism adapted to be actuated by the bar, a rotatable type wheel, a gear wheel adapted to rotate the type wheel, said gear wheel engaged directly by the teeth of the bar, and adapted to be turned by the bar as said bar is actuated in order to bring different characters on the type wheel to printing position, paper carrying mechanism, and means for bringing the paper carrying mechanism and the type wheel into contact, whereby the type on the type wheel which has been brought to printing position is printed on the paper. 2nd. The combination of a casing, a shaft, a type wheel mounted thereon, a gear wheel mounted on the axis of said type wheel and rotatable with the type wheel, a longitudinal bar provided with a series of teeth, said teeth adapted to engage directly with the teeth of the gear wheel, means for actuating the bar to bring different characters on the type wheel to printing position, a paper carying cylinder, and means for bringing said paper carrying cylinder into contact with the type on the type wheel which has been brought to printing position. 3rd. In a calculating and printing machine, the combination of a casing, a longitudinal bar within the casing, said bar provided with a series of teeth, means for actuating the bar, means for limiting the movement of the bar, calculating mechanism adapted to be actuated by the bar, a shaft, a type wheel mounted thereon, a gear wheel



67733

mounted on the axis of said type wheel and rotatable with the type wheel, said gear wheel engaged directly by the teeth of the bar and adapted to be turned by the bar as said bar is actuated, in order to bring different characters on the type wheel to printing position, a paper carrying cylinder, and means for bringing said paper carrying cylinder into contact with the type on the type wheel which has been brought to printing position. 4th. In a calculating machine, the combination of a casing having an opening therein, a series of longitudinal bars beneath the opening, the exposed edge of each bar having a series of characters thereon running in regular sequence, and each of said bars also provided with a series of teeth, means for actuating each bar, said means contacting with a bordering edge of the opening in the casing in order to limit the movement of each bar, calculating mechanism adapted to be actuated by the longitudinal bars on the movement of said bars in one direction, a series of levers, each lever adapted to engage the teeth of a bar in order to hold the bars which have been actuated to thereby display a number to be mathematically considered in the opening of the casing just back of the bordering edge of said opening, until the calculating mechanism is ready to be again operated for the next number to be mathematically considered, whereby as each bar is actuated to the extent permitted by contact of the actuating mechanism with a bordering edge of the opening in the casing, the several bars are held in position to display the proper characters for verification in said opening of the casing just back of the bordering edge of said opening, means for simultaneously turning the levers for the purpose of releasing them from engagement with the teeth of the bars, and means for acting on the bars to simultaneously return such bars as have been actuated to normal position, after the levers are so released from the bars. 5th. The combination, of a casing, a longitudinal bar within the casing, said bar provided with a series of teeth, means for actuating the bar, said means adapted to be inserted through an opening in the casing in order to engage the bar, a stop with which the actuating means contacts in order to limit the movement of the bar, mechanism adapted to be actuated by the longitudinal bar on the movement of said bar, a bell crank lever engaging a tooth of the bar to hold said bar to adjusted position, mechanism carrying a dog, and means for causing a movement of the mechanism which carries the dog, whereby the dog is caused to turn the bell crank lever and thereby release said bell crank lever from engagement with a tooth of the bar. 6th. The combination, of a casing, a longitudinal bar within the casing, said bar provided with a series of teeth, means for actuating the bar, said means adapted to be inserted through an opening in the casing in order to engage the bar, a stop with which the actuating means contacts in order to limit the movement of the bar, mechanism adapted to be actuated by the longitudinal bar on the movement of said bar, a bell crank lever engaging a tooth of the bar to hold said bar to adjusted position, a rocking bar provided with a projecting lug, mechanism carrying a dog, and means for causing a movement of said mechanism carrying the dog, whereby the dog is caused to act on the lug of the rock bar to cause said bar to contact with the bell crank lever and thereby turn said lever in order to release it from engagement with a tooth of the bar. 7th. The combination of a casing, a longitudinal bar within the casing, said bar provided with a series of teeth, means for actuating the bar, said means adapted to be inserted through an opening in the casing in order to engage the bar, a stop with which the actuating means contacts in order to limit the movement of the bar, mechan-

ism adapted to be actuated by the longitudinal bar on the movement of said bar in one direction, a bell crank lever engaging a tooth of the bar to hold said bar to adjusted position, a spring engaging the bell crank lever to normally hold said lever in engagement with a tooth of the bar, mechanism carrying a dog, and means for causing a movement of said mechanism, whereby the dog carried thereby is caused to turn the bell crank lever and thereby release said lever from engagement with a tooth of the bar. 8th. In a calculating machine, the combination of a casing having an opening therein, a series of longitudinal bars beneath the opening, the exposed edge of each bar having a series of characters thereon running in regular sequence, and each of said bars also provided with two series of teeth, means for actuating each bar, said means contacting with a bordering edge of the opening in the casing in order to limit the movement of the bar, calculating mechanisms, each provided with a ratchet wheel adapted to be engaged by one of the series of teeth of each bar, whereby the calculating mechanism is actuated, a series of bell crank levers, each lever adapted to engage the other series of teeth of each bar, in order to hold the bar in position to which it has been actuated, whereby as each bar is actuated to the extent permitted by the contact of the actuating mechanism with a bordering edge of the opening, the several bars are held in position to display the proper characters through the opening in the casing and just back of the bordering edge of said opening, means for simultaneously releasing all of the bell crank levers from engagement with the series of teeth of the bars, and means for returning the bars which have been actuated to normal position, upon the release of the bell crank levers. 9th. The combination of a casing, a series of longitudinal bars within the casing, said bars having a series of teeth, means for actuating the bars, said means adapted to be inserted through an opening in the casing in order to engage the bars, a stop with which the actuating means contacts in order to limit the movement of the bars, mechanisms adapted to be actuated by the longitudinal bars on the movement of any of said bars in one direction, bell crank levers adapted to engage the teeth of the bars in order to hold said bars to adjusted position, a rock bar arranged adjacent to the bell crank levers, and means for turning said rock bar to cause it to engage the bell crank levers and thereby release said levers from engagement with the teeth of the actuating bars in order to permit the return of said bars to normal position. 10th. The combination, of a casing, a longitudinal bar within the casing, said bar provided with a series of teeth, means for actuating the bar, means for limiting the movement of the bar, a rotatable type wheel, a gear wheel adapted to rotate the type wheel, said gear wheel engaged by the the teeth of the bar and adapted to be turned thereby, as said bar is actuated, in order to bring different characters on the type wheel to printing position, an inking roll adapted normally to be held in position to contact with the type on the type wheel, a paper carrying cylinder, means for bringing said cylinder into contact with the type on the type wheel which has been brought to printing position, means for throwing the inking roll out of the path of movement of the paper cylinder, when said paper cylinder is thus thrown into contact with the type wheel, and means for returning said inking roll to normal position, as the paper cylinder is returned to normal position. 11th. The combination, of a casing, a longitudinal bar within the casing, said bar provided with a series of teeth, means for actuating the bar, means for limiting the movement of the bar, a rotatable type wheel, a gear wheel adapted to rotate the type wheel, said gear wheel engaged by the teeth of the bar and adapted to be turned thereby as said bar is actuated, in order to bring different characters on the type wheel to printing position, pivoted levers, a paper carrying cylinder journalled in said levers, arms extending from the levers, and having an inking roller journalled in their ends, said inking roller normally resting on the periphery of the type wheel, means for turning the levers so as to bring the paper carrying cylinder into contact with the type on the type wheel which has been brought to printing position, said turning of the levers also throwing the inking roll out of the path of the movement of the paper cylinder, and means for returning the paper carrying cylinder and inking roll to normal position. 12th. The combination, of a type wheel, means for rotating said wheel to bring different characters thereof to printing position, links, levers pivotally connected to the links, a paper carrying cylinder having its axis journalled in the levers, a ratchet wheel rotatable with the paper carrying cylinder, a pawl pivoted to a fixed part and having its free end engaging the ratchet wheel, another pawl connected to one of the levers and having one end engaging the ratchet wheel, and means for actuating the links, whereby on one actuation thereof the paper carrying cylinder is thrust to a position to contact with the type on the type wheel which has been brought to printing position. and on the reverse actuation of said links the paper carrying cylinder is returned to normal position. 13th. The combination, of a type wheel, means for rotating said wheel to bring different characters thereof to printing position, links, levers pivotally connected to the links, a paper carrying cylinder having its axis journalled in the levers, a ratchet wheel rotatable with the paper carrying cylinder, a spring dressed pawl pivoted to a fixed part and having its free end engaging the ratchet wheel, another pawl pivoted medially to one of the levers and having one end engaging the ratchet wheel, a stop adapted to contact with and limit the movement of the depending arm of the last mentioned pawl in one direction, means for actuating the links in one direction, whereby the paper carrying cylinder is thrown into position to contact with the type on the type wheel which has been brought to printing position, and a spring acting on the links to cause a reverse actuation, thereof, whereby the paper carrying cylinder is returned to normal position. 14th. The combination, of a casing, a longitudinal bar provided with a series of teeth, means for actuating the bar, mechanism operated by the bar, a bell crank lever normally engaging a tooth of the bar to hold said bar in adjusted position, links, a dog carried by one of the links, mechanism between said dog and the bell crank lever, a shaft having an operating handle on one end thereof, a connection between said shaft and the links, whereby on the operation of the handle the links are caused to move in one direction, and means for causing the movement of the links in the opposite direction, whereby the dog carried by the link is caused to contact with the mechanism which operates the bell crank lever, thereby causing a disengagement of said bell crank lever, and a release of the bar to adapt said bar to return to normal position. 15th. The combination, of a casing, a longitudinal bar provided with a series of teeth, means for actuating the bar, mechanism operated by the bar, a bell crank lever normally engaging a tooth of the bar to hold said bar in adjusted position, mechanism carrying a dog, a rock bar provided with a depending lug, said rock bar being in position to engage the bell crank levers, means for causing a movement of the mechanism which carries the dog in one direction, and means for causing a movement of said mechanism in the opposite direction, whereby the dog carried thereby is caused to contact with the depending lug of the rock bar, to turn said rock bar in a direction to act on the bell crank lever, and thereby causing a disengagement of said bell crank lever, and a release of the longitudinal bar to adapt said longitudinal bar to return to normal position. 16th. The combination of a type wheel, means for rotating said wheel to bring different characters thereon to printing position, a longitudinal bar provided with a series of teeth, means for actuating the bar, mechanism operated by the bar, a bell crank lever normally engaging a tooth of the bar to hold said bar in adjusted position, mechanism carrying a dog, levers pivotally connected to said mechanism, a paper carrying cylinder having its journals mounted in the levers, a rock bar provided with a depending lug, said rock bar being in position to engage the bell crank lever, means for causing a movement of the mechanism which carries the dog in one direction, whereby the levers are rocked and the paper carrying cylinder thrown into engagement with the character on the type wheel which has been brought to printing position, and means for causing a movement of the mechanism carrying the dog in the opposite direction, whereby said dog is caused to contact with the depending lug of the rock bar and said rock bar thereby swung in an opposite direction to act on the bell crank lever and cause a disengagement of the bell crank lever and a release of the longitudinal bar, to adapt said longitudinal bar to return to normal position. 17th. The combination of a casing, a longitudinal bar provided with a series of teeth, means for actuating the bar, mechanism actuated by the bar, a bell crank lever normally engaging a tooth of the bar to hold said bar in adjusted position, mechanism carrying a dog, a rock bar provided with depending lugs, said bar being in position to engage the bell crank lever, an auxiliary dog pivoted to a fixed part, and in position to engage one of the depending lugs of the rock bar on the return movement of the mechanism carrying the other dog, a spring acting against said auxiliary dog, a bell crank lever engaging the auxiliary dog, said bell crank lever adapted to be turned on its pivot, and thereby release the auxiliary dog from engagement with the depending lug of the rock bar, on the return movement of the mechanism which carries the other dog, means for causing a movement of the mechanism carrying the dog in one direction, and means for causing a movement of the mechanism carrying the dog in one direction, and means for causing a movement of said mechanism in the opposite direction, whereby the dog carried by said mechanism is caused to contact by one of the depending lugs of the rock bar, and the auxiliary dog also caused to engage said rock bar by the action of the spring against said auxiliary dog, whereby the rock bar is swung in a direction to act on the bell crank lever, thereby causing a disengagement of said bell crank lever and a release of the longitudinal bar, to adapt said longitudinal bar to be turned to normal position. 18th. The combination of a casing, a longitudinal bar provided with a series of teeth, means for actuating the bar, calculating mechanism operated by the bar, a lever normally engaging a tooth of the bar to hold said bar in adjusted position, a pivoted bar beneath the longitudinal bar, means for turning said pivoted bar so as to act against the longitudinal bar and raise said bar to such a position as to prevent said bar from acting on the calculating mechanism, a type wheel, and a pinion adapted to rotate the type wheel, said pinion being engaged by other teeth on the longitudinal bar. 19th. The combination of a casing having an opening in the top thereof, longitudinal bars within the casing, said bars provided with a series of teeth, means for actuating the bars, said means adapted to be inserted through the opening in the casing. a stop with which the actuating means contacts in order to limit the movement of a bar, mechanisms adapted to be actuated by the longitudinal bars on the movement of said bars in one direction, bell crank levers engaging teeth of the bars to hold said bars to adjusted position, type wheels, a pinion adapted to rotate each type wheel, said pinions engaged by other teeth on the longitudinal bars, a rock bar in position to act on the bell crank levers, and when turned in one direction to release said bell crank levers from the teeth of the longitudinal bars, a link

connected at one end to the rock bar, a bell crank lever connected to the opposite end of the link, and a push rod adapted to act on the bell crank lever. 20th. The combination of a shaft, a series of calculating wheels, a finger secured to each calculating wheel, a series of discs fast on the shaft, each disc provided with a projecting lug in position to engage the finger of the calculating wheel, another disc mounted fast on the shaft and provided with a notch in its periphery, a medially pivoted lever having one end adapted normally to engage the notch of the disc, means acting on the lever to disengage the same from the notch, and means for turning the shaft. 21st. The combination of a shaft, a series of calculating wheels, a finger secured to each calculating wheel, a series of discs fast on the shaft, each disc provided with a projecting lug in position to engage the finger of the calculating wheel, another disc mounted fast on the shaft and provided with a notch in its periphery, and also a finger projecting outwardly from one side of the notch, a medially pivoted lever, a spring acting on the lever to cause one end thereof normally to engage the notch, means acting on the lever to disengage the same from the notch against the action of the spring, and means for turning the shaft. 22nd. The combination of a casing having an opening in its top, a series of longitudinal actuating bars beneath said opening and visible through the opening, means for operating the actuating bars, mechanism operated by the actuating bars, and a series of divisional rods removably fitted to the opening in the casing, so as to divide said opening into a series of changeable divisions, each division having therein one or more of the actuating bars. 23rd. The combination of a casing, a series of calculating wheels having characters thereon adapted to be displayed through the casing, and each calculating wheel provided peripherally with projecting teeth, means for rotaring the calculating wheel, carrying over mechanism adapted, upon the complete revolution of one calculating wheel, to cause the rotation of the next succeeding calculating wheel the distance of one member, and pawls for each calculating wheel, each pawl having its free end in position to be engaged by the teeth of a calculating wheel. 24th. The combination of a casing, a shaft mounted therein, a series of calculating wheels mounted on the shaft, and having characters thereon adapted to be displayed through the casing, and each calculating wheel provided peripherally with projecting teeth, ratchet wheels mounted upon the shaft of the calculating wheels, one ratchet wheel being provided for each calculating wheel, means engaging the ratchet wheels for the purpose of rotating the same and consequently the calculating wheels, pawls for each calculating wheel, each pawl having its free end in position to be engaged by the teeth of a calculating wheel, and pawls for each ratchet wheel, and adapted to prevent backward rotation of said ratchet wheels, and both sets of pawls adapted to hold the calculating wheels in perfect alignment.

No. 67,734. Friction Brake. (*Frein à friction.*)

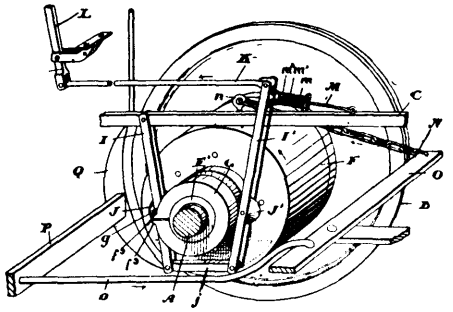


Fig. 1.

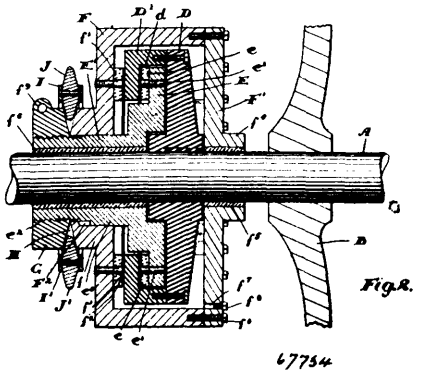


Fig. 2.

67754

James Harry Keigly McCollum, Toronto, Ontario, Canada, 14th June, 1900; 6 years. (Filed 7th April, 1900.)

Claim.—1st. The combination with the brake shoes, lever and connections of an enclosing casing loosely journalled on the axle and connected by chain to the brake lever, the wheel keyed to the axle, a friction ring secured to the inner face of the casing and means for longitudinally adjusting the casing, so as to throw the friction ring in contact with the face of the wheel as and for the purpose specified. 2nd. The combination with the brake shoes, lever and connections of an enclosing casing loosely journalled on the axle and connected by chain to the brake lever, the wheel keyed to the axle and provided with an over-hanging and inwardly extending flange with an annular space between the flange and the wheel, a disc loosely journalled on the axle and provided with a face contact friction ring designed to engage with the inner face of the flange and means for longitudinally adjusting the disc, so to throw the friction ring against the inner face of the flange, as and for the purpose specified. 3rd. The combination with the brake shoes, lever and connections, of an enclosing casing loosely journalled on the axle and connected by chain to the brake lever, and wheel keyed to the axle and provided with an over-hanging and inwardly extending flange with an annular space between the flange and the wheel, a disc loosely journalled on the axle and provided with a face contact friction ring designed to engage with the inner face of the flange, a friction ring secured to the inner side of the casing opposite the flange of the wheel and means for bringing the friction rings close towards each other, so as to frictionally grip the flange, as and for the purpose specified. 4th. The combination with the brake shoes, lever and connections, an enclosing casing loosely journalled on the axle and connected by chain to the brake lever, of the wheel keyed to the axle and provided with an an over-hanging and inwardly extending flange with an annular space between the flange and the wheel, a disc loosely journalled on the axle and provided with a face contact friction ring designed to engage with the inner face of the flange, a friction ring secured to the inner side of the casing opposite the flange of the wheel, the collar secured on the hub of the friction disc and forming with the end of the hub of the casing a V-shaped recess, the hanger double bars connected together by links, the wedge wheels journalled in the same, means for normally holding them out of engagement and means for operating them to throw the wedge wheels between the hub of the casing and collar, so as to separate them, as and for the purpose specified. 5th. The combination with the wheel keyed to the axle and the friction disc loose on the axle provided with a contact ring to frictionally engage the face of the wheel, of an enclosing casing designed to contain oil and means for bringing the friction contact rings into contact with the wheel, as and for the purpose specified. 6th. In a device of the class described, the combination with the casing secured to the axle and disc having a hub extending through the hub of the casing and provided with a threaded end, of the collar screwed on to the hub and the bolt extending through bosses on the collar, as and for the purpose specified.

No. 67,735. Fluid Meter. (*Compteur de fluide.*)

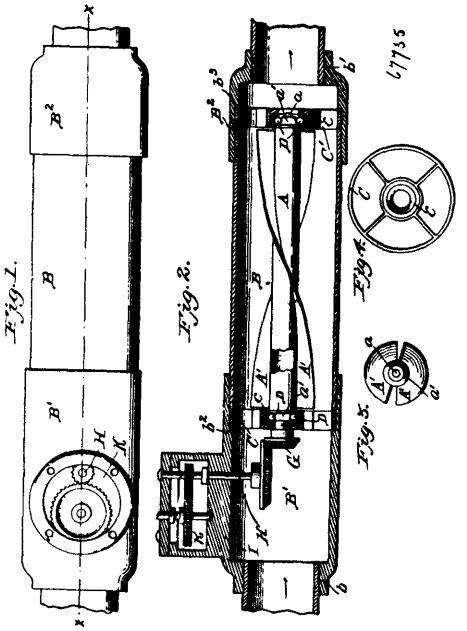


Fig. 1. Fig. 2. Fig. 4. Fig. 5.

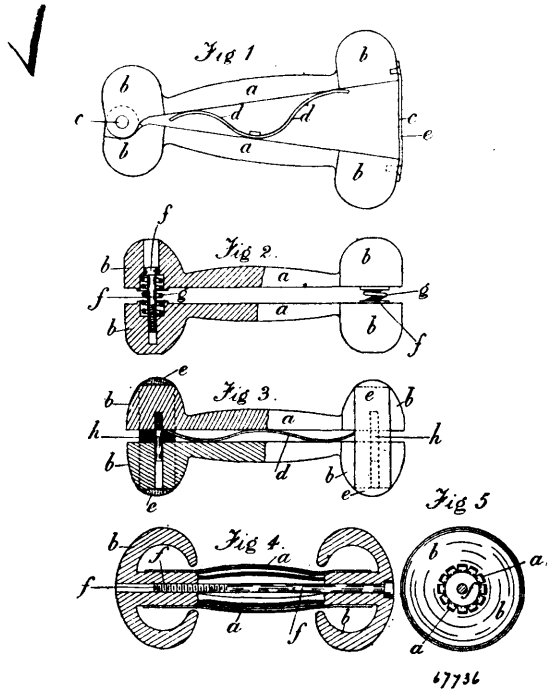
67735

Samuel Ainsley Chesley, Lunenburg, Nova Scotia, Canada, 14th June, 1900; 6 years. (Filed 9th April, 1900.)

Claim.—1st. In a fluid meter, the combination with a tubular casing, of a shaft or spindle journalled therein, and having opposite helical fins or flanges, each of which has a low angular relation with the axis of said shaft, the combined diameter of said shaft and flanges being appreciably less than the interna diameter of the

casing, substantially as specified. 2nd. In a fluid meter, the casing composed of a tubular central section, and tubular end sections, the internal shoulders of said end sections, the spiders clamped in place between said shoulders and the extremities of the central section, and the meter shaft or spindle journalled in hub portions of said spiders, substantially as specified. 3rd. In a fluid meter, the combination with a tubular casing having aligned entrance and discharge openings, of a shaft or spindle journalled in said casing and provided with opposite helical fins or flanges each of which has an angular relation with the axis of said shaft of about 30 degrees, and is of comparatively small breadth, to provide an appreciable interval between its margin and the interior surface of said casing, substantially as specified. 4th. In a fluid meter, the casing composed of a central section and shouldered end sections, spiders seated in said casing against said shoulders, ball cups in the hubs of said spiders, a conically journalled meter shaft, and anti-friction balls between the journals and cups, substantially as specified. 5th. In a fluid meter, the combination with a tubular casing, having aligned entrance and discharge openings, of a shaft or spindle journalled therein in line with said openings and provided with opposite helical fins or flanges, each of which has an angular relation with the axis of said shaft of about 30 degrees, and makes a turn of about 180 degrees, substantially as specified. 6th. A fluid meter, comprising a tubular casing, having aligned entrance and discharge openings, a shaft or spindle journalled in said casing and having opposite helical fins or flanges of low angular relation with said shaft, and of short breadth to leave an appreciable interval between its margin and the interior surface of the casing, a dial train and gearing in connection with said shaft or spindle, substantially as specified.

No. 67,736. Dumb Bell. *(Haltères.)*



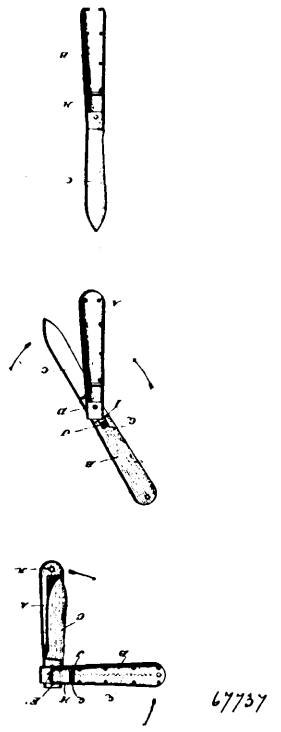
Eugen Sandow, assignee of Joseph Robinson, both of London, England, 14th June, 1900; 6 years. (Filed 7th February, 1900.)

Claim.—1st. A dumb bell having a handle part composed of a plurality of parts adapted to be compressed together by the head, as and for the purpose described. 2nd. A dumb bell having a handle consisting of a number of parts and resilient means for expanding said parts, adapted to be compressed by the hand, as and for the purpose described.

No. 67,737. Clasp Knife. *(Couteau-pliant.)*

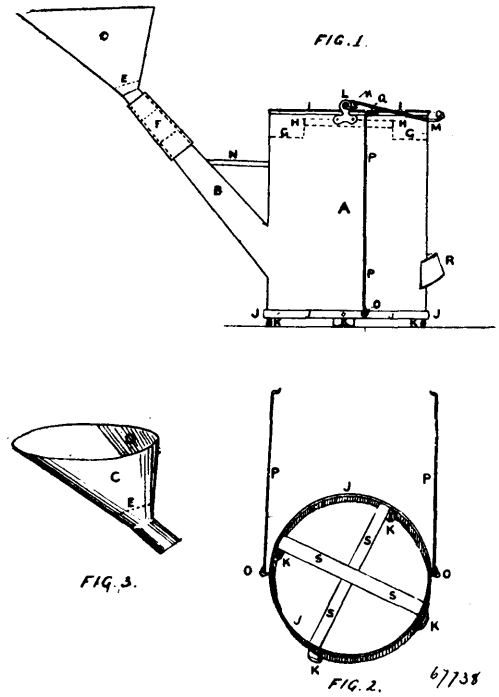
Oliver M. Walker, Raccoon, Indiana, U.S.A., administrator of the estate of John D. Conover, 14th June, 1900; 6 years. (Filed 6th June, 1898.)

Claim.—The combination of the handle piece A provided with semi-circular groove E and lug K, the handle piece B provided with oppositely placed semi-circular groove E^1, under-cut slot J and pocket K^2 to receive lug K, the blade C provided with pins F, F^1, projecting on each side to engage in the grooves E and E^1 respectively, the pin D pivotally connecting the handle pieces and blade and concentrically located with reference to the grooves and pins, the pin G mounted in the handle piece B to slide longitudinally



therein, and engage in a correspondingly situated perforation K^1 in lug K, the under-cut slot J, and the top plate H secured to the under-cut lug, substantially as described.

No. 67,738. Milk Pail and Stool. *(Seau à lait et tabouret.)*

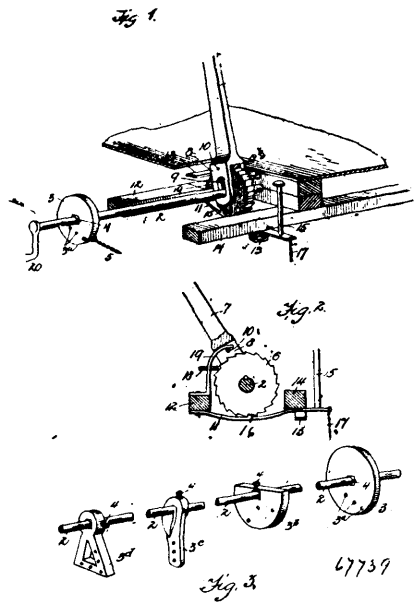


James Souva and John Dalziel, both of Sarnia, Ontario, Canada, 14th June, 1900; 6 years. (Filed 17th March, 1900.)

Claim.—1st. The combination of the seat 11 with the milking pail A, substantially as and for the purposes hereinbefore set forth. 2nd. The combination of such covered milking pail with a funnel into which the cow or other animal is milked, substantially as and for the purposes hereinbefore set forth. 3rd. The combination of

such covered milking pail, seat and funnel, substantially as and for the purposes hereinbefore set forth. 4th. The combination of the milking pail, stool and funnel with movable framework or support, substantially as and for the purposes hereinbefore set forth. 5th. The combination of the milking pail, stool, funnel and strainer, with a movable framework or support, substantially as and for the purposes hereinbefore set forth.

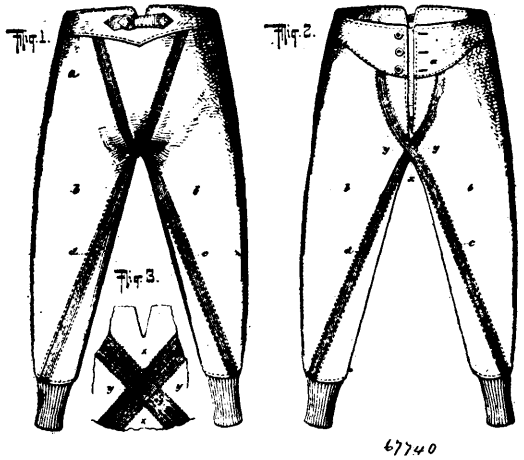
No. 67,739. Brake Lever. *(Levier de frein.)*



Samuel A. Roseman, Laurel, and Harry Daniel Rupp, York, both of Pennsylvania, U.S.A., 14th June, 1900; 6 years. (Filed 21st May, 1900.)

Claim.—1st. The combination with a rock shaft and a ratchet wheel fixed thereon, of a lever having arms formed with elongated slots, a transverse pin secured to said arms, a curved arm extending above said pin, a spring plate below said ratchet wheel provided with a dog, means for depressing said plate, a slack gatherer fixed upon the rock shaft, and a brake chain secured at one end to the slack gatherer. 2nd. The combination with a rock shaft and the ratchet wheel secured thereon, of the lever having arms formed with elongated slots, the transverse pin secured to said arms, the curved arm extending above said transverse pin, and a spring plate below said ratchet wheel provided with a dog, one end of said spring plate being secured to the car frame, while its free end extends through a keeper and is provided with means for depressing said spring plate.

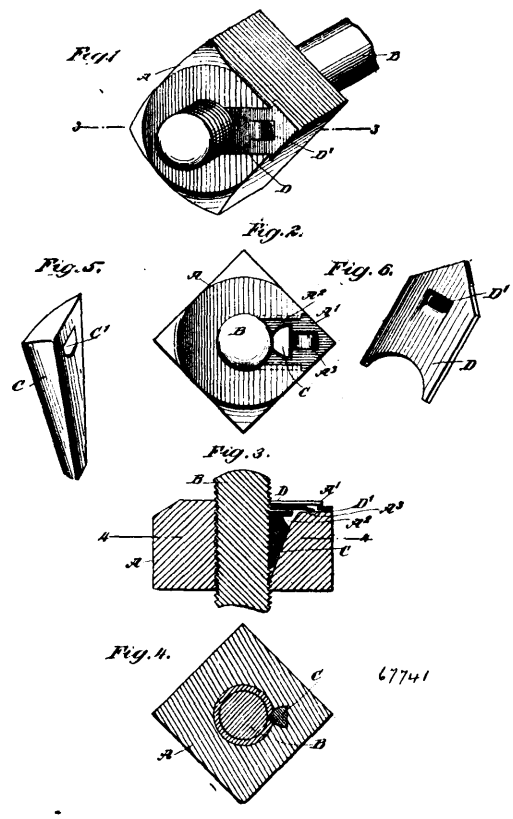
No. 67,740. Garment. *(Vêtement.)*



Jeremiah Anderson Scriven, Manhattan, New York, U.S.A., 14th June, 1900; 6 years. (Filed 5th June, 1900.)

Claim.—1st. A nether garment, having legs *b* of inelastic material and continuous elastic insertion strips *c*, *d*, in the legs extending diagonally thereof, and adapted to stretch laterally, the said strips crossing each other at the crotch of the garment, the edges of each being secured to the other strip at the crossing point of the strips thus neutralizing the elasticity of each of the strips within the field of the crossing on the longitudinal and transverse lines of the strips, the said strips having wales crossing each other at such angle as to afford over the field of the crossing great elasticity on lines *x x*, *y y*, laterally and longitudinally of the garment, the said inserts also extending in divergent paths upward to the band *a* of the garment. 2nd. A garment having inelastic members and continuous elastic strip insertions running diagonally of the garment and crossing each other at the crotch thereof, the edges of each strip being secured to the other strip at the crossing point of the strips so as to neutralize the elasticity of the strips in the field of the crossing on lines running laterally and longitudinally of the strips, the wales or ribs of each elastic strip running at the place of crossing at an angle to the wales or ribs of the other elastic strip and at an angle to the longitudinal and lateral lines of strain *x x*, *y y*, of the garment.

No. 67,741. Nut Lock. *(Arrête-écrou.)*



W. F. Maxwell, A. L. Houseworth, and L. S. Downing, assignees of H. E. Downing and H. L. Dorsett, all of Seward, Oklahoma, U.S.A., 14th June, 1900; 6 years. (Filed 31st May, 1900.)

Claim.—1st. A nut lock, having a removable locking slide in the nut, and extending along the bore thereof, and a cover removably held on the nut, to hold the locking slide in position, as set forth. 2nd. A nut lock, having a nut formed with a recess inclined inwardly and downwardly, and a tapering locking slide having an inner sharp corner and adapted to be driven home in the recess to force the said corner inward into the threads of the bolt. 3rd. A nut lock, having a nut formed with a recess extending along the bore of the nut, with the bottom of the recess inclined rearwardly and down there, a tapering locking slide having an inner sharp corner and adapted to be driven home in the recess to force the said corner inward into the threads of the bolt, and a cover removably held on to the nut to hold the locking slide in position in its recesses, as set forth.

No. 67,742. Ore Treatment. *(Traitement de minerais.)*

William Oliver Webber, Boston, Massachusetts, assignee of Daniel O'Keefe, Tacoma, Washington, U.S.A., 15th June, 1900; 6 years. (Filed 21st September, 1899.)

Claim.—1st. The process of treating ores, consisting in roasting the same while being agitated, for the purpose of mechanical disintegration, subjecting the same to hydrogen gas under pressure, leaching the same with liquid, and then evaporating any moisture or vapour present, substantially as described. 2nd. The process of

treating ores, consisting of roasting the same while being agitated, for the purpose of mechanical disintegration, subjecting the ore to hydrogen gas under pressure, and afterward to chlorine gas, substantially as described. 3rd. The process of treating ores, consisting of roasting the same while being agitated, for the purpose of mechanical disintegration, subjecting the ore to hydrogen gas under pressure, afterward to chlorine gas, and then leaching the same with hot salt walter, substantially as described.

No. 67,743. Process of Purifying Waste Water and Sewage. *(Procédé pour purifier les eaux d'égoûts.*

Edward Burmeister, Hamburg, assignee of Leberecht Tralls, Berlin, Germany, 15th June, 1900; 6 years. (Filed May 27th, 1899.)

Claim.—Process for purifying waste water or sewage by precipitation, consisting in adding to the mud obtained by a preceding precipitation of waste water as much sulphuric acid as is required to convert the basis contained in the mud (alumina, iron oxide, iron protoxide) into sulphates, and precipitating with this product a fresh quantity of waste water, the first precipitation for obtaining the first mud being effected in any known manner, substantially as described.

No. 67,744. Joint Fastener for Tire Wires or Bands.
(Attache de joint pour fils de bandages.)

Fig. 1.

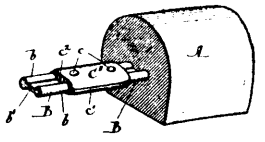


Fig. 2.

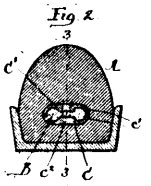


Fig. 3.

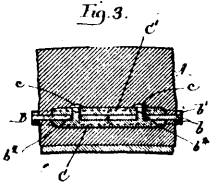
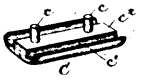


Fig. 4.



67744

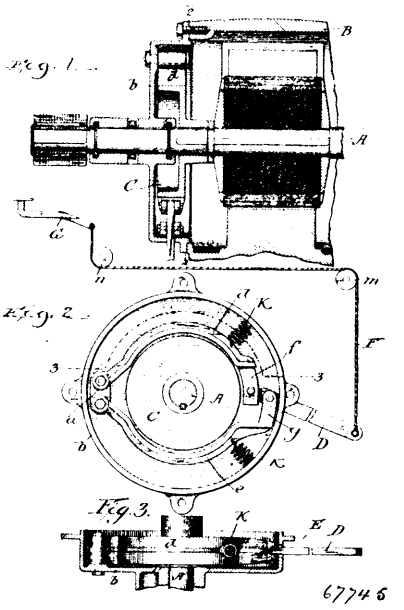
Frank Wilbur Kenny and Edgar Arnold Hill, both of Chicago, Illinois, U.S.A., 15th June, 1900; 6 years. (Filed 6th April, 1900.)

Claim.—In a vehicle tire, the combination with the retaining band or wire B having thickened portions and channels upon one or both sides and having its ends provided with holes to receive the retaining pins, of the joint fastener comprising the opposite sections, one or both having inwardly extending side flanges and having intermediate longitudinal ribs to enter the channels of the band or wires and having pins for uniting said section joints together, said pins passing through the holes in the ends of the band, substantially as described.

No. 67,745. Brake for Electric Motors.
(Frein pour moteurs électriques.)

The Hewitt Lindstrom Motor Company, assignee of Charles August Lindstrom, Chicago, Illinois, U.S.A., 15th June, 1900; 6 years. (Filed 2nd June, 1900.)

Claim.—1st. The combination with an armature shaft, and case enclosing the same and a dished head closing one end thereof, of a friction wheel secured to said shaft and enclosed within the circumference of said head, two breaking arms having their adjacent ends pivoted at fixed points to the inner surface of said case at one side of said wheel around which they extend in opposite directions to an extent slightly greater than one half of the circumference of said wheel, radially arranged springs for normally keeping said arms out of contact with said wheel, and a suitable lever one end of which extends through a suitable slot in the circumference of said head and is pivotally connected to the movable ends of both of said breaking arms. 2nd. The combination with an electric motor and a case enclosing the same, of a friction wheel keyed to the armature shaft within said case, two segmental braking arms having their adjacent ends pivoted to the inner side of the head of said case and extending within said case in opposite directions partially around said wheel, springs within said case normally keeping said arms out of contact with the wheel and a suitable lever one end of which extends through



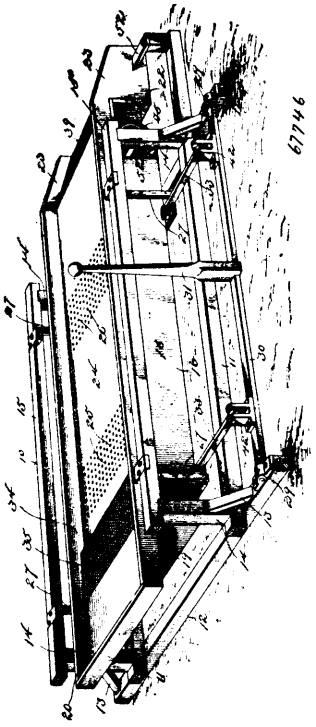
a slot in the circumference of the case and has the adjacent movable ends of said breaking arms pivotally connected thereto at different points. 3rd. The combination with a rotatable element, of two arms each pivotally mounted at one end, the said brake arms enclosing the said rotatabne element springs for normally maintaining a disengagement between the said arms and the said rotatable element, a lever having connection with each opposed free end of the brake arms the connections of the said opposed ends with the lever being separate, whereby upon proper actuation of the lever the free ends of the brake arms are caused to approach to engage the rotatable element, a cap or head enclosing the brake shoes and rotatable element, a slot in the said cap through which the said lever extends and external actuating means for operating the said lever to cause the operation of the brake arms, substantially as described.

No. 67,746. Ore Separator and Amalgamator.
(Séparateur et amalgamateur de minerais.)

Isaac A. Palmer, Seattle, Washington, U.S.A., 15th June, 1900; 6 years. (Filed 7th April, 1899.)

Claim.—1st. In an ore separator and amalgamator, a shaking box provided with a series of curved perforated riffles having their concave coated with an amalgam film, substantially as described. 2nd. In an ore separator and amalgamator, a shaking box provided with a perforated grizzly, a series of inclined aprons below the perforations in said grizzly, and a series of amalgamated, curved and perforated riffles on said aprons, substantially as described. 3rd. In an ore separator and amalgamator, a shaking box, provided with a perforated grizzly, a collector pan below said grizzly, and a series of inclined aprons within said box between the grizzly and the collector pan, and each provided with a perforated and amalgamated riffle, substantially as described. 4th. In an ore separator and amalgamator, a shaking box provided with a head board, a grizzly secured to said box to form, with the head board, a fall or drop near the receiving end of the box, a coarse separator screen arranged flush with the head board, and a fine amalgamator screen between the separator screen and the grizzly, both screens being situated at the fall between the grizzly and the head board, substantially as described. 5th. In an ore separator and amalgamator, a shaking box provided with a grizzly, a tailings receptacle at the delivery end of said box, a coarse screen inclined from the grizzly over the tailings receptacle, and a riffle within the tailings receptacle, substantially as described. 6th. In an ore separator and amalgamator, a shaking box provided with a grizzly, a tailings receptacle at the delivery end of the box and having a flanged amalgamated plate-like bottom, a separator screen inclined from the grizzly and extending over the tailings receptacle to form an overflow discharge opening between the lower edge of screen and the flange of the bottom, and a riffle within the tailings receptacle, substantially as described. 7th. In an ore separator and amalgamator, a shaking box provided with a grizzly, a tailings receptacle at the delivery end of said box and on a plane below the grizzly, an inclined separator screen extending from the grizzly and across the tailings receptacle, and an apron inclined within the tailings receptacle reversely to the separator screen and provided at its free end with a curved, perforated riffle, substantially as described. 8th. In an ore separator and amalgamator, a shaking box provided with a grizzly, a collector

pan secured firmly to said box and provided with a raised curved rim at its delivery end, a series of riffles fixed within the box and



the collector pan in staggered relation, and each riffle having the perforations and the amalgam coating, and a stationary agitator occupying a fixed position within the box and above the collector pan thereof, substantially as described. 9th. In an ore separator and amalgamator, a suspended box provided with a grizzly perforated at intervals throughout its length, a collector pan fixed to the box below the grizzly and provided with perforated riffles, a series of aprons within the box, below the perforated sections of the grizzly, and each having a perforated riffle in staggered relation to the riffles on the collector pan, a primary screen at the head of the grizzly, a tailings receptacle at the delivery end of the box and provided with an inclined apron and a riffle, and a discharge screen extending from the grizzly over the tailings receptacle, substantially as described. 10th. In an ore separator and amalgamator, a shaking box provided with a grizzly and with a tailings receptacle, a collector pan attached to said box below the grizzly, a series of inclined aprons secured within the box and the tailings receptacle thereof, and the curved perforated riffles at the lower discharge ends of said aprons and having the amalgamated balls or spheres confined loosely therein, substantially as described. 11th. In an ore separator and amalgamator, the combination with a suitable frame, of a shaking box provided with the separating screens and the amalgamated collector devices, a rock shaft arranged longitudinally of the machine, posts fast with said shaft to rock therewith, and linked to the shaking box to vibrate the latter transversely, hangers connected with the frame and the box, and means for operating the rack shaft, substantially as described.

No. 67,747. Gold Concentrator. *(Concentrateur d'or.)*

Louis Charles Park, Vancouver, British Columbia, Canada, 15th June, 1900; 6 years. (Filed 6th June, 1899.)

Claim.—1st. In an apparatus and method of saving gold, in combination, a chute 10 placed at an incline having a grizzly fixed intermediately therein, a riffle box beneath said grizzly, a revolving cylindrical screen communicating with the riffle box, a hopper having flap doors at intervals therein, a shaking table arranged at a declivity beneath the flap doors, perforated trays fixed on said table for receiving the fine gravel for further use screening the same, and of mercury baths placed in the tables at right angles thereto, and fixed depressers contacting with the upper surface of the mercury and means for introducing water to the gravel in the chute 10 and the cylindrical screen for washing the gravel and carrying it forward. 2nd. In an apparatus for the purpose set forth, having a chute with a receiving portion for the gravel and a grizzly in the bottom thereof, and a riffle box therebeneath and a revolving screen for again reducing the materials, a hopper 17 beneath the revolving screen, flap doors at intervals along the opposite sides of the bottom of the said hopper, shaking tables having trays fixed thereon for again reducing the material, heavy screens of metal placed on said tables with a pile of material therebeneath for retaining the fine gold, and mercury baths placed at right angles across the tables having depressers therein for causing the flour gold to be inter.

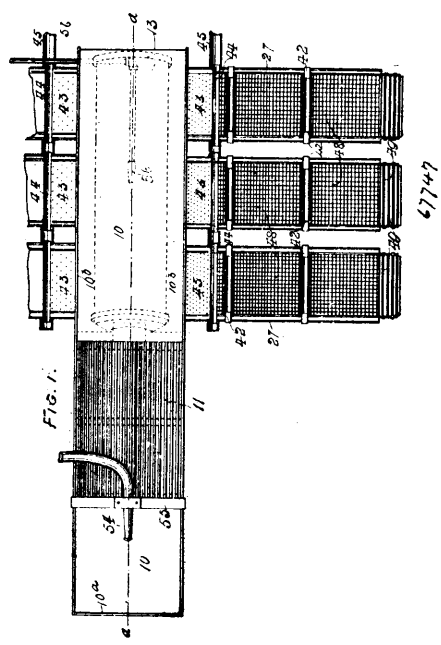


FIG. 1.

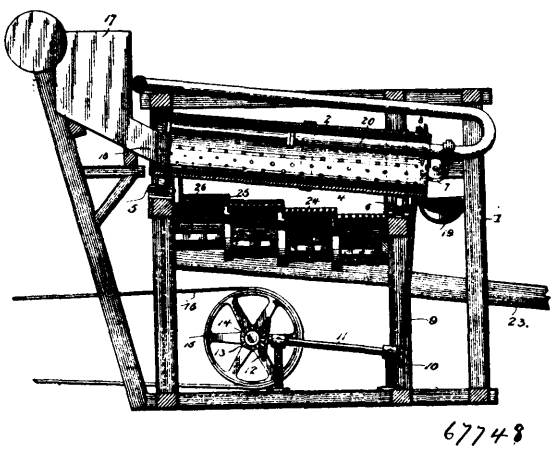
mingled with the mercury, substantially as set forth. 3rd. In an apparatus of the class described, in combination with a chute for the reception of the gravel to be treated having a grizzley therein for reducing the material, a riffle box beneath for arresting the coarse gold, a cylindrical screen for again reducing the materials, an elongated hopper for receiving the material from the screen, and flap doors for controlling the flow of the residue to shaking tables to be further treated. 4th. In an apparatus of the kind described, having the several washing and reducing processes, a shaking table for receiving the residue to be further treated, consisting of a flat receptacle placed at an incline, and movably supported on crooked pivots resting on a fixed frame, said receptacle being divided and jogged downwards at intervals, mercury baths arranged at right angles across the bottom of the receptacle at the points where the downward jogs are located, and fixed depressors connecting the opposite sides of the fixed frame, and lying over the mercury baths and designed to contact with the upper surface of the mercury, and means for imparting a gyratory movement to the table, as set forth. 5th. In an apparatus of the kind and for the purposes described, in combination with a shaking table placed at an incline having its surface covered with metal netting and the blanket or other pile material, said netting forming recesses in the surface of the table, and jogs placed at intervals along said table and mercury baths arranged at the points where the jogs take place, fixed depressers dipping down to the surface of the mercury so that when the table is given gyratory movement there will be a scouring movement between the said depressers and the mercury, as and for the purposes set forth. 6th. For the purposes specified, a table placed at an incline having crooked pivot supports 34 resting in steps or bearings 33 and 35 on the table and a fixed frame respectively, shafts resting on steps in said frame and having bearings in cross pieces 26 and their upper ends resting in a collar 36 fixed to the bottom of the table, crooks in said shafts to correspond with the crooks on the pivot supports and means for imparting movement to the said shafts, as specified. 7th. In combination with a moving table placed at a declivity, having baths of mercury arranged at different planes, depressers fixed to the supporting frame of the table and made to lie over and contact with the upper surface of the mercury in said baths, means for setting the table at different slopes, and a trap attached to the lower end of the table for recovering escaped mercury, substantially as set forth.

No. 67,748. Ore Separator. *(Séparateur d'or.)*

Claude M. Seeley, Tacoma, Washington, U.S.A., 15th June, 1900; 6 years. (Filed 26th June, 1899.)

Claim—1st. In an apparatus for recovering precious metals, the combination of an inclined perforated cylinder, means for imparting a rotary motion to said cylinder, said means comprising a fixed toothed collar or gear on the cylinder, a sprocket chain engaging said gear and also engaging a sprocket wheel, said sprocket wheel being keyed to a shaft, which latter carries at its outer end a bevelled pinion, which pinion meshes with another bevelled pinion on the main power shaft, said main power shaft carrying a belt wheel which is operated by a belt from a suitable source of power, an

inclined amalgamating table arranged beneath the perforated cylinder, said table being provided with riffles for collecting the precious

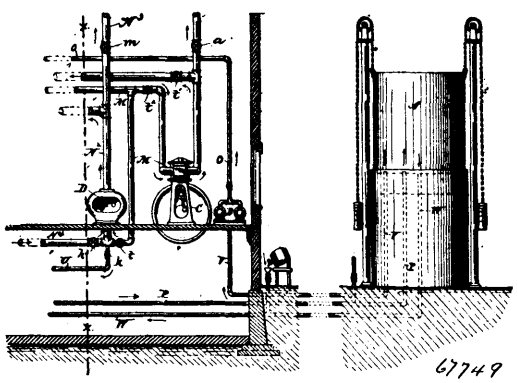


67748

metal, substantially as described. 2nd. In an apparatus for recovering precious metals, the combination of an inclined perforated cylinder, means for imparting a rotary motion to said cylinder, means for imparting a rotary motion to said cylinder, rollers at the upper and lower ends of said cylinder upon which the cylinder rests, and transversely arranged rollers for preventing the cylinder moving longitudinally, and amalgamating tables arranged beneath the cylinder and provided with riffles for engaging the precious metal, substantially as described. 3rd. In an apparatus for recovering precious metals, the combination of an inclined perforated grizzly, means for supplying material to be treated to said grizzly, means for imparting a rotary movement to said grizzly, and inclined amalgamating tables arranged beneath the grizzly and riffles on said table containing mercury for collecting the gold, substantially as described. 4th. In an apparatus for recovering precious metals, the combination of an inclined perforated cylindrical grizzly, the perforations being smallest near the receiving end and largest at the delivery end thereof, means for imparting a rotary motion to the grizzly, amalgamating tables arranged beneath the grizzly in an inclined stair step manner and riffles on said table containing quick silver, substantially as described. 5th. In an apparatus for the recovery of precious metals the combination of a perforated rotary, inclined cylindrical grizzly, means for imparting a rotary motion to the grizzly amalgamating tables arranged beneath the grizzly in a stair stepped inclined manner, riffles on said tables containing quick silver, removable screens interposed between the grizzly and the tables and pipes for conducting water to the interior of the grizzly and on to the amalgamating tables, substantially as described.

No. 67,749. Raw Wool Preparatory Treatment.

(Traitement de laine crue.)



67749

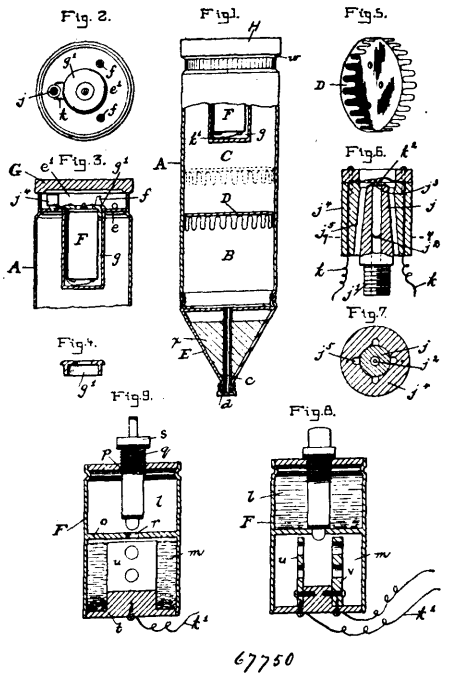
Emile Maertens, Providence, Rhode Island, U.S.A., 15th June, 1900; 6 years. (Filed 21st November, 1899.)

Claim.—1st. In the art of removing solvent or residual solvent from fibrous and other materials containing the same, the improvement which consists in passing a suitable gas through the material, then freeing the gas wholly or in part from the solvent which it has absorbed, and finally re-using the gas, substantially as described. 2nd. In the art of removing solvent or residual solvent from fibrous and other materials containing the same, the improvement which consists in first heating a suitable gas, then passing it through the said material, then cooling the gas whereby it is freed wholly or in part from solvent, and then conducting the gas to a suitable holder, substantially as described. 3rd. In the art of removing solvent or residual solvent from fibrous and other materials containing the same, the improvement which consists in passing a suitable gas through the material, circulating said gas in a closed circuit, freeing it wholly or in part from the solvent which it has absorbed on its way from and before its return through the material, substantially as described. 4th. In the art of removing solvent or residual solvent from fibrous and other materials containing the same, the improvement which consists in passing a suitable gas through the material, circulating said gas in a closed circuit, heating it on its way through the material so as to make its absorbent capacity greater and cooling it on its way from the material so as to free it wholly or in part from solvent, substantially as described. 5th. In the art of removing solvent or residual solvent from fibrous and other materials containing the same, the improvement which consists in circulating through the material a suitable gas, which is drawn from a holder and is returned to said holder after use, substantially as described. 6th. In the art of removing solvent or residual solvent from fibrous and other materials containing the same, the improvement which consists in the employment of a suitable gas or mixture of gases drawn from a holder and used to form an atmosphere above the solvent in the reservoirs, hereinbefore described, to circulate the liquid solvent through the material being treated, to form a heat carrying medium to the material and to serve as a solvent vapour carrying agent from said material, and after being devapourized wholly or in part is returned to the holder and is adapted to be repeatedly re-used, substantially as described. 7th. In apparatus used in the art of extracting matters from fibrous or other materials with volatile solvents and of removing solvent or residual solvent therefrom, the combination of one or more digesters, one or more reservoirs for solvents, a vacuum pump arranged to pump the air or gas out of the system into the atmosphere or to circulate the same through the system, and suitably connected valved piping for circulating the solvent air or gas, substantially as described. 8th. In apparatus used in the art of extracting matters from fibrous or other materials with volatile solvents and of removing solvent or residual solvent therefrom, the combination of one or more digestors, one or more reservoirs for the solvent, a gas holder, a vacuum pump arranged to pump air or gas out of the system into the atmosphere or into the gas holder or to circulate the same through the system, and suitably connected valved piping for circulating the solvents and air or gas and for carrying the gas from the holder to the digesters, reservoirs, etc., and for returning it to said holder, substantially as described.. 9th. In apparatus used in the art of extracting matters from fibrous or other materials with volatile solvents and of removing solvent or residual solvent therefrom, the combination of one or more digestors, one or more reservoirs for the solvents, a vacuum pump arranged to pump air or gas out of the system into the atmosphere or into the gas holder or to circulate the same through the system, a gas compressor and suitably connected valved piping for circulating the solvent and air or gas and for carrying the gas from the holder to the digesters, reservoirs, etc., and for returning it to said holder, substantially as described. 10th. In apparatus used in the art of extracting matters from fibrous or other materials with volatile solvents and of removing solvent or residual solvent therefrom, the combination of one or more digesters, one or more reservoirs for solvents, a vacuum pump arranged to pump air or gas out of the system into the atmosphere or into the gas holder or to circulate the same through the system, a gas compressor, a condenser and suitably connected valve piping for circulating the solvent and air or gas, and for carrying the gas from the holder to the digesters, reservoirs, compressors, etc., and for returning it to said holder, substantially as described. 11th. In apparatus used in the art of extracting matters from fibrous or other materials with volatile solvents and of removing solvent or residual solvent therefrom, the combination of one or more digesters, one or more reservoirs for the solvents, a gas holder, a vacuum pump, a gas compressor, a condenser, a heater, and suitably connected valve piping for circulating the solvent and air or gas and for carrying the gas from the holder to the digesters, reservoirs, compressors, etc., and for returning it to said holder, substantially as described. 12th. In apparatus used in the art of extracting matters from fibrous or other materials with volatile solvents and of removing solvent or residual solvent therefrom, the combination of one or more digesters, one or more reservoirs for solvents, a gas holder, a vacuum pump, a gas compressor, a condenser, a heater, a blower, and suitable connected valved piping for circulating the solvent and air or gas and for carrying the gas from the holder to the digesters, reservoirs, compressor, etc., and for returning it to said holder, substantially as described. 13th. In apparatus used in the art of extracting matters from fibrous or other materials with volatile solvents and of removing solvent or residual solvent therefrom, the combination of one or more digesters, one or more reservoirs for the solvent, a gas holder, a vacuum pump, a gas compressor, a condenser, a heater, a blower, a four way valve, and suitably connected valved piping for circulating the solvent and air or gas for carrying the gas from the holder to the digesters, reservoirs, compressor, etc., and for returning it to said holder, substantially as described. 14th. In apparatus used in the art of extracting matters from fibrous or other materials with volatile solvents and of removing solvent or residual solvent therefrom, the combination of one or more digesters, one or more reservoirs for the solvents, a gas holder, a vacuum pump, a gas compressor, a condenser, a heater, a blower, a four way valve, a trap

tank, and suitably connected valve piping for circulating the solvent and air or gas and for carrying the gas from the holder to the digesters, reservoirs, compressors, etc., and for returning it to said holder, substantially as described. 15th. In apparatus used in the art of extracting matters from fibrous or other materials with volatile solvents and of removing solvent or residual solvent therefrom, the combination of one or more digesters, one or more reservoirs for the solvents, a gas holder, a vacuum pump, a gas compressor, a condenser, a heater, a blower, a four way valve, a trap tank, an overflow tank and suitably connected valved piping for circulating the solvent and air or gas and for carrying the gas from the holder to the digesters, reservoirs, compressors, etc., and for returning it to the said holder, substantially as described. 16th. In apparatus used in the art of extracting matters from fibrous or other materials with volatile solvents and of removing solvents or residual solvents therefrom, the combination of one or more digesters, one or more reservoirs for the solvents, a gas holder, a vacuum pump, a gas compressor, a condenser, a heater, a blower, a four way valve, a trap tank, an overflow tank, a separating tank, and suitably connected valved piping for circulating the solvent and air or gas and for carrying the gas from the holder to the digesters, reservoirs, compressor, etc., and returning it to said holder, substantially as described.

No. 67,750. Illuminating Projectile.

(Projectile illuminéc.)

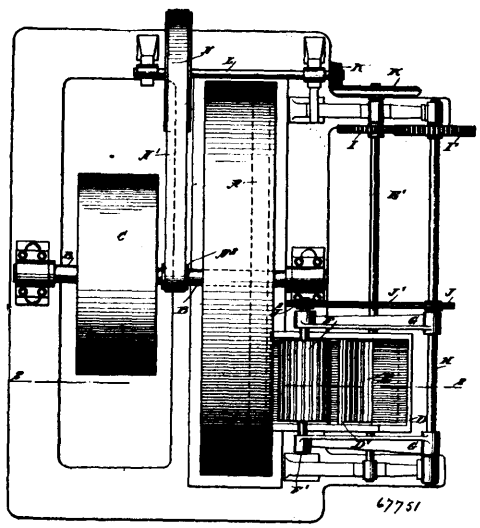


Aaron Brylanski, assignee of William Judson Wilson, Richmond, Virginia, and William Holliday Rose, Baltimore, Maryland, U.S.A., 15th June, 1900; 6 years. (Filed 4th August, 1899.)

Claim.—1st. The combination of a buoyant shell having a gas chamber, a burner communicating with said chamber, an electric battery carried by the shell, a circuit for said battery having its terminals adjacent to the burner, and a resistance wire connecting said terminals and located in position to ignite the gas issuing from the burner. 2nd. A cylindric projectile adapted to be fired from a gun and having two chambers separated by a perforated partition, a water-inlet to one of said chambers, a weight to keep said chamber lowermost when the projectile is floating, valcium carbide charged into said lower chamber, burner tubes or aperture, communicating with the upper chamber, and means for lighting the gas escaping from the burners after the projectile alights in the water. 3rd. An illuminating projectile to float on water having in combination a cylindric shell forming a chamber, a movable partition dividing the chamber into two compartments, B, and C, calcium carbide in one compartment and confined by said partition, a water inlet to the calcium carbide compartment, gas burners, and an electric battery carried by the shell for lighting the gas escaping from the burners after the projectile alights in the water. 5th. An illuminating projectile to float on water having in combination a cylindric shell forming a carbide chamber, a water inlet to said chamber temporarily closed by a removable cap, gas burners, an electric battery carried by the shell for lighting the escaping gas after the projectile alights in the water, a buffer block loosely covering the burner end of the projectile, and a cap H, covering said block and temporarily excluding air and moisture while the projectile is stored.

No. 67,751. Feed Attachments for Pulp Wood Chippers.

(Attache d'alimentateur pour rogneur de bois à pulpe.)



Samuel Wesley Butterfield, Three Rivers, Quebec, Canada, 15th June, 1900; 6 years. (Filed 25th September, 1899.)

Claim.—1st. In a feed attachment for wood pulp chippers, the combination with a rotary cutter, an inclined feed table having an opening in its bottom, a lower feed roller below the table and operated from the cutter shaft, said roller projecting into the opening of the feed table, of a shaft in rear of the feed roller shaft and geared therewith, arms mounted loosely on said shaft, an upper feed roller mounted in the free ends of the arms and adapted to engage the upper surface of the timber, and means for operating said upper feed roller from the shaft upon which its arms are mounted, substantially as described. 2nd. In a feed attachment for wood pulp chippers, the combination with a rotary cutter, and an inclined table having an opening in its bottom, of a shaft below the table and provided with a gear wheel, a feed roller mounted on the shaft and projecting into the opening of the table, means for operating the feed roller shaft from the cutter shaft, a shaft in rear of the feed roller shaft and provided with a gear wheel meshing with the gear wheel thereof, arms mounted loosely on the said shaft, an upper feed roller mounted in the free ends of the said arms, and means for operating the upper roller from the said shaft, substantially as described. 3rd. In a feed attachment for wood pulp chippers, the combination with a rotary cutter, and inclined feed table having an opening in its bottom, a shaft below the feed table and provided with a gear wheel, a lower feed wheel on the shaft and projecting into the opening of the feed table, and means for operating the shaft of the feed roller from the cutter shaft, of a shaft in rear of the shaft of the said roller and provided with a gear wheel meshing with the gear wheel of the feed roller shaft, arms loosely fulcrumed on the said shaft, an upper roller mounted in the free ends of the arms, a sprocket wheel on the shaft of the said upper roller, a sprocket wheel on the shaft upon which the arms are mounted, and a sprocket chain passing around said wheels, substantially as described.

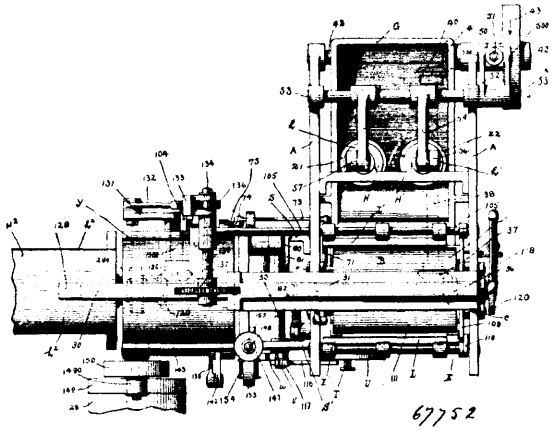
No. 67,752. Sterotype Casting and Finishing Machine.

(Machine à couler et finir les clichés.)

Henry Alexander Wise Wood, New York City, New York, U.S.A., 15th June, 1900; 6 years. (Filed 13th February, 1899.)

Claim.—1st. The combination with stereotype plate casting mechanism of automatically operating devices for operating said mechanism to automatically cast stereotype printing plates, substantially as described. 2nd. An automatically operating plate casting mechanism and plate finishing mechanism arranged in co-operative relation to cast and finish stereotype printing plates, substantially as described. 3rd. The combination of automatically operating plate casting mechanism, conveying mechanism and plate finishing mechanism arranged to co-operate, substantially as and for the purpose set forth. 4th. The combination of automatically operating plate casting mechanism, and edge finishing devices arranged to co-operate, substantially as and for the purpose set forth. 5th. The combination of automatically operating plate casting mechanism, and devices for finishing the back surface of the plate arranged to co-operate, substantially as and for the purpose set forth. 6th. The combination of an automatically operating plate casting mechanism, conveying mechanism, edge finishing devices and devices for finishing the back surface of a plate, arranged to co-operate, substantially as and for the purpose set forth. 7th. In an automatic plate casting mechanism, a casting chamber, means for automatically moving

a matrix into position in the casting chamber, and means for directing the molten metal into said casting chamber, arranged to co-operate

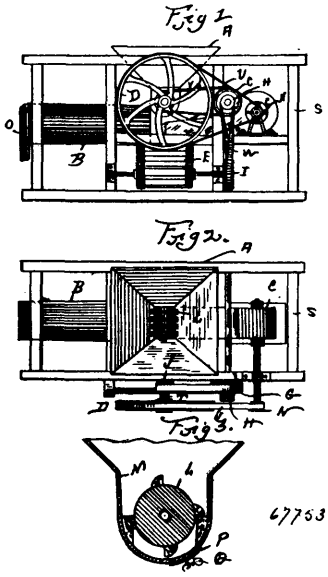


substantially as and for the purpose set forth. 8th. In an automatic plate casting mechanism, a casting chamber, means for locking a matrix in said chamber, means for directing the molten metal into said chamber, and means for automatically stripping the matrix off from the surface of the cast plate, arranged to co-operate, substantially as and for the purpose set forth. 9th. In a plate casting mechanism, a casting chamber and means for stripping or unwinding the matrix from the cast plate, substantially as described. 10th. In a plate casting mechanism, a casting chamber, means for supporting or positioning a matrix in the casting chamber, and means whereby this supporting means may be moved to strip or unwind the matrix from the cast plate, substantially as described. 11th. In a plate casting mechanism, a casting chamber, and means for automatically stripping or unwinding the matrix from the cast plate, substantially as and for the purpose set forth. 12th. In a plate casting mechanism, a casting chamber, means for automatically stripping or unwinding the matrix from the surface of the cast plate, and means for automatically removing the plate from the casting chamber, substantially as and for the purpose set forth. 13th. In a plate casting mechanism, the combination of a casting chamber, and means for automatically stripping or unwinding the matrix by two of its edges from the surface of the cast plate, substantially as and for the purpose set forth. 14th. In a plate casting mechanism, a casting chamber, means for automatically bringing a matrix into said casting chamber, and means for automatically cooling the cast plate, substantially as and for the purpose set forth. 15th. In a plate casting mechanism, a casting chamber, means for locking a matrix in said casting chamber, means for directing the molten metal into said casting chamber, means for removing the matrix from the surface of the cast plate, a finishing mechanism and devices for removing the plate from the casting chamber, and presenting the same to the finishing mechanism, substantially as and for the purpose set forth. 16th. A framing provided with means whereby the same may be inserted and held within a casting chamber and with clamping devices arranged to receive and hold the ends of the matrix before the framing is placed in the casting chamber, so that when the framing is inserted and held within the casting chamber, the matrix will thereby be brought into proper position, substantially as and for the purpose set forth. 17th. A framing capable of being inserted within a casting chamber, provided with clamping means for clamping and holding the edges of a matrix, and with registering devices, whereby the matrix may be accurately positioned and held by said framing, substantially as and for the purpose set forth. 18th. A framing for holding the edges of a matrix, comprising two side bars having clamping devices, one of said bars carrying a finishing strip, the side bars being capable of being inserted within a casting chamber, substantially as and for the purpose set forth. 19th. A framing for holding the matrix, comprising two dovetailed side bars having clamping means for holding the matrix, substantially as and for the purpose set forth. 20th. A framing for holding the matrix, comprising two side bars connected by flexible spring strips, said bars being capable of being inserted within a casting chamber, substantially as and for the purpose set forth. 21st. In a stereotype plate casting machine, the combination of a core or cylinder, devices co-operating with said cylinder to form a curved casting chamber, means for automatically forcing molten metal into said curved casting chamber, and means for actuating the part of the chamber so that the same will be closed as the molten metal is forced in, and so that the same will be opened after the plate has been cast, substantially as and for the purpose set forth. 22nd. In a stereotype plate casting machine, the combination of a central core or cylinder, devices co-operating therewith to form a casting chamber, means whereby the matrix will be carried by said devices, and means for automatically opening said casting chamber, and by the same operation stripping or unwinding the matrix from the cast plate, substantially as and for the purpose set forth. 23rd. The combination in a stereotype plate casting machine of a central core or cylinder, and two co-operating matrix carrying segments, and means for moving the segments to open the casting chamber, and to strip the matrix from the surface of the cast plate, substantially as and for the purpose set forth. 24th. In a stereotype plate casting mechanism, a central core or cylinder, two co-operating segments provided with means whereby the edges of the matrix may be secured thereto, and means for automatically moving said segments to open the casting chamber, and to strip or unwind the matrix from the surface of the cast plate, substantially as and for the purpose set forth. 25th. In a stereotype plate casting machine, the combination of a central core or cylinder, and two matrix carrying segments, said segments being pivoted, and means for moving the segments around the pivot to automatically open the casting chamber, and to strip or unwind the matrix from the surface of the cast plate, substantially as and for the purpose set forth. 26th. The combination in a stereotype plate casting mechanism of a central core or cylinder, two matrix carrying segments mounted upon a common pivot, and means for moving the segments about their pivot to open the casting chamber, and to strip or unwind the matrix from the surface of the cast plate, substantially as and for the purpose set forth. 27th. The combination in a stereotype plate casting machine of a central core or cylinder, co-operating matrix carrying segments, means for moving said segments to unwind the matrix from the surface of the cast plate, and then bodily away from the central core, substantially as and for the purpose set forth. 28th. In a stereotype plate casting mechanism, the combination of a central core or cylinder, matrix carrying segments, and cam mechanism for moving said segments to unwind the matrix from the surface of the cast plate, substantially as and for the purpose set forth. 29th. In a stereotype plate casting machine, the combination of a central core or cylinder, matrix carrying segments co-operating therewith, cam mechanism for moving said segments to unwind or strip the matrix from the surface of the cast plate, and cam mechanism for moving said segments bodily away from the central core or cylinder, substantially as and for the purpose set forth. 30th. In a stereotype plate casting mechanism, the combination of a central core or cylinder, matrix carrying segments co-operating therewith, cam mechanism mounted on a common shaft for moving the segments to strip or unwind the matrix from the surface of the cast plate and to move the segments bodily away from the central core or cylinder, substantially as and for the purpose set forth. 31st. In a stereotype plate casting mechanism, the combination of a central core or cylinder, two matrix carrying segments co-operating therewith, said segments being mounted on a common pivot or shaft, mechanism for moving said segments around their pivot to strip or unwind the matrix from the surface of the cast plate, and means for moving the pivot or shaft to cause the segments to move bodily with relation to the central core or cylinder, substantially as and for the purpose set forth. 32nd. In a stereotype plate casting mechanism, the combination of a central core or cylinder, devices for co-operating therewith from the side walls of a casting chamber, and end rims arranged to form the ends of said casting chamber, and means for moving one of the end rims to relieve the end of the cast plate, substantially as and for the purpose set forth. 33rd. The combination in a stereotype plate casting mechanism of devices for making up and constituting a curved casting chamber, a lug or shoulder as 25 projecting into the chamber and having an inclined face, and a flat end or edge, so that a working shoulder p^1, will be formed near one side of the cast plate and so that the cast plate can be withdrawn from the lug 25, substantially as and for the purpose set forth. 34th. The combination in a stereotype plate casting mechanism of devices constituting and forming a curved casting chamber, a spout connecting with said chamber, said spout having a lip projecting within the casting chamber, said lip having an inclined face, and a flat end or edge, whereby a plate may be cast with a working shoulder p^1, and a tail p, which extends up to its breaking edge, and so that the plate can be withdrawn from said spout, substantially as described. 35th. The combination in a stereotype plate casting mechanism of a central core or cylinder, devices co-operating therewith to form the side walls of a curved casting chamber, a finish strip carried by these devices, means for moving these devices to free the cast plate and to move the finish strip so that the plate may be delivered from the casting chamber past the same, substantially as and for the purpose set forth. The combination in a stereotype plate casting mechanism of a central core or cylinder, two segments co-operating therewith and forming the side walls of a casting chamber, a finish strip carried by one of said segments and means for moving the segments and the finish strip away from the central core or cylinder, to free the cast plate, substantially as and for the purpose set forth. 37th. The combination of devices forming a curved casting chamber, means for automatically forcing molten metal into said chamber, means for automatically closing said chamber when the metal is forced in, and for automatically opening said chamber after the plate is set, and a mechanism arranged to automatically cool the plate after the same has been cast, substantially as and for the purpose set forth. 38th. The combination in an automatic stereotype plate casting mechanism, of devices for forming a curved casting chamber, and means for automatically forcing molten metal into said casting chamber, and mechanism arranged to automatically supply water to the inside of the core or cylinder to cool the plate after the same has been cast, substantially as and for the purpose set forth. 39th. The combination in a stereotype plate casting mechanism of

devices for forming a curved casting chamber, including a central core or cylinder, inlet and outlet pipes projecting into the interior of said core or cylinder, and means for automatically letting water into the said cylinder to cool the plate after the same is cast, and for withdrawing the water before the plate is cast, substantially as and for the purpose set forth. 40th. The combination in a stereotype plate casting mechanism of devices comprising or forming a curved casting chamber, including a core or cylinder, an inlet pipe projecting through one journal of said cylinder, an outlet pipe projecting through the other journal of said cylinder, and having a downward extension to form a siphon, valves in said inlet and outlet pipes, and means for automatically operating said valves, substantially as and for the purpose set forth. 41st. The combination in a stereotype plate casting machine, of a cylinder, devices co-operating therewith to form a casting chamber, and means for turning the cylinder on an axis passing through the centre of the same to remove the plate from the casting chamber, substantially as and for the purpose set forth. 42nd. The combination in a stereotype plate casting mechanism, of a cylinder, devices co-operating therewith to form a casting chamber, and means for intermittently turning the cylinder part of a revolution, so that the plates may be cast upon different portions of the periphery of said cylinder, substantially as and for the purpose set forth. 43rd. The combination in a stereotype plate casting mechanism of a cylinder, segments co-operating therewith to form a casting chamber, and means for turning the cylinder on on axis passing through the centre of the same to remove the cast plate from the casting chamber, substantially as and for the purpose set forth. 44th. In a stereotype plate casting mechanism, the combination of a cylinder, devices co-operating therewith to form a casting chamber, a spout connected to the casting chamber, means for turning the cylinder to remove the cast plate from the casting chamber and to free the plate from the metal remaining in the spout, substantially as and for the purpose set forth. 45th. The combination in a stereotype plate casting mechanism of a cylinder, devices co-operating therewith to form a casting chamber, and means for intermittently imparting a half turn to the cylinder, substantially as and for the purpose set forth. 46th. The combination in a stereotype plate casting mechanism, of a cylinder co-operating therewith to form a casting chamber, and a crank actuated mechanism for intermittently turning the cylinder, substantially as and for the purpose set forth. 47th. The combination in a stereotype plate casting mechanism, of a cylinder, devices co-operating therewith to form a casting chamber, means for intermittently turning the cylinder, and a locking mechanism arranged to hold the cylinder in its various positions, substantially as and for the purpose set forth. 48th. The combination in a stereotype plate casting mechanism, of a core, devices co-operating therewith to form a casting chamber, means for supporting a matrix in the casting chamber, means for forcing molten metal into the casting chamber, and means for stripping the matrix from the surface of the cast plate, substantially as and for the purpose set forth. 49th. The combination in a stereotype plate casting mechanism, of a cylinder, devices carrying the matrix and co-operating therewith to form a casting chamber, means for moving these devices to open the casting chamber and to strip the matrix from the surface of the cast plate, and means for turning the cylinder to remove the cast plate from the casting chamber when the latter has been opened, substantially as and for the purpose set forth. 50th. The combination in a stereotype plate casting mechanism of a cylinder, devices co-operating therewith to form a casting chamber, means for turning the cylinder to carry the plate from the casting chamber, and detaching mechanism arranged to detach the cast plate from the surface of the cylinder, substantially as and for the purpose set forth. 51st. The combination in a stereotype plate casting mechanism of a cylinder, devices co-operating therewith to form a casting chamber, means for turning the cylinder to carry the plate from the casting chamber, and a lifting mechanism arranged to lift the plate by its edges off from the periphery of the cylinder, substantially as and for the purpose set forth. 52nd. The combination in a stereotype plate casting mechanism of a cylinder, devices co-operating therewith to form a casting chamber arranged so that the plate will be cast with a working shoulder near one edge, means for rotating the cylinder to carry the plate from the casting chamber, and lifting devices adapted to engage one edge of the plate and the said shoulder of the plate, to forcibly remove the plate from the periphery of said cylinder, substantially as and for the purpose set forth. 53rd. The combination in a stereotype plate casting mechanism of a cylinder, devices co-operating therewith to form a casting chamber, means for turning the cylinder to carry the plate out of the casting chamber, a lifter arranged on each side of the cylinder, and means for simultaneously operating said lifters to forcibly remove the cast plate from the periphery of the cylinder, substantially as and for the purpose set forth. 54th. The combination in a stereotype casting mechanism of a cylinder, devices co-operating therewith to form a casting chamber, means for turning the cylinder to remove the plate from the casting chamber, lifters for forcibly removing the plate from the periphery of the cylinder, and conveying devices for removing the plate from the lifters, substantially as and for the purpose set forth. 55th. The combination with the plate casting mechanism of skids extending from said mechanism, and a conveying mechanism for sliding the plate along said skids, substantially as and for the purpose set forth. 56th. The combination of a casting mechanism, skids or ways extending from said casting mechanism, and a reciprocating traveller or conveyer for sliding the plate along said skids or ways, substantially as and for the purpose set forth. 57th. The combination of a plate casting mechanism, skids or ways extending from the same, a traveller or conveyer for sliding the plate along said skids or ways, and a crank actuated mechanism for reciprocating the conveyer, substantially as and for the purpose set forth. 58th. The combination of plate casting mechanism, a reciprocating traveller or conveyer for carrying the plate away from the casting mechanism, and edge finishing cutting mechanism arranged to trim or true the edge of the plate as the same is moved by the conveyer, substantially as and for the purpose set forth. 59th. The combination with a plate casting mechanism, of a plate clamping mechanism, means for moving the plate from the casting mechanism into the plate clamping mechanism, and a shaving mechanism arranged to shave or trim the inner surface of the plate while in the clamping mechanism, substantially as and for the purpose set forth. 60th. The combination with a plate casting mechanism, of a dome or arch, a conveying mechanism for moving the plate from the casting mechanism into this arch, means for clamping the plate in this arch, and a trimming mechanism arranged to trim or true the inner surface of the plate while clamped in the arch, substantially as and for the purpose set forth. 61st. The combination in a plate finishing mechanism of skids or ways, a clamping mechanism arranged in line with skids or ways, means for conveying a plate along the skids or ways into the clamping mechanism, and a truing or trimming mechanism arranged to true the inner surface of the plate while the same is held in the clamping mechanism, substantially as and for the purpose set forth. 62nd. The combination of skids or ways, a mechanism for moving a plate along said ways, a dome or arch arranged in line with said skids or ways, a movable clamping strip arranged in line with one of said skids, means for actuating this clamping strip to form a clamping mechanism, and a truing mechanism arranged to finish the inner surface of the plate while the same is clamped, substantially as and for the purpose set forth. 63rd. The combination of skids or ways, a truing mechanism for truing the inner surface of the plate, arranged in line with said skids or ways, a reciprocating conveyer for sliding the plates along said ways, and into position to be engaged by said truing mechanism, and a gravity pawl mounted in said reciprocating conveyer, to carry the plate beyond the position where the same is operated upon by the truing mechanism, substantially as and for the purpose set forth. 64th. The combination of a plate casting mechanism, comprising a cylinder and co-acting devices, a mechanism for finishing the interior of the plates arranged substantially in line with said cylinder, and conveying mechanism for moving the plate from over said cylinder to the said finishing mechanism, substantially as and for the purpose set forth. 65th. The combination of an automatic plate casting mechanism, an automatic plate finishing mechanism, a power driven shaft for operating the finishing mechanism, a shaft for operating the casting mechanism, and a clutch arranged between these two shafts, substantially as and for the purpose set forth. 66th. The combination of an automatic plate casting mechanism, a shaft for operating the same, an automatic plate finishing mechanism and a conveying mechanism, a shaft for operating the finishing and conveying mechanism, and a clutch arranged between said shafts, substantially as and for the purpose set forth. 67th. The combination of an automatic plate casting mechanism, a shaft having connections to operate the same, a clutch connecting this shaft with a power driven shaft, and automatic stopping mechanism arranged to disengage said clutch, substantially as and for the purpose set forth. 68th. The combination of an automatic plate casting mechanism, a shaft having connections to operate the same, a clutch arranged to connect said shaft to the source of motive power, a disc driven from said shaft, a pin adjustably mounted on said disc, and connections whereby said pin will act to disengage the clutch, substantially as and for the purpose set forth. 69th. The combination with an automatic plate casting mechanism, a shaft having connections to actuate the same, a clutch for throwing said shaft into and out of operation, a handle for operating said clutch, a disc driven from said shaft, and a pin adjustably mounted in said disc, so as to bear on said handle to automatically stop the casting mechanism, substantially as and for the purpose set forth. 70th. The combination of an automatic plate casting mechanism, a shaft having connections to operate the same arranged so that a plate will be cast for each revolution of said shaft, a clutch for throwing said shaft into and out of operation, a handle for operating said clutch, a disc driven from said shaft by any suitable reducing gear, as a worm and worm wheel, a numbered ring in which said disc turns, and a pin which may be secured in different positions in said disc arranged to strike on said handle to automatically disengage the clutch when the desired number of plates, to which the machine is set have been cast, substantially as and for the purpose set forth. 71st. The combination in a stereotype plate casting mechanism, of devices for making up and constituting a curved casting chamber, a lug or shoulder as 25 projecting into the chamber and having an inclined face, and a flat end or edge, so that the working shoulder p^1 will be formed near one side of the cast plate and so that the cast plate can be withdrawn from the lug 25, substantially as and for the purpose set forth. 72nd. The combination in a stereotype plate casting mechanism, of devices constituting and forming a curved casting chamber, a spout connecting with said chamber, said spout having a lip projecting within the casting chamber, said lip having an

inclined face, and a flat end or edge, whereby a plate may be cast with a working shoulder p^1 and a tail p, which extends up to its breaking edge, and so that the plate can be withdrawn from said spout, substantially as described.

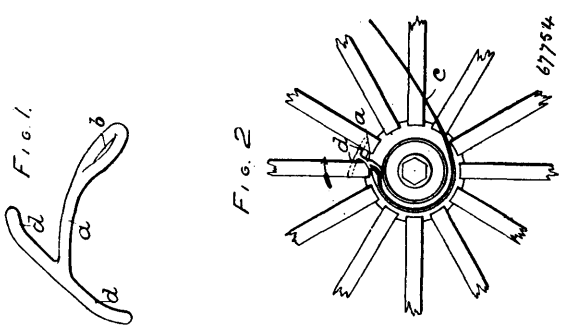
No. 67,753. Pneumatic Concentrator.
(Concentrateur pneumatique.)



Arthellow M. Randolph, Vermonia, Oregon, U.S.A., 15th June, 1900; 6 years. (Filed 25th May, 1899.)

Claim.—1st. In an apparatus of the class described, the combination with the hopper, provided with a suitable outlet, and the blower arranged adjacent to said outlet, of the open end stationary cylinder arranged opposite said blower, the flannel or similar lining detachably within said cylinder adapted to catch and hold the dust being carried through the receiver by the current of air, said lining then being adapted to be removed to secure the contained dust. 2nd. The combination with the hopper, provided with a suitable outlet, and the blower arranged adjacent one side of said outlet, of the open end receiver arranged opposite said blower, the flannel or equivalent lining for said receiver, provided with a depending bag portion at one end, whereby the dust blown through said receiver by the current of air is caught and retained by said bag portion. 3rd. The combination with the hopper provided with a suitable outlet, the contained crusher, and the blower arranged adjacent said outlet, of the receiver arranged opposite said blower, the flannel or similar lining detachably secured within said receiver, and the open end bag portion depending from the end of the receiver opposite from the blower, whereby any particles that would otherwise be carried by the current of air through and out of the receiver are caught and retained by said bag portion.

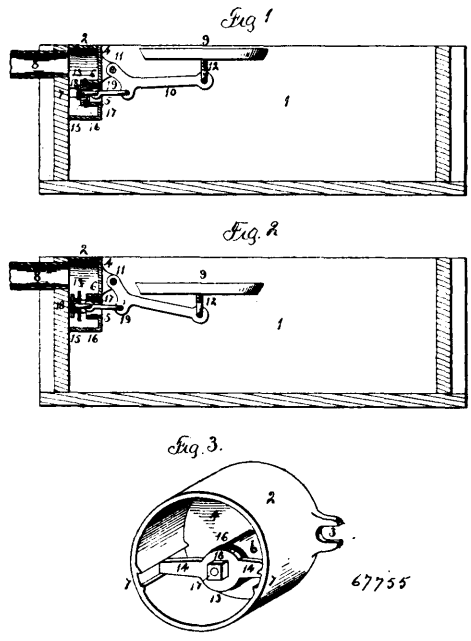
No. 67,754. Hitching Device. (*Entrave.*)



Caleb Bingham Mansell, Vancouver, British Columbia, 15th June, 1900; 6 years. (Filed 14th April, 1900.)

Claim.—An article of manufacture, consisting of a T-shaped hitching device attached to a tethering strap, having a downward curve in the stem a, an eye in the end of such stem and downward curves on the opposite ends of the cross arms d, substantially for the purpose set forth.

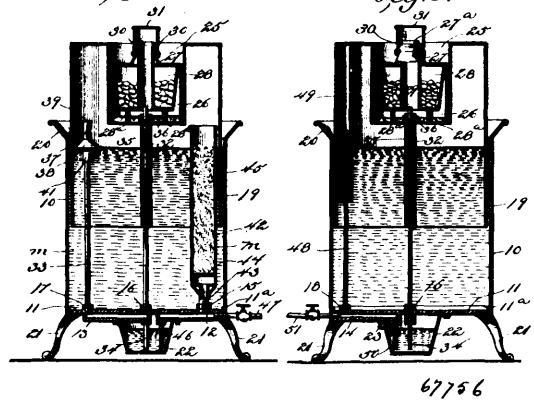
No. 67,755. Water Tank. *(Réservoir.)*



Chester Farmer, Rockford, Illinois, U.S.A., 15th June, 1900; 6 years. (Filed 21st May, 1900.)

Claim.—The combination of a water tank, a valve therefor consisting of a casing secured to the inside of the tank having one closed end, an opening through the closed end, a closure for the opening having two radial arms and a central disc of yielding material, the arms guided in ways in connection with the casing, ears extending from the closed end, a lever having a pivotal connection with the ears, a float connected to the free end of the lever, and a link connecting the lever with the closure.

No. 67,756. Acetylene Gas Generator.
(Générateur à gaz acétylène.)

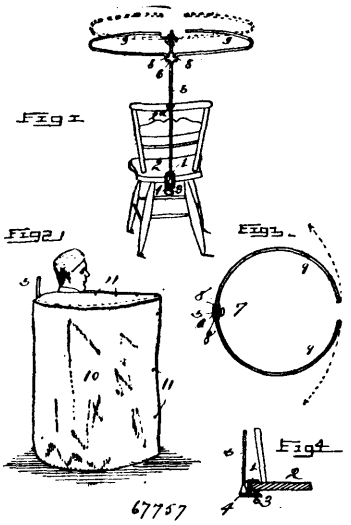


Thomas Seevers Oskaloosa, Iowa, U.S.A., 15th June, 1900; 6 years. (Filed 17th November, 1899.)

Claim.—1st. The combination with a floatable bell, a generator mounted on said bell, and a tank in which the bell moves having a lower trap, of an imperforate tube attached to the bell to travel therewith and extending into the generator to terminate above the bottom thereof, the extended end of the tube serving to prevent the escape of water from the generator and thereby form a seal around the cover of said generator the said cover and a pipe connected to the said trap and over which the said tube loosely moves. 2nd. In an acetylene gas apparatus, the combination of a floatable bell, a generator therein comprising a well or cavity and a pendent water tube which opens into said cavity, the upper terminal of the said tube being located above the bottom of the well or cavity to prevent the escape of water therefrom, a carbide vessel, a cover mounted over the carbide vessel and closed by a water seal established by the retained water in the well or cavity, and a central perforated gas tube, a tank

in which the said bell moves having a lower trap, and a gas pipe extending from said perforated gas tube through the pendent water tube and communicating with the trap at the bottom of the tank. 3rd. In an acetylene gas apparatus, the combination of a floatable bell, a generator therein comprising a well or cavity, and a water tube which enters said cavity, an upper nipple, a carbide vessel having a perforated tube which is interlocked with said nipple, a tank in which said bell has movement and provided with a lower trap, and a fixed gas tube extending from a point of communication with the trap upwardly through the water tube of the bell and communicating with the tube of the carbide vessel. 4th. In an acetylene gas apparatus, the combination of a generator having a nipple at its upper end, a carbide vessel provided with a perforated tube which enters said nipple and has interlocking engagement therewith, a cap for closing the upper end of the perforated tube, and a gas pipe entering the tube of the carbide vessel and receiving gas from the generator, substantially as described. 5th. In an acetylene gas apparatus, the combination with a tank having a lower trap, of a floatable bell having a depending tube, a generator carried by said bell also having a depending tube, and a gas pipe having two lengths arranged to communicate with both of the said tubes to provide a service feed and a vent. 6th. In an acetylene gas apparatus, the combination with a tank, a floatable bell, a generator carried by the bell, a gas tube having two lengths arranged to communicate with the generator and the gas chamber of the floatable bell, and a valve provided with a float and fitted slidably to the end of that length of the gas pipe which conveys the gas to the floatable bell, said valve having ports which open through the under surface of the float and a third length of pipe for venting the apparatus, all the lengths of pipe being in communication with a trap at the lower end of the tank.

No. 67,757. Vapor Bath. (*Bain à vapeur.*)



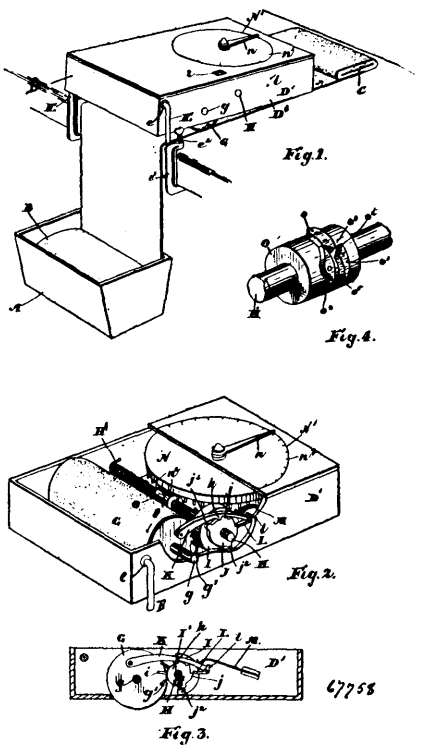
Sylvester Wygal, Paola, Kansas, U.S.A., 15th June, 1900; 6 years. (Filed 5th April, 1900.)

Claim.—In a vapor bath apparatus, the combination of a chair, a bracket 1 clamped upon the seat of the chair, an upright rod 5 secured to the bracket, a sliding sleeve mounted upon the rod and provided with laterally projecting ears 8 having vertical holes therein, a set screw 7 carried by said sleeve and impinging upon said rod, a staple 2^a embracing the rod and secured to the chair back, a pair of semi-circular arms 9, having their rear ends bent vertically downward and pivotally engaged with the holes of said sleeve, and a flexible cover 10, suspended from said swinging arms and adapted to open or close coincidently with the free ends of said arms, substantially as described.

No. 67,758. Cloth Measuring Machine.
(*Machine à mesurer le drap.*)

Edwin Carter Crompton and William Graham Killmaster, both of Brantford, Ontario, Canada, 15th June, 1900; 6 years. (Filed 11th April, 1900.)

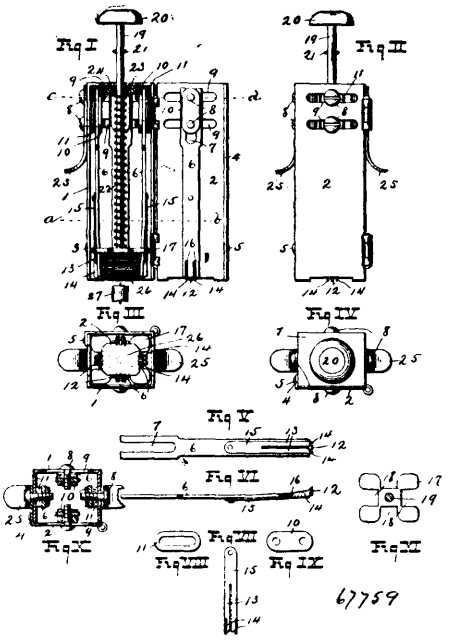
Claim.—1st. The combination with the casing pivotally supported at one end, of a roller journalled in the casing and designed to be turned by the drawing of the web or roll of cloth and registering mechanism connected to the roller for computing the number of yards traversed by the roller, as and for the purpose specified. 2nd. The combination with the casing having pivoted sockets at one end and the arms held therein and the clamps to which the arms are connected, of a roller journalled in the casing and designed to be turned by the drawing of the web or roll of cloth and registering mechanism connected to the roller for computing the number of yards traversed by the roller, as and for the purpose specified. 3rd. The combination with the casing loosely supported at one end and having an index



opening therein and the roller suitably journalled in the casing and designed to be turned by the roll of cloth as it passes under it and having a laterally projecting pin, of the index drum having four arms secured thereto and designed to be engaged by such pin and means for holding such index drum in each succeeding position it is turned to, as and for the purpose specified. 4th. The combination with the casing loosely supported at one end and having an index opening therein and the roller suitably journalled in the casing and designed to be turned by the roll of cloth as it passes under it and having a laterally projecting pin, of the index drum having four arms secured thereto and designed to be engaged by such pin, the ratchet wheel provided with four teeth and the arm provided with a tooth to engage therewith, as and for the purpose specified. 5th. The combination with the casing loosely supported at one end and having an index opening therein and the roller suitably journalled in the casing and designed to be turned by the roll of cloth as it passes under it and having a laterally projecting pin, of the index drum having four drums mounted thereto and designed to be engaged by such pin, the ratchet wheel provided with four teeth, the arm provided with a tooth to engage therewith and means for restoring the index drum to its normal position, as and for the purpose specified. 6th. The combination with the casing loosely supported at one end and having an index opening therein and the roller suitably journalled in the casing and designed to be turned by the roll of cloth as it passes under it and having a laterally projecting pin, of the index drum having four arms secured thereto and designed to be engaged by such pin, the ratchet wheel provided with four teeth, the last in order of rotation being larger than the other three, the arm having a tooth designed to engage with the ratchet teeth spring held as specified, the supplemental teeth on the ratchet wheel and the rocking detent suitably pivoted and provided with a stop pin and designed to act with the supplemental tooth and the end of arm, as and for the purpose specified. 7th. The combination with the casing loosely supported at one end and the roller suitably journalled in the casing and held by the weight of the casing upon the roll of cloth and of a circumference of substantially a quarter of a yard, of a counter spindle suitably journalled in the casing and provided with mechanism for registering a quarter of a yard upon each revolution of the roller and spring means for restoring the yard registering mechanism to its normal position, as and for the purpose specified. 6th. The combination with the casing loosely supported at one end and the roller suitably journalled in the casing and held by the weight of the casing upon the roll of cloth and a circumference of substantially a a quarter of a yard, of a counter spindle suitably journalled in the casing and provided with mechanism for registering a quarter of a yard upon each revolution of the roller, spring means for restoring the yard registering mechanism to its normal position, a collar secured on the disc and provided with the plates o o^2 and gate o^4 having inclined ends and sides as described, the disc sppported in the

casing and provided with a pointer on a central spindle and pin tooth designed to co-act with the plates arranged on the collar on the counter spindle, as and for the purpose specified. 9th. The combination with the casing loosely supported at one end and the roller suitably journalled in the casing and held by the weight of the casing upon the roll of cloth as it passes under it, of a supplemental spindle deriving a partial rotation from the roller, so as to measure a yard, means for restoring it to its normal position, a collar on the supplemental spindle provided with the plates o o^2 and gate o^4 having included ends and sides as specified, the disc supported in the casing and having pin teeth designed to act with the plates on the supplemental or counter spindle, as and for the purpose specified.

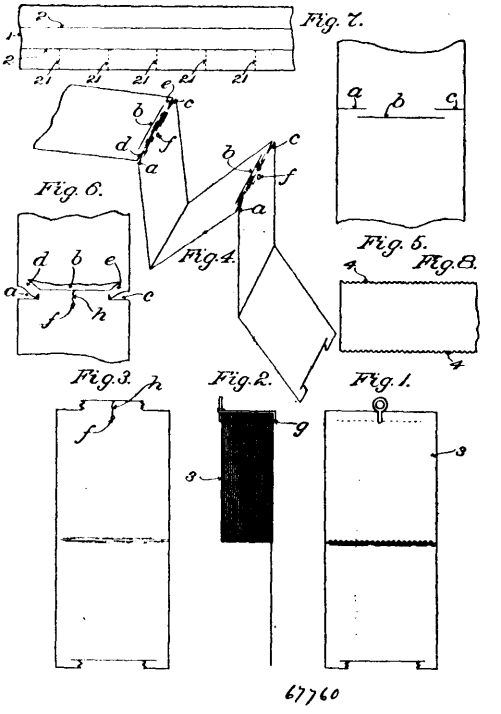
No. 67,759. Label Affixer. (*Machine à attacher les étiquettes.*)



Julius John Karges, Kansas City, Missouri, U.S.A., 15th June, 1900; 6 years. (Filed 30th September, 1899.)

Claim.—1st. A label magazine comprising a tubular body having label guides, and means by which a portion of the magazine and one of the guides may be displaced for the insertion of labels between the other guides, substantially as described. 2nd. A label magazine, comprising a tubular body having a label exit at one end, and a lateral opening for the insertion of labels, and a door closing the said lateral opening, substantially as described. 3rd. In a label affixer, the combination with a support, of guides mounted thereon, and means by which one of the guides may be displaced for the insertion of labels between the other guides, substantially as described. 4th. In a label affixer, the combination with a support provided with a hinged member, of parallel guides mounted upon the support and one on the hinged member, and a locking device for holding the hinged member in operative position, substantially as described. 5th. In a label affixer, the combination with a support, of guides between which the labels are held, and means by which one or more of the guides may be laterally adjusted, substantially as described. 6th. In a label affixer, the combination with a support, of parallel guides between which the labels are held, and means for adjusting the guides radially, laterally and vertically upon the support, substantially as described. 7th. In a label affixer, the combination with a support, of guides carried thereby, and a filler of adjustable thickness between the guides and the support, substantially as described. 8th. In a label affixer, the combination with a tubular frame provided in its side with one or more transverse slots, of a series of label guides, each provided with a longitudinal slot, and means co-operating with the slots in the frame wall and the guide slots, whereby the guides may be vertically, laterally and radially adjustably secured to the frame, substantially as described. 9th. In a label affixer, the combination with a tubular frame, of a series of guides mounted therein, a filler of adjustable thickness between each guide and the frame, clamping plates for holding the guides, and securing screws engaging the frame and clamping plates, substantially as described. 10th. In a label affixer, the combination with the magazine, of a follower reciprocable therein, and a brake for resisting reciprocation thereof, substantially as described. 11th. In a label affixer, the combination with the label magazine, of a follower longitudinally movable therein, means for forcing the follower in one direction and means for resisting longitudinal movement of the follower, substantially as described. 12th. In a label affixer, the combination with the label magazine, of a follower longitudinally movable therein, a spring for forcing the follower forward, and a frictional resistance to the movement of the follower, substantially as described. 13th. In a label fixer, the combination with the label magazine, of a follower longitudinally movable therein, a follower rod movable with the follower, and a stationary resilient ring tightly embracing the follower rod, substantially as described. 14th. In a label affixer, the combination with the magazine, of a follower longitudinally movable therein and provided with peripheral recesses, substantially as described. 15th. In a label affixer, the combination with the label guide provided at one end with a rigid retaining device, of two releasable retaining devices disposed one on each side of the rigid device, substantially as described. 16th. In a label affixer, the combination with the guide provided with a rigid label retaining device, of two independently acting spring label retaining arms located one at each side of said rigid devices, substantially as described. 17th. In label affixers, a label retaining device, comprising a resilient plate provided with two arms, each of which is provided with a bevelled flange, substantially as described.

No. 67,760. Toilet Paper. (*Papier de toilette.*)



Edward N. Cummings, Lynn, Massachusetts, U.S.A., 15th June, 1900; 6 years. (Filed 26th January, 1899.)

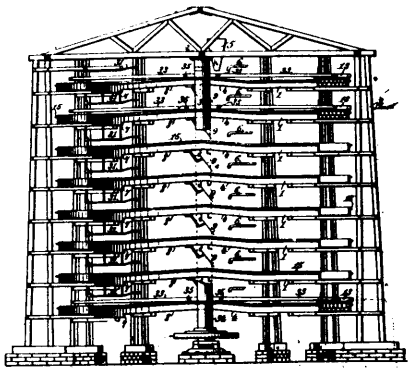
Claim.—1st. A package of paper consisting of a continuous strip reversely folded upon itself and partially severed by transverse cuts in different lines at the folds at one and the same and of the package, substantially as described. 2nd. A package of paper consisting of a continuous strip reversely folded upon itself and partially severed by transverse cuts in more than one line at each of the folds at one end of the package and fastened by a wire passing through said package at or near the said cuts at one end of the same, substantially as described. 3rd. A package of paper consisting of a continuous strip reversely folded upon itself and partially severed at every alternate fold, the line of fold coinciding with that of a portion of the cuts, and having a securing wire passing through that end of the package at which the partially severed folds lie, said wire passing through the cuts which partially sever the sheets, and thereby puncturing each double sheet only once, substantially as described.

No. 67,761. Lixiviation Apparatus.
(*Appareil de lixiviation.*)

Herbert Baldwin Williams, Castle Gate, Utah, U.S.A., 15th June, 1900; 6 years. (Filed 8th August, 1899.)

Claim.—1st. An apparatus for continuous lixiviation of ores or other substances, comprising a vertical series of annular tanks located one above another and each provided with an exit through which the material that has traversed one tank is delivered to the tank beneath, the bottom of each tank being provided with an ascending incline to one side of said exit and a descending incline at the other side thereof, whereby the exit is raised above the level of the main portion of the tank bottom to confine the leaching solution, a filter in each tank, and mechanism for drawing the ore or

other material around through the solution in each annular tank, substantially as described. 2nd. An apparatus for continuous lixi-



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viation of ores or other substances, comprising a vertical series of annular tanks located one above another and each provided with an exit through which the material that has traversed one of said tanks is delivered to the tank beneath, the several tank exits being in the same vertical plane one above another and the bottom of each tank being provided with an ascending incline leading to one side of said exit and a descending incline leading from its other side, an inclined apron located beneath each of said exits to deflect material falling through the same onto the descending incline of the tank below, a filter in each tank, and mechanism for gradually moving the ore around through each annular tank, substantially as described. 3rd. An apparatus for continuous lixiviation of ores or other substances, comprising a vertical series of annular tanks located one above another and each provided with an exit through which the material that has traversed one of said tanks is delivered to the tank beneath, the bottom of each tank being provided with an ascending incline leading to one side of said exit and a descending incline at the other side thereof, whereby the exit is raised above the level of the main portion of the tank bottom to confine the leaching solution, a filter located at the foot of the descending incline in each tank and sunk below the level of the tank bottom, and mechanism for moving the ore around through the solution in each tank, substantially as described. 4th. An apparatus for continuous lixiviation of ores or other substances, comprising a vertical series of annular tanks located one above another and each provided with an exit through which the material that has traversed one of said tanks is delivered to the tank beneath, the bottom of each tank being provided with an ascending incline leading to one side of said exit, and a descending incline at the other side thereof, a filter sunk in the bottom of the main portion of each tank at the foot of said ascending incline and provided with a layer of sand or filtering material level with the bottom of the main portion of the tank, and mechanism for moving the ore around through the solution in each tank, substantially as described. 5th. In a lixiviation apparatus, the combination with an annular tank provided with an ore exit, and a filter located in said tank, of a scraper carriage mounted on wheels arranged to travel on track rails at the sides of the tank, a series of scrapers supported by said carriage, and each provided with a vertical arm having a crank on its u per end, a slide bar engaged with said cranks, a screw for adjusting said slide bar to vary the inclination of the scrapers, and mechanism for moving said carriage around the tank, substantially as described. 6th. In a lixiviation apparatus, the combination with an annular tank provided with an ore exit, and a filter located in said tank, of a scraper carriage mounted on wheels arranged to travel on track rails at the sides of the tank, a series of adjustable scrapers supported by said carriage, a rocking rake mounted on the scraper carriage and provided with a lever, a spring to normally hold the rake teeth away from the tank bottom, a presser rail to act on the rake lever for forcing the rake teeth down into the sand of the filter to loosen and break up any packed ore on the filter surface, and mechanism for moving said carriage around the tank, substantially as described. 7th. In a lixiviation apparatus, the combination of a vertical series of annular tanks arranged one above another and each provided with an exit through which ore or other substances may be discharged into the tank beneath, filters located in the several annular tanks, a number of wheeled carriages arranged to be moved in succession around each tank, scraper and rake mechanism mounted in each carriage to stir the ore contained in each tank and cause it to be moved along through the solution therein, and a central vertical shaft having radial arms connected with the several carriages and adapted to be slowly revolved to draw said carriages gradually along the annular tanks, substantially as described. 8th. In a lixiviation apparatus, the combination of a vertical series of annular tanks arranged one above another and each provided with an exit through which ore or other substances may be discharged into the tank beneath, each tank bottom being provided with an ascending incline leading to one side of the tank exit and having a descending incline on the other side, means for feeding ore into the topmost tank, pipes for conveying leaching solution into the several tanks separately, the feed of the ore to be continuous and the feed of the solution to be continuous or intermittent, filters located in the several annular tanks, and automatic scraping and stirring mechanism to cause the ore and solution to be moved around each annular tank and over the filter therein, substantially as described. 9th. In a lixiviation apparatus, the combination with an annular tank, and a filter therein, of a travelling carriage adapted to be moved around said tank, a series of scrapers depending into the tank from said carriage, and means for adjusting the scraper blades to any required angle to vary the speed with which the ore is moved around in the annular tank, substantially as described. 10th. In a lixiviation apparatus, the combination of a series of annular tanks located one above the another and each provided with an exit through which ore may be discharged into the tank beneath, each tank bottom being provided on one side of the tank exit with a descending incline and on the other side a lengthened ascending incline, a filter in each tank bottom, and automatic mechanism for drawing the ore around the annular tanks and up the ascending inclines thereof to the tank exits, whereby on said ascending inclines the ore is drained of the leaching solution and exposed while still wet with said solution to the oxygen of the air before falling through the ore exit into the tank below, substantially as described. 11th. In a lixiviation apparatus, the combination with a series of annular tanks arranged one above another and each provided with an ore exit through which the ore is discharged to a tank beneath, of a filter located in the bottom of each annular tank and provided with a frame carrying a filter cloth and a layer of sand supported thereon to about the level of the tank bottom, means for supplying leaching solution to the separate tank, and automatic mechanism for moving ore around through the several annular tanks and over the filters therein substantially as described. 12th. In a lixiviation apparatus, the combination of a series of annular tanks arranged one above another and each provided with an exit for discharge of ore into the tank beneath, the ore to be fed into the topmost tank, pipes for separately supplying said tanks with leaching solution, a filter sunk into the bottom of each tank and having a sand layer level with the main portion of the tank bottom, and automatic scraper and rake mechanism adapted to be moved around in each annular tank to agitate the ore and move it along the tank and to prevent packing of the filter surface, substantially as described.

No. 67,762. Casting Apparatus. *(Appareil de coulage.)*

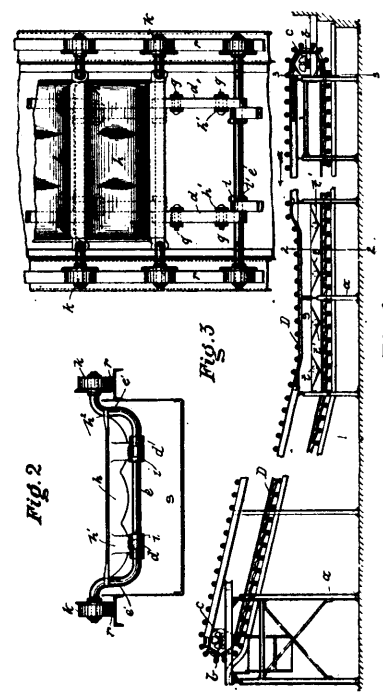

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Fig. 1

Fig. 3

Fig. 2

The Firm of Heyl & Patterson, assignee of William Joshua Patterson, and Alfred Miller Acklin, both of Pittsburgh, Pennsylvania, U.S.A., 15th June, 1900; 6 years. (Filed 9th August, 1899.)

Claim.– 1st. In casting apparatus, a suitable structure, an endless travelling carrier supported thereby, said travelling carrier consisting of open links, axles passing through the adjoining ends of said links, removable filler blocks inserted within said links between the axles at each end thereof, and moulds secured to said blocks, substantially

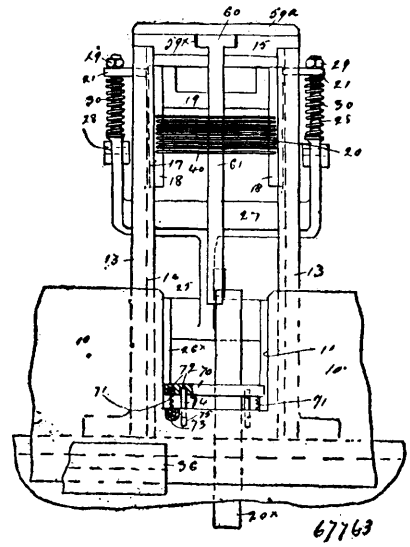
as set forth. 2nd. In casting apparatus, a suitable structure, an endless travelling carrier supported thereby, said travelling carrier consisting of open links having rounded seats at the ends thereof, axles fitting in the seats of the adjoining ends of said links, removable filler blocks having seats at the ends thereof fitting within said links and engaging said axles, and moulds secured to said blocks, substantially as set forth. 3rd. In casting apparatus, a suitable structure, an endless travelling mould carrier supported thereby, moulds, axles engaging said carrier, wheel bearings, said axles being bent to bring the wheel bearings above the main body of the axles, tracks, and a tank through which said mould carrier passes, substantially as set forth. 4th. In casting apparatus, a suitable structure, an endless travelling carrier supported thereby, axles engaging said carrier, wheel bearings, said axles being bent to bring the wheel bearings above the main body of the axles, tracks, moulds connected to said carrier, said moulds having bifurcated portions engaging the vertical portions of said axles caused by said bend, substantially as set forth. 5th. In casting apparatus, a suitable structure, an endless travelling mould carrier, moulds, axles engaging said carrier, wheel bearings, said axles being bent to bring the wheel bearings above the main body of the axles, a tank through which said mould carrier passes, a track secured to the exterior walls of said tank, substantially as set forth. 6th. In casting apparatus, a suitable structure, an endless travelling mould carrier composed of links, moulds, axles engaging said mould carrier, and U-shaped clamps secured to said axles to prevent lateral movement of the links composing said mould carrier, substantially as set forth. 7th. An endless carrier comprising open links, axles engaging the links, loosely mounted wheels on said axles, collars on said axles, said collars having lugs thereon adapted to enter the links to prevent the turning of the axles, substantially as set forth. 8th. An endless carrier composed of open links, axles engaging the links, loosely mounted wheels on said axles, split collars on said axles, said collars having lugs thereon adapted to enter the links to prevent the turning of the axles, substantially as set forth. 9th. In metal casting apparatus, the combination with a suitable frame, of an endless chain, moulds mounted thereon, wheels on said chain, tracks on said frame for said wheels, the return track having a gap therein arranged to cause continually a tension on the endless chain, substantially as set forth. 10th. In metal casting apparatus, the combination with a suitable frame, of an endless chain composed of over lapping links, moulds on said chain, drive wheels, therefor, having removable peripheral blocks provided with lugs adapted to engage the rear ends of said links, substantially as set forth. 11th. In metal casting apparatus, the combination with a suitable frame, of an endless chain composed of over lapping links, moulds on said chain, polygonal drive wheels, therefor having peripheral blocks bolted thereto and provided with lugs at the angles of said wheels adapted to engage the rear ends of said links, substantially as set forth. 12th. In metal casting apparatus, the combination with a suitable frame, of an endless chain composed of over lapping links, moulds on said chain, polygonal sprocket drive wheels, and lugs at the angles of said wheels, the lug at one angle being at the opposite side of the periphery from that of the succeeding one, substantially as set forth. 13th. In metal casting apparatus, the combination with a suitable frame, of an endless chain, moulds on said chain, a tank, wheels on said chain adapted to travel on tracks in said tank, said wheels having pockets therein, and absorbent material in said pockets, said pockets having orifices leading to the bearings of said wheels, substantially as set forth. 14th. In metal casting apparatus, the combination with a suitable frame, of an endless chain, moulds on said chain, a tank through which said moulds pass having an inclined portion at the discharge end of said frame, and a spraying pipe above said inclined portion, substantially as set forth. 14th. In metal casting apparatus, the combination with a suitable frame, of an endless chain, moulds on said chain, a tank through which said moulds pass having an inclined portion at the discharge end of said frame, and a spraying pipe above said inclined portion, substantially as set forth. 15th. In metal casting apparatus, the combination with a suitable frame, of an endless chain, moulds on said chain, a tank having overflow openings, swinging boxes secured to said tank having openings corresponding to said overflow openings, and means for adjusting said boxes at different positions, substantially as set forth. 16th. In metal casting apparatus, the combination with a suitable frame, of an endless chain, moulds on said chain, a tank having overflow openings, boxes secured to said tank having openings corresponding to said overflow openings, said boxes being formed of hinged sections, and one of said sections being vertically adjustable, substantially as set forth. 17th. In metal casting apparatus, the combination with a suitable frame, of an endless chain, moulds on said chain, a tank having overflow openings, boxes secured to said tank having openings corresponding to said overflow openings, said boxes being formed in sections, flexible material connecting said sections, and means for raising and lowering one of said sections, substantially as set forth.

No. 67,763. Line Casting Machine.

(Machine de coulage de lignes.)

Sharples Bradley, Montreal, Quebec, Canada, 15th June, 1900; 6 years. (Filed 18th February, 1898.)

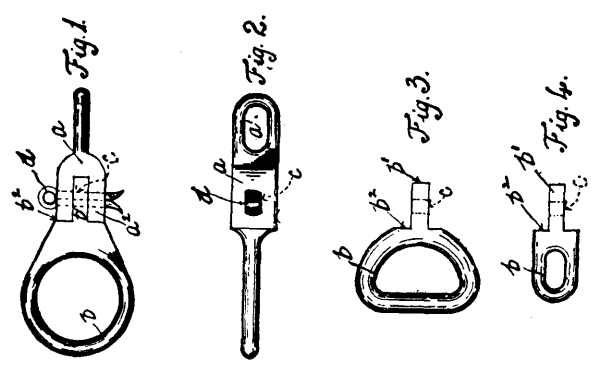
Claim.—1st. In a line casting machine, a distributor consisting of a series of horizontally disposed plates adapted to receive the matrix bars and spacers after the line has been cast and carry them to their appropriate magazine chambers, each of said plates being provided



at its forward end with an upwardly projecting bead, in combination with means for actuating said distributor, for the purpose set forth. 2nd. In a line casting machine, a distributor consisting of a series of plates adapted to receive the matrix bars and spacers after the line has been cast and carry the same vertically into position to be moved horizontally into their appropriate magazine chambers. each of said plates having its forward end diminished in thickness and provided with an upwardly projecting bead, in combination with means for actuating said distributor, for the purpose set forth. 3rd. In a line casting machine, a distributor consisting of a series of plates adapted to receive the matrix bars and spacers after the line has been cast and carry the same vertically into position to be moved horizontally into their appropriate magazine chambers, each of said plates having its forward end diminished in thickness and provided with a bevelled upwardly projecting bead extended slightly beyond the magazine side of the said plate, in combination with means actuating said distributor, for the purpose set forth. 4th. In a line-casting machine, a distributor consisting of a series of plates adapted to receive the matrix bars and spacers after the line has been cast and carry them to their appropriate magazine chambers and means for horizontally and vertically moving said plates, for the purpose set forth. 5th. In a line casting machine, a distributor consisting of a series of plates adapted to receive the matrix bars and spaceas after the line has been cast, and carry them to their appropriate magazine chambers and maintain them in a predetermined position relatively to said plate and means for horizontally and vertically moving said plates, for the purpose set forth. 6th. In a line casting machine, a distributor consisting of a series of plates adapted to receive the matrix bars and spacers after the line has been cast and carry them to their appropriate magazine chambers, means comprising a yielding device for horizontally moving said plates, means for vertically moving said plates, and means for limiting the forward horizontal movement thereof for the purpose set forth. 7th. In a line casting machine, a distributor consisting of a series of plates adapted to receive the matrix bars and spacers after the line has been cast and carry them to their appropriate magazine chambers and maintain them in a predetermined position relatively to said plates, means for vertically moving said plates, and means for limiting the rearward horizontal movement thereof, for the purpose set forth. 8th. In a line casting machine, a distributor consisting of a series of plates adapted to receive the matrix bars and spaces after the line has been cast and carry them to their appropriate magazine chambers, means comprising a yielding device, for horizontally moving said plates, means for vertically moving said plates, and means for limiting the forward and rearward horizontal movement thereof, for the purpose set forth. 9th. In a line casting machine, a distrlbutor consisting of a series of plates, adapted to receive the matrix bars and spacers after the line has been cast and carry them to their appropriate magazine chambers, and maintain them in a predetermined position relatively to said plates, means compris.Eg a yielding device for horizontally moving said plates, means for limiting the forward and rearward horizontal movement thereof, for the purpose set forth. 10th. In a line casting machine, a distributor consisting of a series of plates arranged one above the other and adapted to receive and carry the matrix bars and spacers, each plate having its forward end formed with an upwardly projectiug bead extending the full length thereof, means for causing said plates to, at intervals, assume positions in the same vertical plane, and distributing positions relatively to the magazine chambers, and means for imparting a vertical reciprocal movement to said series of

plates, for the purpose set forth. 11th. In a line casting machine, the combination of the base plate, a pair of vertical guides mounted rigidly upon said base plate, a cross head adapted to slide vertically in said guides, a cam operated lever adapted to impart a vertical reciprocal movement to said cross head, a series of plates arranged horizontally one above the other and connected to said cross head by a sliding connection, means for causing said plates to, at intervals, assume positions relatively to the magazine chambers. 12th. In a line casting machine, the combination of the base plate, a pair of guides mounted rigidly upon said base plate, a cross head adapted to slide vertically in said guides, a cam operated lever adapted to impart a vertical reciprocal movement to said cross head a yielding connection between said lever and slides, a series of plates arranged horizontally one above the other and connected to said cross head by a sliding connection, means for causing said plates to, at intervals, assume positions with their forward ends in the same vertical plane and distributing positions relatively to the magazine chambers. 13th. In a line casting machine, the combination of the base place, a pair of vertical guides mounted rigidly upon said base plate, a cross head adapted to slide vertically in said guides, a cam operated lever adapted to impart a vertical reciprocal movement to said cross head a series of plates arranged horizontally one above the other and connected to said cross head by a sliding connection, means comprising a yielding resistance for causing said plates to, at intervals, assume their positions with their forward ends in the same vertical plane and distributing positions relatively to the magazine chambers. 14th. In a line casting machine, the combination of the base plate, a pair of vertical guides mounted rigidly upon said base plate, a cross head adapted to slide vertically in said guides, a cam operated lever adapted to impart a vertical reciprocal movement to cross head, a yielding connection between said lever and slides, a series of plates arranged horizontial one above the other and connected to said cross head by a sliding connection, means comprising a yielding resistance for causing said plate to, at intervals, assume positions with their forward ends in the same vertical plane and distributing positions relatively to the magazine chambers. 15th. In a line casting machine, the combination with the face plate thereof having an opening adapted to accommodate the distributor, a device adapted to yieldingly obstruct the lower portion of said opening, for the purpose set forth. 16th. In a line casting machine, the combination with a distributor comprising a series of plates located a short distance one above the other, of a matrix bar or spacer having its upper end hooked and flattened, substantially as described. 17th. In a line casting machine, the combination with a distributor comprising a series of plates arranged a short distance one above the other, each of said plates being provided with an upwardly projecting bead and the upper plate having on the top an angular section above its bead, of matrix bars and spacers having upper hooked ends flattened on the top, for the purpose set forth. 18th. In a line casting machine, the combination with the face plate thereof having an opening adapted to accommodate the distributor, a cross bar adapted to extend across the lower portion of said opening, and means yieldingly holding said cross bar against displacement for the purpose set forth. 19th. In a line casting machine, a distributor comprising a series of superposed plates, each rectangular in cross section and provided on its forward end with an upwardly projecting bead, in combination with mechanism for actuating said plates, for the purpose set forth. 20th. In a line casting machine, a distributor comprising a series of rectangular distributor plates each having on its forward end an upwardly projecting bead and provided with a slot, in combination with mechanism for actuating said plates, for the purpose set forth.

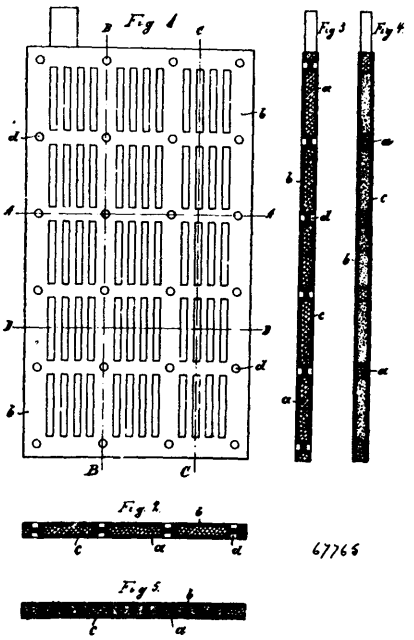
No. 67,764. Trace Link. *(Anneau de traits.)*



William Aguilar Allpress, 26 South Eaton Place, Eaton Square, London, England, 18th June, 1900 ; 6 years. (Filed 3rd January, 1899.)

Claim.—The improvements in links for traces, pole chains and the like, consisting in forming such links with a hame piece or its equivalent, having an eye at one end and being bi-furcated at the other, between the jaws of which bi-furcated end fits the tail of the link proper, shoulders being formed an each side of the said tail which abuts against the squared shoulders of the hame piece, openings being provided in the bi-furcated end of the said hame piece coinciding with an opening in the tail of the link proper to receive a split pin or its equivalent for the purpose of securing the link proper and the hame piece together, substantially as described and as illustrated by the drawings.

No. 67,765. Electrode for Secondary Batteries.
(Electrode pour piles secondaires.)



Paul Ferdinand Ribbe, Charlottenburg, Berlin, Prussia, 18th June, 1900 ; 6 years. (Filed 2nd March, 1899.)

Claim.—1st. In electrode plates the combination of a lead plate *a*, having thick bars along its edges and at intermediate points and having also smaller ribs in its body of the shape of a rhomb or square, the outer edges of all of said ribs lying in the same planes with the side faces of the lead plate and two plates *b*, *c*, consisting of insulating material, said plates having perforations registering with the openings in the lead plate and said lead plate having openings through which the plates *b* and *c* are pressed and joined to make an integral whole. 2nd. In electrode plates, the combination of a lead plate *a*, having thick bars along its edges and at intermediate points and having also smaller ribs in its body of the shape of a rhomb or square, the outer edges of all of said bars and ribs lying in the same plane with the side faces of the lead plate and two plates *b*, *c*, consisting of insulating material, said plates having perforations registering with openings in the lead plate, the said ribs serving to separate the active mass into independent swallow tail fields, the points of the ribs lying between the openings in the plates *b*, *c*, so that portions of said plates will overhang to make four corners in which the active mass will engage, substantially as described.

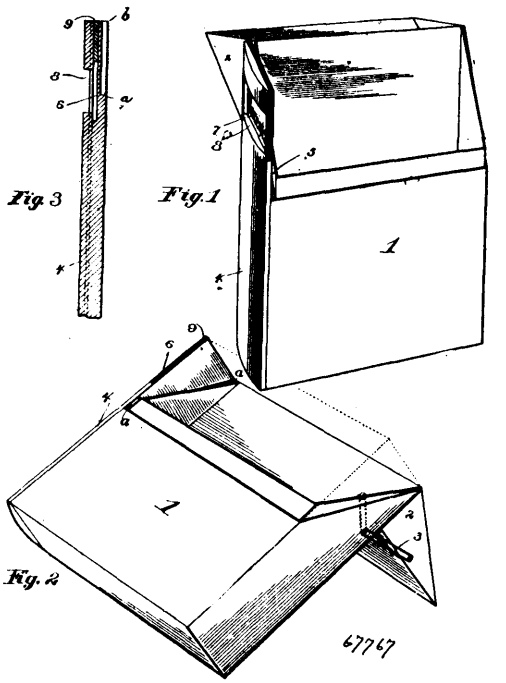
No. 67,766. Acetylene Gas Purifying Material.
(Matériel à purifier le gaz acétylène.)

Otto Ernst and Alfred Philips, both of 6 Kleine, Taunusstrasse, near Frankfort-on-Main, German Empire, 18th June, 1900; 6 years. (Filed 29th June, 1899.)

Claim.—1st. For purifying acetylene gas, a material consisting of a solid, highly porous material containing a salt of hypochlorous acid and capable of remaining porous and effective under the influence of moisture. 2nd. For purifying acetylene gas, a material consisting of a solid, highly porous material containing a salt of hypochlorous acid and slaked lime. 3rd. For purifying acetylene gas, a material consisting of a solid, highly porous material containing a salt of hypochlorous acid, slaked lime, and calcium chloride. 4th. The manufacture of a purifying material for acetylene gas, by stirring a salt of hypochlorous acid to a sludge, with a substance or substances not attacked by acetylene gas, and then drying the sludge at such a temperature that the salt of hypochlorous acid does not decompose. 5th. The manufacture of a solid, highly porous, purifying material for acetylene gas by stirring bleaching powder to a sludge with some indifferent material suitable

for use with acetylene, and then drying the sludge at such a temperature that the salt of hypochlorous acid does not decompose. 6th. The manufacture of a solid, highly porous purifying paste for acetylene gas by stirring bleaching powder into a sludge with slaked lime, and then drying the sludge at such a temperature that the salt of hypochlorous acid does not decompose. 7th. The manufacture of a solid, highly porous purifying paste for acetylene gas by stirring bleaching powder into a sludge with slaked lime and calcium chloride, and then drying the sludge at such a temperature that the salt of hypochlorous acid does not decompose. 8th. In the production of a material for purifying acetylene gas the combination of a process for obtaining a solid, highly porous material containing a salt of hypochlorous acid, with a process for obtaining the hypochlorite, in which the hypochlorous liquor obtained by the latter process is stirred into a sludge with some indifferent material, and the sludge then dried at such a temperature that the salt of hypochlorous acid does not decompose.

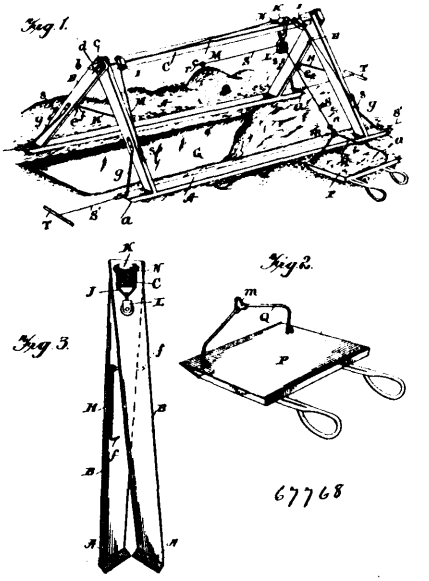
No. 67,767. File Box. (*Serre-papier.*)



Wallace Sumner Grange, Malta, Illinois, U.S.A., 18th June, 1900 6 years. (Filed 5th April, 1900.)

Claim.—1st. A filling box or case composed of the hollow body portion provided at one end with a stiff back and having a portion of the back cut-away between it and the end of the body portion next thereto to form a recess or groove to receive and protect the end of the cover fitting therein, and a hinged cover adapted when closed to have one end thereof fit in the recess formed as described and the other edges of the cover to overlap the edges or the body portion, substantially as described. 2nd. A filling box or case provided with a hinged top or cover adapted when opened to lie beneath one side of the box to constitute a support for sustaining the box in an inclined position, and a fastening device connecting the cover and box so as to securely hold the cover beneath the box when opened and thus prevent the cover support from being accidentally displaced from beneath the box body, and also hold the cover in its closed position, substantially as described. 3rd. A file box or case provided with a hinged cover and having a stiff back at one end and extended above the open portion or mouth of the box, said extended portion having a kerf formed in it from its upper edge downwardly, a portion of the body of the back below the edge and in front of the kerf being removed to form an open recess, and a filling fitting in said kerf above the open recess in the back and terminating at such point as to leave the kerf open along the side edge of the back opposite the open recess, substantially as described. 4th. A file box or case provided with a hinged cover and having a stiff back extended above the open portion or mouth of the box, said extended portion being cut-away next to the mouth of the box to form a groove to receive one end of the cover, said back also being formed with a transverse slot to receive a label and having a portion of the back in front of said slot removed to form an open recess, the walls of which will protect a label in said slot, substantially as described.

No. 67,768. Ditch or Pit Filling Machine.
(*Appareil à emplir les fossés, etc.*)



Walter G. Dungey, Hemlock, Michigan, U.S.A., 18th June, 1900; 6 years. (Filed 7th May, 1900.)

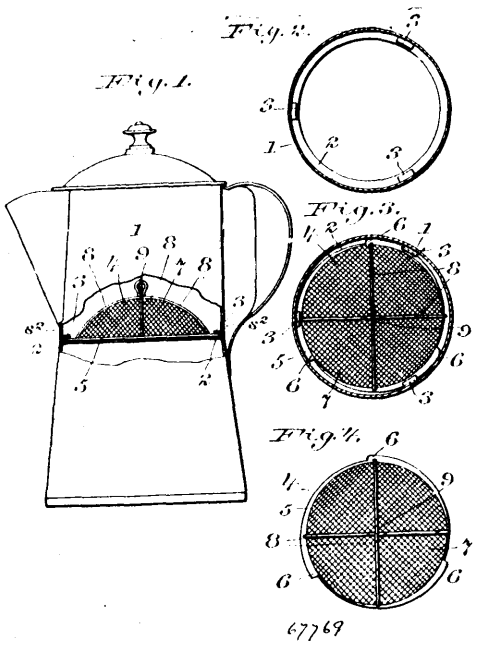
Claim.—1st. A ditch pit filling apparatus comprising two longitudinal and parallel runners adapted to be placed at opposite sides of a ditch or pit, inwardly extending standards having their upper ends in a vertical line over the said ditch or pit, a beam connected to the upper ends of the said standards and extending longitudinally of the said runners, a pulley or rope guide longitudinally movable upon the said beam, and means operatively connected at the ends of said beam for moving the rope guide or pulley upon the beam and holding it in its adjusted position, substantially as described. 2nd. A ditch or pit filling machine comprising two longitudinal and parallel extending runners adapted to be placed at opposite sides of a ditch or pit, inwardly and upwardly extending standards at the ends of said runners, a beam connecting the upper ends of the standards and extending longitudinally of the said runners and situated in a vertical line above the ditch or pit, a rope guide or pulley longitudinally movable upon the said beam, a rope passing through the said guide or pulley and extending across the said ditch, a scraper connected with one end of the rope, the opposite end of the rope adapted to be drawn in a direction transverse the ditch for pulling the scraper thereover, rope guides at opposite ends of the beam, ropes passing through the said guides and having their ends connected with the longitudinally movable pulley or rope guide, the parts adapted to operate, substantially as described. 3rd. An apparatus for filling pits or ditches comprising standards having at their lower ends bases adapted to rest at opposite sides of a pit or ditch, the standards extending upwardly and inwardly over the said ditch or pit, a longitudinally extending beam having its ends connected with the upper ends of the said standards, a travelling pulley or guide frame supported upon said beam, a rope guide loosely connected at opposite ends of the said beam and adapted to extend at either side thereof, ropes passing through the said rope guides and having their ends connected respectively with the travelling guide or pulley whereby the pulley frame can be drawn to any desired position upon the beam, substantially as described. 4th. An apparatus for filling ditches or pits comprising standards having at their lower ends bases adapted to rest at opposite sides of the pit or ditch, the said standards extending upwardly and inwardly over the ditch or pit, a longitudinally extending beam connected to the upper ends of the said standards, a travelling pulley frame supported upon said beam, reversible pulleys at opposite ends of the said beam, ropes passing through the said pulleys and connected at their inner ends to the said pulley frame, a reversible pulley connected with the travelling pulley frame, a rope passing over the said pulley and having at each end a hook, a scraper adapted to be connected to the hook at one end of the rope and the opposite end of the rope adapted to be connected with a single tree, substantially as described.

No. 67,769. Tea and Coffee Pot. (*Théière et cafetière.*)

Elvina Root, Coquille, Oregon, U.S.A., 18th June, 1900; 6 years. (Filed 4th June, 1900.)

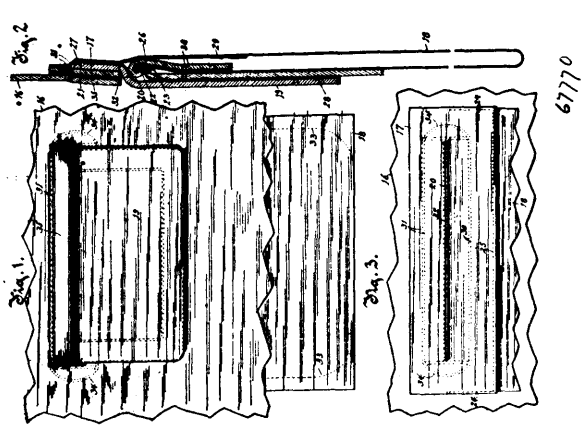
Claim.—1st. The combination with a vessel provided with interior supports, of a removable strainer disposed within the vessel as a dividing wall and comprising a perforated body portion formed circumferentially to co-operate with said supports, as specified.

2nd. The combination with a vessel interiorly flanged and provided with hook-like projections above the flange, of a strainer, comprising



an annular base peripherally toothed to co-operate with said hook-like projections, and a body portion of gauze secured to said base, as specified. 3rd. The combination with a vessel interiorly flanged and provided with a series of undercut lugs, of a strainer, comprising a base cut away circumferentially to form clamp members adapted to co-operate with and lock under said lugs, a gauze body mounted upon the ring and a series of wire strands securing the gauze by extending upward from the ring over the gauze and terminating centrally above the latter in a handle, as specified.

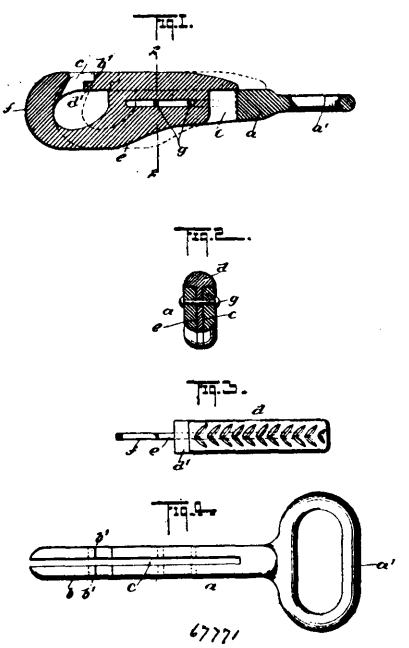
No. 67,770. Garment Pocket. *(Poche de vêtement.)*



Joseph J. McLoughlin, Milwaukee, Wisconsin, U.S.A., 18th June, 1900; 6 years. (Filed 4th June, 1900.)

Claim.—1st. As an improved article of manufacture, a pocket, consisting of a garment material having a cut therein for the pocket mouth, a one piece facing secured to the inner side of the garment over the cut in said garment, and of such length as to have its ends extend beyond the ends of the cut, said facing also having a cut registering with the cut of the garment, and the ends of said cut in the facing terminating short of the edges of said facing, one bordering side edge of the garment cut being inturned, and one bordering side edge of the facing cut being outturned and secured to the inturned edge of the garment, said outturned part outstanding beyond the inturned edge and forming a swell or bead partially filling the space of the pocket mouth and reinforcing and strengthening the bordering edge of said pocket mouth, and a suitable material for forming the pouch or bag of the pocket on the inside of the garment. 2nd. As an article of manufacture, a pocket, consisting of a garment material having a cut therein for the pocket mouth, a one piece facing secured to the inner side of the garment over the cut in said garment, and of such length as to have its ends extend beyond the ends of the cut, said facing also having a cut registering with the cut of the garment, and the ends of the cut in the facing terminating short of the end edges of said facing, and the bordering side edges of the garment cut being inturned, and the bordering side edges of the facing cut being outturned and secured to the inturned edges of the garment, said outturned edges outstanding beyond the inturned edges and forming swells or beads partially filling the space of the pocket mouth and re-enforcing and strengthening the bordering edges of said pocket mouth, and a suitable material forming the pouch or bag of the pocket on the inside of the garment. 3rd. As an article of manufacture, a pocket, consisting of a garment material having a cut therein for the pocket mouth, a one piece facing secured to the inner side of the garment over the cut in said garment, and of such length as to have its ends extend beyond the ends of the cut, a stay between the facing and the garment, said facing and stay having registering cuts which register with the cut in the garment, the ends of said cuts in the facing and stay terminating short of the end edges of said facing and stay, and one bordering side edge of the garment cut being inturned, and the corresponding bordering side edges of the cuts of the facing and stay being outturned and secured to the inturned edge of the garment, said outturned ports extending beyond the inturned edge and forming a swell or bead partially filling the space of the pocket mouth and re-enforcing and strengthening the bordering edge of said pocket mouth, the outturned portion of the stay being inside of said swell or bead and forming a filling therefor, and a suitable material forming the pouch or bag of the pocket inside of the garment. 4th. As an article of manufacture, a pocket, consisting of a garment material having a cut therein for the pocket mouth, a one piece facing secured to the inner side of the garment over the cut in said garment and of such length as to have it ends extend beyond the ends of the cut, a stay secured between the facing and garment, the facing and stay having registering cuts which register with the cut in the garment, the ends of said cuts in the facing and stay terminating short of the end edges of said facing and stay, and one bordering side edge of the garment cut being inturned, and a suitable material for forming the pouch or bag of the pocket inside of the garment, one portion of said material being secured between the facing and the garment below the cuts in the facing and stay, and one of the bordering side edges of the cuts of the facing and stay, together with the portion of the pocket material secured to the stay and the facing being outturned and secured to the inturned edge of the garment, said outturned portions outstanding beyond the inturned edge and forming a swell or bead partially filling the space of the pocket mouth and re-enforcing and strengthening the bordering edge of said pocket mouth, the outturned portions of the stay and pocket material being inside of the swell or bead and forming a filling therefor.

No. 67,771. Snap Hook. *(Crochet à ressort.)*



James A. Gavitt and Peter M. Tucker, both of Waitsburg, Walla Walla County, Washington, U.S.A., 18th June, 1900; 18 years. (Filed 19th April, 1900.)

Claim.—A snap hook, having a main portion and a keeper, the top face of which main portion is plane, and the main portion having a hook projecting from the shank, the main portion also having a

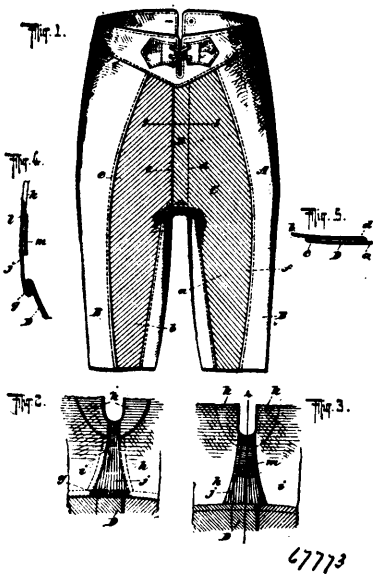
longitudinally disposed slot therein lying in the plane of the hook and extending into and through the shank, and the keeper comprising a thumb plate with a plane under face lying snugly on the top face of the shank and of a width equal to the thickness of the shank, the front end of the thumb plate being projected in position to engage with the point or bill of the hook, and the keeper also comprising a longitudinally disposed web projecting from the under face of the thumb plate and lying friction tight in the slot of the main portion, the web having a front extension forming a hook and lying adjacent to the hook of the main portion, and a pin or pins extended transversely through the shank and through a slot in the web, whereby to slidably mount the keeper.

No. 67,772. Silicides of Iron. *(Silicique de fer.)*

The Willson Aluminum Company, New York City, New York, assignee of Guillaume de Chalmot, Holcomb's Rock, Virginia, U.S.A., 18th June, 1900; 6 years. (Filed 10th April, 1899.)

Claim.—1st. The described new ferro silicide, having the formula Si_2, Fe_3, and containing approximately 25 per cent of silicon. 2nd. The described new product being ferro silicide, containing upwards of 25 per cent of silicon, and consisting of a mixture in variable proportions of Si_2, Fe_3 and Si_2 Fe.

No. 67,773. Nether Garment. *(Culottes.)*



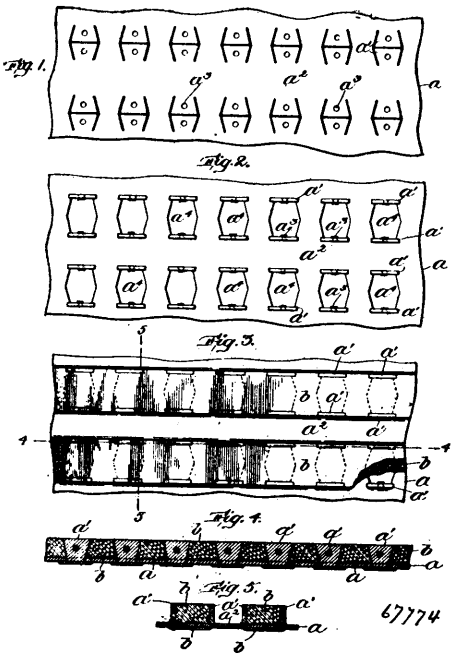
Jeremiah Anderson Scriven, Manhattan, New York, U.S.A., 18th June, 1900; 6 years. (Filed 5th June, 1900.)

Claim.—1st. A garment having a plurality of elastic superpose fabrics which constitute a tension member that is interposed between the sections of the garment, the wales of the fabrics of said tension member running at an angle to each other, an insertion *j* having wales extending longitudinally of the garment and forming a continuation of the tension member which extends to the fly of the garment, and a second insertion *m* overlapping the insertion *j* and having its wales running at substantially right angles to the wales of said insertion *j*, whereby said insertions *j* and *m* act reciprocally as limiting strips for each other. 2nd. A garment having an insertion *f* secured by its side edges in the garment, the wales of which insertion extend longitudinally of the garment and the upper edge of which forms the lower edge of the fly, and a second insertion *m* overlapping said insertion *j*, secured thereto by its upper portion and having the wales thereof running at substantially right angles to the wales of the insertion *j*, the said insertion *m* being secured by its side edges in the garment, whereby said insertion will act reciprocally as limiting strips for each other, but affording a ready expansion of the garment over the field of the inserts on lines diagonal to the vertical and horizontal axes thereof.

No. 67,774. Tread for Stairs. *(Montant d'escaliers.)*

The Universal Safety Tread Company, Jersey City, New Jersey, assignee of Frederick W. Huestis, Newton, Massachusetts, U.S.A., 18th June, 1900; 6 years. (Filed 21st October, 1899.)

Claim.—1st. In a tread for stairs and other purposes, the combination of a sheet metal plate having wear surfaces and holes through its body portion of a non-slipping material between said wear surfaces and passing through said holes and anchored upon the back of the plate. 2nd. In a tread for stairs and other purposes, the combination of a bed plate provided with holes formed by cutting said plate and bending outward the cut portions, said outwardly bent integral portions having retaining means formed on their faces, and non-slipping material secured between said bent integral portions.



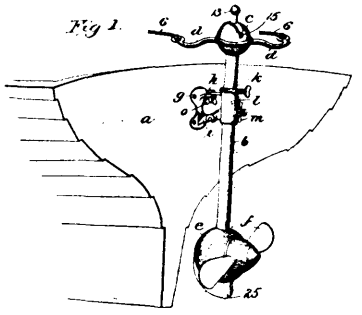
3rd. A sheet metal bed plate for treads for stairs and other purposes, said plate being formed with integral, outwardly projecting wear points and with holes through it. 4th. As a new article of manufacture, a tread for stairs and other purposes made up of a bed plate provided with holes formed by cutting said plate and bending outward the cut portions, the lateral edges of adjacent cut portions being separated from each other, by the uncut portions of said bed plate, and non-slipping material secured between the faces and the lateral edges of said cut portion. 5th. In a tread for stairs and other purposes, the combination of a bed plate provided with holes formed by cutting said plate and bending outward the cut portions, said outwardly bent integral portions of said bed plate, and non-slipping material secured between said bent integral portions. 6th. As a new article of manufacture, a tread for stairs and other purposes made up of a bed plate provided with upwardly projecting wear surfaces being separated from each other transversely and longitudinally by portions of said bed plate, and non-slipping material laid transversely and longitudinally across and on said bed plate and engaging said wear surfaces on the sides.

No. 67,775. Electric Propelling Mechanism for Boats. *(Mécamisme de propulsion électrique pour vaisseaux.)*

The Submerged Electric Motor Company, Menomonie, Wisconsin, U.S.A., assignee of Tracy Barbour Hatch, Chicago, Illinois, U.S.A., 18th June, 1900; 6 years. (Filed 11th April, 1900.

Claim.—1st. An electric motor, having all its parts submerged in and exposed to a liquid, and means for supporting the motor in its submerged position, substantially as and for the purpose set forth. 2nd. The combination of a support mounted to extend below the surface of a liquid, a submerged electric motor on the support and a motor shaft extending through a liquid admitting bearing, whereby the liquid is admitted to surround and prevent overheating of the motor, and the friction upon the shaft of a liquid excluding bearing is avoided, substantially as described. 3rd. The combination of a support mounted to extend below the surface of a liquid, a submerged electric motor on the support, liquid proof insulating material incasing the motor windings, and a motor shaft extending through a liquid admitting bearing, whereby the liquid is admitted to surround and prevent overheating of the motor, and the friction upon the shaft of a liquid excluding bearing is avoided, substantially as described. 4th. In a boat propelling device, a support mounted to extend below the surface of the water, a submerged propeller driving electric motor on the support and a propeller carrying motor shaft extending through a water admitting bearing on the support, whereby water is admitted to the motor to cool the parts thereof, and the friction upon the shaft of a water excluding bearing is avoided, substantially as and for the purpose set forth. 5th. In a boat propelling device, a propeller driving electric motor supported to extend below the surface of the water, and open to the access of the water between the armature and field and a cylinder surrounding the armature within the pole pieces of the field, substantially as and for the purpose set forth. 6th. In a boat propelling device, a

propeller driving electric motor supported to extend below the surface of the water, and open to the access of the water between the armature and field, and a cylinder surrounding the armature within the pole pieces of the field having a smooth inner surface, substantially as and for the purpose set forth. 7th. In a boat propelling driving electric motor supported to extend below the surface of the water, and open to the access of the water between the armature and field, a cylinder surrounding the armature within the pole pieces of the field, having a smooth inner surface, and provided with an annular inwardly projecting flange, substantially as and for the purposes set forth. 8th. In a boat propelling device, a propeller driving electric motor and resistance supported to extend below the surface of the water, and open to the access of the water between the armature and field and about the resistance, commutator and brushes, substantially as and for the purpose set forth. 9th. In a boat propelling device, a propeller driving electric motor and resistance supported to extend below the surface of the water, and open to the access of the water between the armature and field and about the resistance, and waterproof insulating material incasing the resistance, substantially as and for the purpose set forth. 10th. In a boat propelling device, a support, an electric motor and resistance on the support extending below the surface of the water and open to the access of the water about the resistance and between the armature and field, waterproof insulating material increasing the resistance and motor windings, an armature shaft journalled in the support, and a propeller screw on said shaft, substantially as and for the purpose set forth. 11th. In a boat propelling device, the combination of an axially movable supporting tube, a hollow steering head on said tube, a propeller driving electric motor and propeller screw on the lower end of said tube, an electric current supplier, conductors extending from the said supplier through the steering head and supporting tube to the motor, an electric switch in the steering head in circuit with the said supplier and motor, and an operating handle for said switch projecting through the steering head, substantially as described. 12th. In a boat propelling device, the combination of an axially movable supporting tube, a hollow steering head on said tube, a propeller driving electric motor resistance therefor and propeller screw on the lower end of said tube, an electric current supplier, conductors extending from the said supplier through the steering head and supporting tube to the motor and resistance, an electric switch in the steering head in circuit with the said supplier, motor and resistance, and an operating handle for said switch projecting through the steering head, substantially as described.

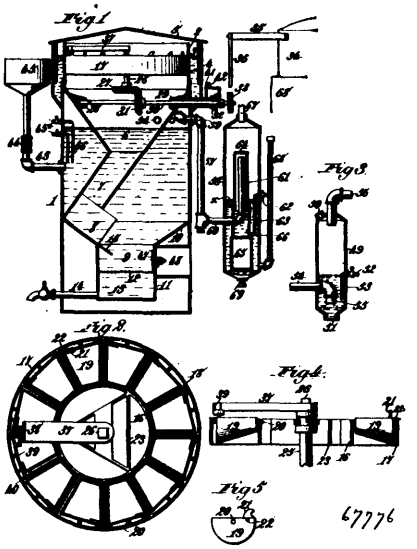


No. 67,776. Acetylene Gas Generator.

(Générateur de gaz acétylène.)

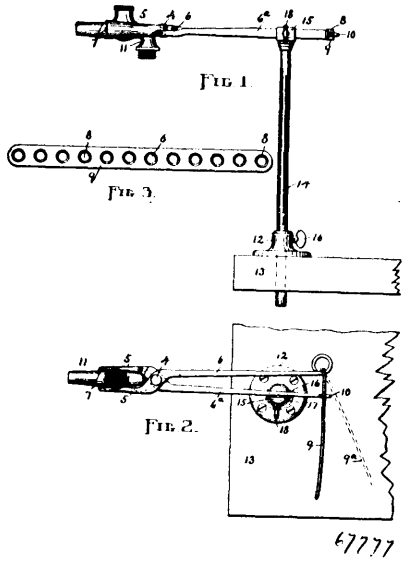
The Kunear Manufacture Company, assignee of Edward Stephen Martindale, all of Warren, Pennsylvania, U.S.A., 18th June, 1900; 6 years. (Filed 21st March, 1899.)

Claim.—1st. In an acetylene gas generator, the combination with the generating chamber, of a carbide container supported above the same, comprising a circular stationary frame having a series of buckets circularly arranged and pivotally and rotatably mounted therein on axes substantially radial of the said frame, and rotary means operating to successively engage said buckets to rotate them in turn on their pivots and cause them to discharge their contents into the generating chamber, substantially as described. 2nd. In an acetylene gas generator, the combination with a gas holder having a movable bell, of a generating chamber, a carbide container supported above the same comprising a circular stationary frame having a series of buckets circularly arranged and pivotally and rotatably mounted therein on axes substantially radial of the said frame, and rotary means operated by said bell to successively engage said buckets to rotate them in turn on their pivots and cause them to discharge their contents into the generating chamber, substantially as described. 3rd. In an acetylene gas generator, the combination with the generating chamber, of a carbide container supported above the same comprising a stationary frame having a series of buckets circularly arranged and pivotally and rotatably mounted therein, a rotary shaft having an arm travelling in a circular path above said buckets, and means carried by said arm to successively engage said buckets to revolve them in turn on their pivots and cause them to discharge their contents into the generating chamber, substantially as described.. 4th. In an acetylene gas generator, the combination with the generating chamber, of a carbide container supported above the same comprising a stationary frame having a series of buckets pivotally mounted therein, a hook on each of said buckets, an upright shaft supported in said frame having at its lower end a bevel gear, a horizontal shaft having a bevel gear meshing with that of the upright shaft, an arm mounted at one end on the opposite end of said upright shaft, a curved arm pivotally mounted on the free end of said arm and having a hook adapted to successively engage the hooks of said buckets, and means for revolving said horizontal shaft, substantially as described. 5th. In an acetylene gas generator, the combination with a gas holder having a movable bell, of a generating chamber, a carbide container supported above the same comprising a stationary frame having a series of buckets, pivotally mounted therein, a hook on each of said buckets, an upright shaft supported in said frame having at its lower end a bevel gear, a horizontal shaft having a bevel gear meshing with that of the upright shaft, an arm mounted at one end on the opposite end of said upright shaft, a curved arm pivotally mounted on the free end of said arm and having a hook adapted to successively engage the hooks of said buckets, and means operated by said bell for revolving said horizontal shaft, substantially as described. 6th. In an acetylene gas generator, the combination with a gas holder having a movable bell, of a generating chamber, a carbide container supported above the same comprising a stationary frame having a series of buckets pivotally mounted therein, a hook on each of said buckets, an upright shaft supported in said frame having at its lower end a bevel gear, a horizontal shaft having a bevel gear meshing with that of the upright shaft and having one end projecting beyond the generator and provided with a ratchet wheel, an arm mounted at one end on the opposite end of said upright shaft, a curved arm pivotally mounted on the free end of said arm and having a hook adapted to successively engage the hooks of said buckets, a pawl carried by said bed and engaging the teeth of said ratchet at a given point in the fall of said bell whereby to turn said horizontal shaft in one direction and through the mechanism described to successively dump said buckets, a dial having a series of numbers circularly arranged thereon and corresponding with the number of said buckets, and an indicator carried by said horizontal shaft and turning therewith in operative relation with said dial, substantially as described. 7th. In an acetylene gas generator, the combination with a cylinder supporting a generating chamber in its lower portion, of a funnel, secured in the upper end of said cylinder in a manner to securely close the same and having a spout extending down toward said generating chamber, said funnel communicating at its upper end with a closed



compartment, a carbide container supported in said closed compartment, means ror discharging carbide therefrom into said funnel, and a safety device comprising an upright vessel having water therein, a discharge pipe leading from the top of said vessel and a pipe leading from said closed compartment and having within said vessel a depending end submerged in the water thereof, the combination operating as described. 8th. The combination with a generator and a gas holder, of a liquid seal devise comprising an upright vessel having water therein, a pipe affording communication between said generator and said vessel and having within the latter an upright extension, a drum loosely inclosing said upright pipe end having a lower open end constantly submerged in the water of said vessel, a float rigidly supported from said drum and normally held by the weight thereof submerged in the wate , and a pipe leading from the upper part of said vessel to said gas holder, substantially as described. 9th. The combination with a generator and a gas holder, of a liquid seal device comprising an upright vessel having water therein, a pipe affording communication between said generator and said vessel and having within the latter an upright extension, a drum loosely inclosing said upright pipe and having a lower open end constantly submerged in the water of said vessel, a float rigidly supported from said drum and normally held by the weight thereof submerged in the water, means for limiting the movements of said drum, and a pipe leading from the upper part of said vessel to said gas holder, substantially as described.

No. 67,777. Plumbers' Holding Tool.
(*Outil de plombiers.*)



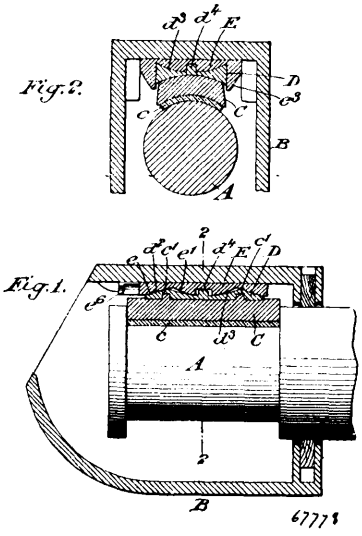
John Thomas Moran and William Lawton, both of Thorndyke, Massachusetts, U.S.A., 18th June, 1900; 6 years. (Filed 9th January, 1900.)

Claim.—1st. In combination with a pair of tongs, having one straight handle, a standard 14, capable of longitudinal and rotary adjustment, and provided with an opening in its free end to receive and grasp one of the handles of said tongs, and a set screw to bear against the handle, substantially as set forth. 2nd. In combination with a pair of tongs, a collar adapted to be attached to a bench, a rod mounted in said collar, and having free longitudinal and rotary movement, means to rigidly fix said rod in position in the collar and means comprising an opening and locking means to bear against the handle to secure said tongs to the top of the latter, substantially as set forth. 3rd. In combination with a pair of tongs, a collar capable of being attached to a bench, a rod loosely mounted in said collar and having longitudinal and rotary movement therein, means to rigidly fix said rod in position, a slo ted head on the latter adapted to receive one of the arms of said tongs, and means for securing the arm to said head, substantially as specified.

No. 67,778. Car Axle Bearing (*Coussinet d'essieux de chars.*)

The Atlantic Brass Company, New York, assignee of James William Harrison, Atlanta, Georgia, U.S.A., 18th June, 1900; 6 years. (Filed 18th May, 1900.)

Claim.—1st. The combination with a wedge provided on its under side with a concave depression having a convex projection at the middle portion thereof, the said wedge being further provided with depending flanges on its opposite sides, of a brass provided on its back with a convex surface adapted to engage the concave depression on the under side of the wedge and with a concave depression adapted to engage the convex projection on the under side of the wedge, substantially as set forth. 2nd. The combination with a wedge provided with a concave depression on its under side and with a convex projection at the middle portion of said concave and with



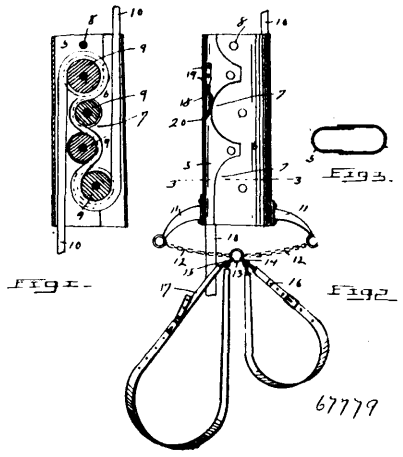
an elongated socket in the face of said convex, of a brass provided with a convex surface on its back adapted to receive the concave surface on the wedge, a concave depression adapted to receive the convex projection on the wedge and a stud uprising from the concave depression and adapted to enter the said elongated socket, substantially as set forth. 3rd. The combination with a wedge provided with a concave depression on its under side and with a convex projection at the middle portion of said concave, of a brass provided on its back with a convex surface in position to receive the concave surface on the wedge and with an oval concave depression in position to receive the convex projection on the wedge, substantially as set forth. 4th. The combination with a brass and a wedge, of an intermediate bearing piece fitted to the brass and means for securing the said intermediate piece to the brass at its corners, substantially as set forth. 5th. The combination with a brass provided on its back with lips, of an intermediate bearing piece arranged to seat between the lips on the back of the brass and a wedge adapted to bear upon the intermediate piece, substantially as set forth. 6th. The combination with a brass having its lips extending upwardly or outwardly from its back and an intermediate bearing piece having beveled corners adapted to seat between the said lips and a wedge adapted to bear upon the intermediate piece, substantially as set forth. 7th. The combination with a brass having lips and studs extending upwardly from its back, of an intermediate bearing piece adapted to seat between the lips and provided with sockets for receiving the studs and a wedge fitted to bear upon the intermediate piece, substantially as set forth. 8th. The combination with a brass, of a wedge provided with depending flanges at its opposie sides for engaging the opposite sides of the brass, substantially as set forth. 9th. The herein described wedge p ovided at its opposite sides with depending flanges having beveled edges and with a concave depression on its under side and a convex projection at the middle portion of the concave depression, substantially as set forth.

No. 67,779. Fire Escape. (*Sauveteur d'incendie.*)

Paul Grittinger, Cornwall, Pennsylvania, U.S.A., 19th June, 1900; 6 years. (Filed 6th June, 1900.)

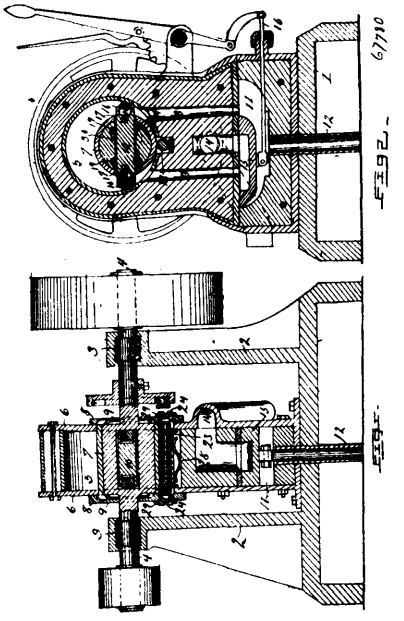
Claim.—1st. A fire escape, comprising a body consisting of two members which are pivotally connected adjacent their upper ends, and each provided with a plurality of pulleys which are arranged alternately upon the members, a suspension device connected with the lower ends of said members and a rope which is passed about said pulleys, and adapted to be connected with a building or other structure, substantially as shown and described. 2nd. A fire escape, comprising a body consisting of two semi-tubular overlapping members which are pivotally connected adjacent their upper ends, and each provided with a plurality of pulleys, which are arranged alternately upon the members, a suspension device connected with the lower ends of both of said members, and a rope which is passed about said pulleys and adapted to be connected with a building or other structure, substantially as specified. 3rd. A fire escape, comprising a body consisting of two semi-tubular overlapping members which are pivotally connected adjacent their upper ends, and each provided with a plurality of pulleys, said members being provided at the edges with projecting cheeks in which said pulleys are mounted, a suspension device connected with the lower ends of both of said members, and a rope which is passed about said pulleys and adapted to be connected with a building or other structure, substantially as specified. 4th. A fire escape, comprising a body consisting of two members which are pivotally connected adjacent their upper

ends, and each provided with a plurality of alternately arranged pulleys, a suspension device connected with the lower ends of both



of said members, said suspension device consisting of an arm connected with the lower end of each of said members, and slings detachably connected with said arms, and a rope which is passed about the said pulleys and adapted to be connected with a building or other structure, substantially as shown and described.

No. 67,780. Rotary Motor. *(Moteur rotatoire.)*

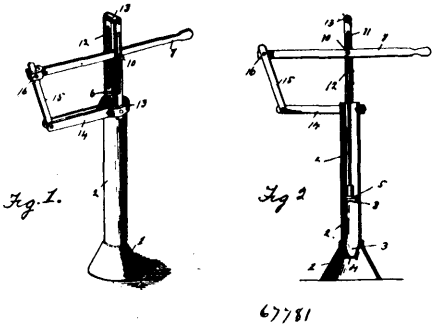


Harvey O. Gadberry, Carth age, Missouri, U.S.A., 19th June 1900; 6 years. (Filed 6th June, 1900.)

Claim.—1st. In a rotary motor, the combination of the cylinder, the eccentrically disposed piston within said cylinder provided with a slide having terminal bearing surfaces engaging with the wall of the cylinder, roller bearings mounted in the core of the piston supporting said slide, ports for the introduction and exhaust of the propulsive agent communicating with said cylinder and means for controlling said ports. 2nd. In a rotary motor, the combination of the cylinder, the shaft passing therethrough and supported in roller bearings, the piston upon said shaft eccentrically disposed within said cylinder, said piston having a diametrically disposed way therethrough, a reciprocatory slide located in said way adapted to have terminal contact with the wall of the cylinder, roller bearings located in the core of the piston and supporting said slide and packing strips located in the way in said piston and engaging the opposite faces of said slide. 3rd. In a rotary engine, the combination of the cylinder, the shaft, the piston thereon, said piston being eccentrically disposed within the cylinder, a slide passing through the piston and having terminal contact with the wall of the cylinder, the periphery of the piston being in contact with the wall of the cylinder at one point, an antifriction roller located in the wall of the cylinder at said point and engaging the periphery of the piston, ports communicating with the cylinder on each side of said antifriction roller and means for opening and closing said ports. 4th. In a rotary motor, the combination of the cylinder and shaft, the piston mounted on the shaft and eccentrically disposed within the cylinder, the periphery of the piston at a point standing contiguous to the wall of the cylinder and the antifriction roller located in a recess in the wall of the cylinder at said point of contiguity and engaging the periphery of the piston, a spring actuated packing strip engaging the lower side of the roller, ports communicating with the cylinder on either side of the roller and means for opening and closing said ports. 5th. In a rotary engine, the combination of the cylinder, the piston eccentrically disposed therein, said piston having a diametrical way therethrough, a slide located in said way having terminal contact with the wall of the cylinder, antifriction rollers located in the wall of the piston and engaging the opposite faces of said slide, ball cups adjustably located in the piston and carrying a series of balls which serve as bearing supports for the ends of said rollers. 6th. In a rotary motor, the combination of the cylinder, the piston disposed eccentrically therein and standing contiguous to the wall of the cylinder at said point of contiguity, an antifriction roller located in said recess engaging the periphery of the piston, bearing cones on the ends of said rollers and ball cups screwed into the casing of the cylinder which embrace said bearings and retain a series of balls which serve as supports for the ends of the rollers.

No. 67,781. Washing Machine or Churn.

(Machine à laver ou baratte.)

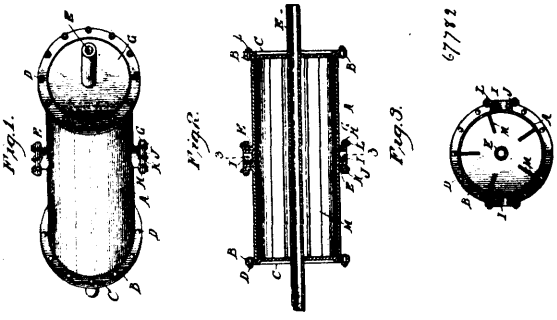


Joseph T. Crow, Kieferville, Ohio, U.S.A., 19th June, 1900; 6 years. (Filed 6th June, 1900.)

Claim.—1st. A device of the class described, comprising a conical shell having an opening at its top, a vertical tube having a contracted lower end extended into the top of the shell and depending therefrom, a valve mounted on the lower end of the tube and operating within the conical shell, a pair of bars extending vertically from the top of the tube, a handle connecting the upper ends of the said bars, a plunger, and a lever connected with the plunger and guided by the bars, substantially as described. 2nd. A device of the class described, comprising a shell, a tube extending upward therefrom and provided with a valve, a pair of bars extending vertically from the top of the tube, a handle connecting the upper ends of the bars, a band embracing the tube and the lower ends of the bars and extended from the former to provide elongated arms 14, a link pivoted at its lower end between the arms 14, a plunger, and a lever fulcrumed on the link and connected with the plunger and arranged between and guided by the vertical bars, substantially as described.

No. 67,782. Mercury Amalgamator.

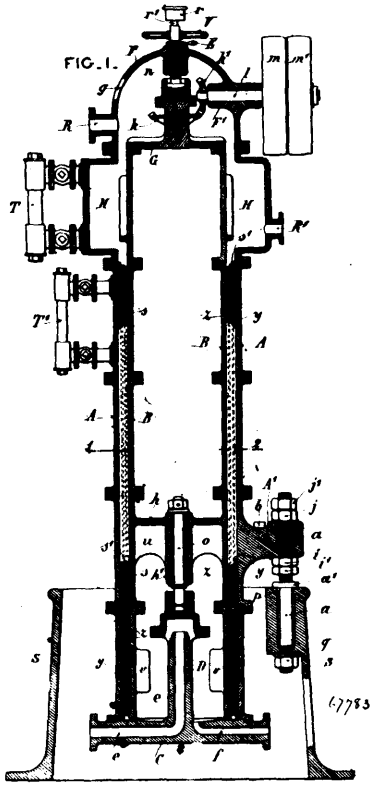
(Amalgamateur de mercure.)



Nelson S. Bullis and Alexander Shaw, both of Glens Falls, New York, U.S.A., 19th June, 1900; 6 years. (Filed 6th May, 1899.)

Claim.—1st. The amalgamator or mixer herein described, comprising the cylinder A having manholes, the heads C, the hollow shaft E passing centrally through the cylinder and heads, and the cup-shaped manhole covers I with their inner surfaces flush with and curved to correspond with the curvature of the inner surface of the cylinder, substantially as described. 2nd. The amalgamator or mixer herein described, comprising a cylinder provided with outwardly projecting nipples surrounding manholes, and having outwardly turned end flanges with radial slots in combination with cup-shaped covers having their inner ends flush with and curved to correspond with the curvature of the inside of the cylinder, and provided with flanges to rest on the nipple flanges and corresponding notches, bolts seated in the registering notches of the nipples and covers, and nuts on said bolts to clamp the flanges together, substantially as described. 3rd. The amalgamator or mixer herein described, comprising a cylinder having suitable heads, a hollow shaft passing centrally through said cylinder and heads, and a series of radially arranged wings or flanges secured to and projecting inwardly from the inner surface of the cylinder, substantially as described.

No. 67,783. Amalgamating Apparatus for Extraction of Precious Metals from Minerals. (*Appareil à amalgamer pour l'extraction des métaux précieux des minerais.*)



Antoine Lavoia, 7 Rue de Chateaudun, Paris, France, 19th June, 1900; 6 years. (Filed 9th August, 1899.)

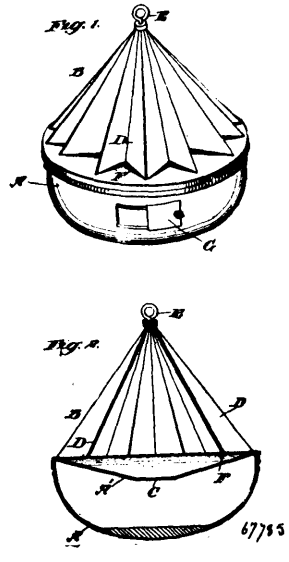
Claim.—1st. An amalgamating apparatus for the treatment of minerals containing precious metals, wherein the minerals in suspension in a mass of water traverse under pressure from below to the top, an annular layer of quicksilver of feeble thickness and several meter height comprised between two cylinders whilst the mass is stirred up by the rotating of one of the cylinders provided with teeth or pins covering its circumference in contact with the quicksilver, the rising movement of the minerals being moreover delayed either by rings with teeth carried by the stationary cylinder or by the circular ribs carried by the two cylinders so as to secure the intimate and prolonged contact of all the particles of the mineral with the quicksilver. 2nd. An amalgamating apparatus with a cylinder A resting upon a base S by three regulating screws allowing of its vertical adjustment in combination with an inner concentric cylinder B provided with teeth or pins on its outer circumference, open at the under part allowing an edge perfectly horizontal resting upon the bottom of the first cylinder by means of a central pivot and receiving a rotating movement by means of a driving gear carried by the head or above the outer cylinder A, substantially as and for the purpose hereinbefore set forth. 3rd. An amalgamating apparatus with a cylinder A resting upon a base S by three regulating screws in combination with an inner concentric cylinder B open at its under part and receiving whilst the apparatus is at work a continuous rotating movement, in combination with rings of one piece z of iron cast with a horizontal row of pins or teeth s and entered one above the other and keyed with the cylinder B, and in combination with rings of one piece z^1 of iron cast with a horizontal row of teeth s^1, and entered one above the other in the interior of the stationary cylinder B to which they are keyed, so that the horizontal rows of teeth s^1 alternate with the horizontal rows of teeth s, substantially as and for the purpose hereinbefore set forth. 4th. An amalgamating apparatus with a cylinder A resting upon a base S by three regulating screws and having on its inner surface circular ribs t^1 conveniently spaced one from the other, in combination with an inner concentric cylinder B open at its under part, receiving a continuous rotating movement and provided on its outer surface with screwed pins s and circular ribs t alternating with the ribs t of the stationary cylinder, substantially as and for the purpose hereinbefore set forth.

No. 67,784. Synthetic Production of India Rubber.
(*Production synthétique de caoutchouc.*)

William James Cordner, London, England, 19th June, 1900; 6 years. (Filed 10th February, 1900.)

Claim.—1st. A process for the synthetic production of india rubber, consisting in the mixture and treatment, substantially as herein before, described, of cleaned china grass or rhea fibre and the latex of the tabermæmontana crassa. 2nd. A material consisting of china grass or rhea fibre and the latex of the tabermæmontana crassa mixed and treated, substantially as described.

No. 67,785. Water Purifier. (*Appareil à purifier l'eau.*)



Charles Alfred Scadding, Buffalo, New York, U.S.A., 19th June, 1900; 6 years. (Filed 18th November, 1899.)

Claim.—1st. A water purifier, comprising a floatable vessel having a top, and a fluted collector on said top and having its lower ends terminating above said top whereby to form passages for the impurities to pass over the top into the vessel, as set forth. 2nd. A water purifier, comprising a floatable vessel, and a collector on the top of said vessel, said collector being in the form of a pyramid having fluted sides, as set forth. 3rd. A water purifier, comprising a floatable vessel having a dished top, with an aperture at the apex, and a collector on said top and in the form of a hollow pyramid having fluted sides, the lower ends of which terminate above said top, to form passages for the impurities gathered by the sides, to allow the impurities to pass over the top into the vessel, as set forth. 4th. A water purifier, comprising a flotable vessel having a dished top with an aperture at the apex, a collector on said top and in the form of a hollow pyramid having fluted sides, the lower ends of which terminate above said top, to form passages for the impurities gathered by the sides, to allow the impurities to pass over the top into the vessel, and a cleaning door in the side of the vessel, as set forth. 5th. A water purifier, comprising a floatable vessel having a dished top with an aperture at the apex, a collector on said top and in the form of a hollow pyramid having fluted sides, the lower ends of which terminate above said top, to form passages for the impurities gathered by the sides, to allow the impurities to pass over the top into the vessel, and a ring in the apex of said collector, as set forth.

No. 67,786. Railway Switch. *(Aiguille de chemin de fer.)*

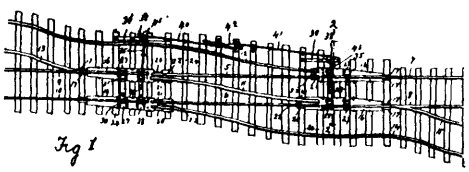


Fig 1

Fig 2

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James C. Sturm, Knottsville, and William Jennings, Grafton, both in West Virginia, U.S.A., 19th June, 1900; 6 years. (Filed 6th June, 1900.)

Claim.—1st. In a railway switch system, the combination with a main trackway including movable rails, of a switch at each side of the main trackway and comprising a single rail common to both switches, and means for moving the movable rails into alignment with the main or switch rails each of said switches comprising also a portion of a main trackway rail. 2nd. In a railway switch system, the combination with a main trackway comprising fixed and movable rails, of a switch at each side of the main trackway and comprising foxed switch rails, each of said switches including also a portion of a main track rail, a rail common to the switches and located intermediate the main track rail and at an angle thereto, and a common means having connections with the movable rails to move them into simultaneous engagement with the switch rails or the adjacent main track rails. 3rd. In a railway switch system, the combination with main track rails comprising movable rails, of switch rails adjacent thereto, a plate including chairs engaging and holding the adjacent ends of corresponding rails, and with which the movable rails are in slidable contact, and means for operating the movable rails to cause them to alternately align with adjacent fixed rails. 4th. In a switch system, the combination with a main trackway comprising fixed rails, and additional rails, portions of which are movable, of switch rails adapted for alignment with the movable rails altenately with the adjacent fixed rails of the main track, a plate having a single chair connected with the fixed portion of each movable rail, and having a double chair connected with the adjacent ends of the adjacent main and switch rails, connections between corresponding movable rails, bell-crank levers connected with said connections, a lever, and links connecting the bell crank levers with the last named lever and adapted to transmit motion from the lever to the movable rails. 5th. In a railway switch system, the combination with main track rails including rails having fixed portions and movable portions, of switch rails, a plate beneath each movable rail portion and having a chair engaging the corresponding fixed rail portion, and an additional chair engaging the adjacent ends of a corresponding main and switch rails, transverse depressions in said plates, connections between the element of each pair of movable rail portions, lying in said depressions, and a lever connected with said connections and adapted to reciprocate them in the depressions and align the movable rail portions with the main and switch rails alternately.

No. 67,787. Hernia Truss. *(Bandage herniaire.)*

John Bain and Arthur Arnold Mahaffy, both of Bracebridge, Ontario, Canada, 19th June, 1900; 6 years. (Filed 14th September, 1899.)

Claim.—1st. A hernia truss embracing in its construction an inflatable hernia pad a ball contained within the inflatable hernia pad to prevent the collapsing of the sides and a valve for the inflation of the hernia pad, substantially as specified. 2nd. A hernia truss consisting of a body bandage, an air tube connected to the body bandage and extending from end to end of the same, a strap one end of which is connected to the body bandage at the middle of the front the other end of which is adapted to be connected to the body bandage at the middle of the back, an inflatable hernia pad connected to the inner sides of the bandage at its junction with the depending strap

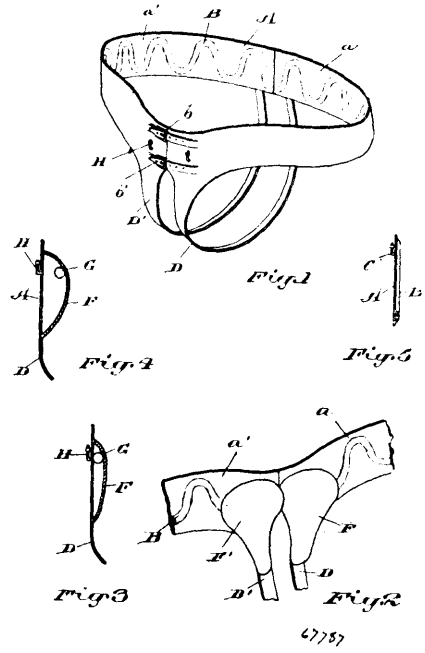

Fig 1 Fig 2 Fig 3 Fig 4 Fig 5

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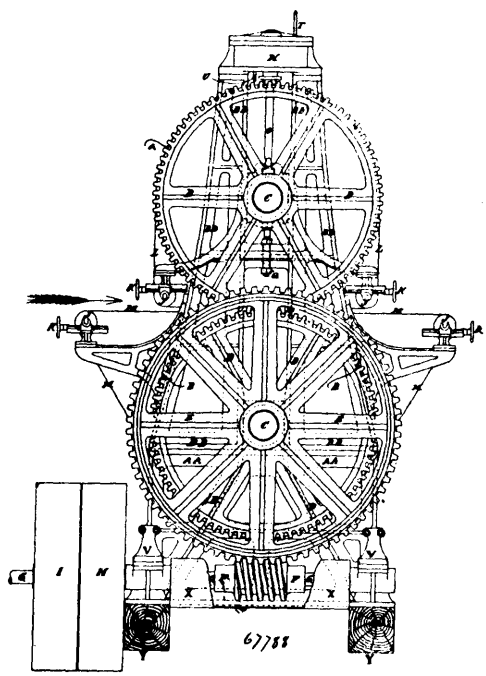
and a ball contained within the inflatable hernia pad to prevent the collapsing of the sides, substantially as specified.

No. 67,788. Pulp Press. *(Presse à pulpe.)*

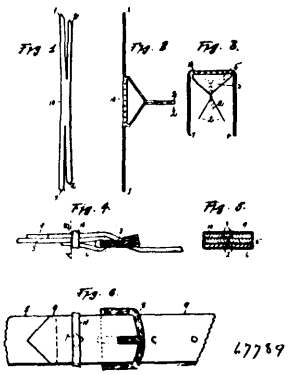


67788

A. H. Larochelle, de Lévis, et O. A. Porritt, Chicoutimi, Québec, Canada, 19 juin 1900; 6 ans. (Déposé 17 octobre 1899.)

Résumé.—1° La combinaison des rouleaux presseurs A et B, des rouleaux de renvois J, des tabliers L et M, tel que décrit et pour les fins indiquées. 2° La combinaison des cylindres passeurs N, des tiges O, des coussinets F, des vis de retenu Q, tel que décrit et pour les finis indiquées. 3° La combinaison du corps de valve R, de la valve circulaire S, et des tuyaux de raccordement T et U tel que décrit et pour les finis indiquées.

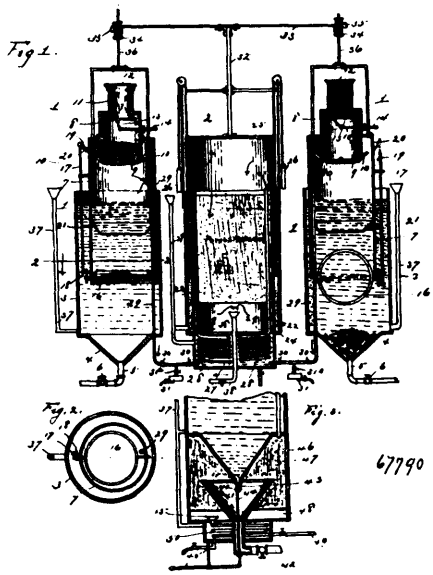
No. 67,789. Fastener for Strap. (*Attache de courroie.*)



Thomas Samuel Grace, Blenheim, New Zealand, 19th June, 1900; 6 years. (Filed 7th June, 1900.)

Claim.—1st. In combination, the strap sections and the fastener having two pairs of strips formed integral therewith, one of said pairs extending through an opening and clenched against the face of one strap section and the other pair of strips being passed in the opposite direction through the strap sections and clenched against the other face of the section, substantially as described. 2nd. In combination, the strap sections and the fastener having two pairs of strips formed integral therewith, one of said pairs extending through an opening and clenched against the face of one strap section and the other pair of strips being passed in the opposite direction through the strap sections and clenched against the face of the sections, the main portion of the fastener being located at a distance from the strap sections to form a keeper, substantially as described. 3rd. In combination, the strap sections and a fastener having two pairs of strips one passing between the sections out through an opening in one of them and clenched against the outer side and the other pair passing around the sections and thence through them and clenched on the side opposite to that upon which the first pair is clenched, substantially as described.

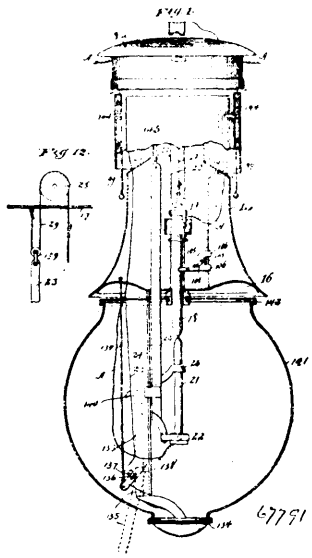
No. 67,790. Acetylene Gas Generator.
(*Générateur de gaz acétylène.*)



James H. Needles, Atlanta, and Harry W. Crozier, Washington, Court House, Ohio, U.S.A., 13th June, 1900; 6 years. (Filed 11th March, 1899.)

Claim.—1st. In an acetylene gas generator, the combination of a water tank, a movable holder, a carbide basket carried by the holder and provided with a gauze bottom and adapted to be immersed in the water in the tank when the holder descends, and vent tubs 10 communicating at their lower ends with the lower end of the carbide basket, at a point just above the gauze bottom, and terminating at their upper ends within the gas space of the holder, as and for the purposes herein set forth. 2nd. In an acetylene gas generator the combination of a water tank, a movable holder therein, a carbide basket carried by said holder, a receptacle carried by the holder and adapted to catch the slacked carbide, and means for discharging said slacked carbide from said receptacle, substantially as set forth. 3rd. In an acetylene gas generator the combination of a water tank, a movable holder therein, a carbide basket carried by said holder, a receptacle carried by the holder and adapted to catch the slacked carbide, means for discharging said slacked carbide from said receptacle, and a deflector carried by the holder to direct the slaked carbide into the receptacle, substantially as described. 4th. In an acetylene gas generator the combination of a water tank, a movable tank therein, a carbide basket carried by said holder, a receptacle carried by the holder and adapted to catch the slaked carbide, and means for upsetting said receptacle to discharge its contents, substantially as described. 5th. In an acetylene gas generator the combination of a generator with a gasometer, said gasometer consisting of a stationary rank formed with double walls, a body of porous material contained within said tank, a gas space being formed below said porous material, a movable tank forming the upper part of said gasometer, a water receptacle below said gasometer, a gas pipe leading from the generator and formed into a coil in the water receptacle and then carried up above the porous material, and a pipe leading out from the gas space below the porous material, substantially as described.

No. 67,791. Electric Arc Lamp. (*Lampe électrique à arc.*)



James Monroe Willard, Decatur, Illinois, U.S.A., 19th June, 1900; 6 years. (Filed 16th January, 1900.)

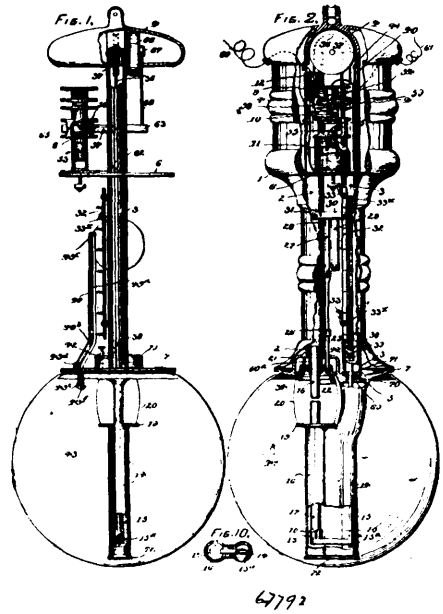
Claim.—1st. In an arc lamp, the combination with carbons movable toward and from each other, of a vibrating lever, a drum carried by said lever, a flexible device connecting said carbons and wound around said drum and extending therefrom directly to the carbon supporting devices, whereby when said drum moves bodily the distance between the carbons is not affected, a gear wheel connected and moving with said drum, a coil located in the main circuit and having a core or armature connected to said lever, and an electric motor located in a shunt circuit and provided with a pinion with which said gear meshes when said coil is energized, whereby said gear and drum are partially rotated to cause both carbons to move away from each other and strike the arc, substantially as described. 2nd. An arc lamp feeding mechanism, comprising means for connecting the carbons, whereby they may be moved toward each other as consumed, and a motor for actuating said mechanism comprising a coil located in a shunt circuit, a core or armature for said coil, an actuating lever connected to said core, means for moving said lever in opposition to the attraction of the coil, a dash pot connected with said lever, whereby a slow movement is imparted thereto, a circuit breaking device for the shunt circuit, and means controlled by the movement of the actuating lever for positively and instantaneously operating said circuit breaking devices, substantially as described. 3rd. In an arc lamp, the combination with the carbons, their flexible connection and a drum and wheel gear therefor, of an actuating lever adapted to be operatively connected with said gear wheel, a coil located in a shunt circuit and having a core or armature connected with one end of said lever, a counterweight and dash pot connected with the other end of said lever, and a circuit breaking device controlled by the movement of the actuating lever, substantially as described. 4th. In an arc lamp, the combination with the carbons, and an electric motor for feeding the same toward each other located in a shunt circuit and comprising a vibrating actuating lever, of a circuit breaking device for the shunt circuit, comprising a normally

depressed circuit breaking lever, a latch for maintaining the same in raised position, an intermediate lever adapted when depressed to raise the circuit breaking lever, and a latch for maintaining said intermediate lever in raised position, the actuating lever being adapted to raise the intermediate lever and to alternately trip the latches of the intermediate and circuit breaking levers, substantially as described. 5th. In an arc lamp, a manually operated device for actuating a cut out switch, comprising, in combination, an actuating lever connected with the movable member of the switch for bringing the same into contact with the fixed member, a releasing lever provided with a bevelled shoulder arm with which said actuating lever engages, and separate means connected with each of said levers and accessable externally of the lamp casing for independently operating said levers, substantially as described. 6th. In an arc lamp, the combination with a switch or cut out and its releasing lever, of an adjustable stop arm located in the path of one of the carbon holders and operatively connected with said releasing lever, substantially as described. 7th. In an arc lamp, the combination with a switch or cut out and its releasing lever, of a rod connected to said lever and extending parallel with the line of travel of the upper carbon holder, and a stop arm adjustably mounted on said rod and extending into the path of the carbon holder, substantially as described. 8th. In an arc lamp, the combination with a switch or cut out, and a movable carbon holder, of manually operative means accessible externally of the casing for operating said switch, means actuated by one of the carbon holders for automatically operating said switch at a predetermined time, and means inclosed within the casing for automatically locking the manually operative switch operating mechanism, substantially as described. 9th. In an arc lamp, the combination with a switch or cut out, an actuating lever therefor, and a releasing lever with which said actuating lever engages, of a stop arm located in the path of one of the carbon holders and operatively connected with the releasing lever, and a locking dog controlled by said releasing lever and adapted to engage the actuating lever when the releasing lever is actuated by said stop arm, substantially as described. 10th. In an arc lamp, the combination with the carbons and their inclosing globe, of feeding mechanism located above and outside of said globe, a separate casing inclosing said feeding mechanism, and coils controlling the feeding mechanism and mounted externally on the casing, whereby said coils are exposed to the external air and protected from the heat of the lamp, both directly from the carbons and by convection from the feeding mechanism, and their effect upon the feeding mechanism is thereby rendered more uniform, substantially as described. 11th. In an arc lamp, the combination with the carbons and their inclosing globe, of the carbon feeding mechanism, a casing inclosing said feeding mechanism and provided with external bays or recesses, and coils controlling said feeding mechanism and mounted in said bays or recesses, substantially as described. 12th. In an arc lamp, the combination with the frame having a downwardly extending arm provided with inclined ways, of a globe holder having a supporting rod adapted to slide in said arm, a roller mounted in said inclined ways, and means accessible externally of the globe for moving said roller out of engagement with the supporting rod, substantially as described. 13th. In an arc lamp, the combination with the frame and downwardly extending arm, and a globe holder having a supporting rod mounted to slide in said arm and provided with a terminal hook or projection to engage said roller, substantially as described. 14th. In an arc lamp, the combination with the frame and its downwardly extending arm provided with inclined ways, of a globe holder having a supporting rod adapted to slide in said arm, a roller mounted in said inclined ways, a pivoted yoke supporting said roller, and a rod connected to said yoke and extending upward into the casing of the lamp, substantially as described. 15th. In an arc lamp, the combination with the carbons, their flexible connection and a drum and gear wheel therefor, of a vibrating lever operatively connected with said gear wheel, a coil located in a shunt circuit and having a core or armature connected with one end of said lever, a counterweight connected with the other end of said lever, means for varying the weight of said counterweight, and a circuit breaking device controlled by the movement of the actuating lever, substantially as described.

No. 67,792. Electric Arc Lamp. (*Lampe électrique à arc.*)

Edward H. Belden, Fort Wayne, Indiana, U.S.A., 19th June, 1900; 6 years. (Filed 25th January, 1900.)

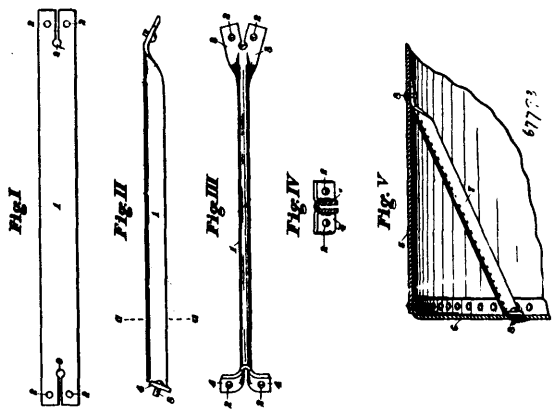
Claim.—1st. In an arc lamp, a frame consisting of a tubular guide for the upper carbon, and a tubular guide for the lower carbon, said guides being in vertical alignment, in combination with platforms secured to said guides and adapted to support the operative mechanism of the lamp, and a tube interposed between the upper carbon and its tubular guide. 2nd. In an arc lamp, a frame consisting of upper and lower tubular guides for the carbons and in combination with a platform located at the upper end of the lower guide and adapted to support an arc inclosing globe, and a tube interposed between the upper carbon and its tubular guide. 3rd. In an arc lamp, the combination with the magnet frame, and the carbon suspending and controlling mechanism of a toggle lever one member of which is pivotally secured to the magnet frame, while the other member is pivotally secured to a tilting frame carried by said magnet frame. 4th. In an arc lamp, the combination with the magnet frame, and the carbon suspending mechanism, of a toggle lever one member of which is pivotally secured to said frame, while the other member is pivotally secured to a tilting frame carried by the magnet



frame, a flanged wheel and gripping dog, and a connection between said tilting frame and gripping dog. 5th. In an arc lamp, the combination with the lamp frame, of a pulley at the upper end thereof, a carbon suspend ng cord passing around said pulley, a flanged wheel concentric with said pulley, a gripping dog adapted to engage the flange of said wheel, a magnet frame, a tilting frame arranged theron, a toggle lever connecting the magnet frame and tilting frame, and a connection between said tilting frame and gripping dog. 6th. In an arc lamp, the combination with a frame comprising a tube for the upper carbon, a tube for the mechanism controlling the lower carbon holder, and a tube for the lower carbon, of an arc inclosing globe located between the proximate ends of the upper and lower carbon tubes a cap for said globe having an opening for the passage of the upper carbon, and a cap closing the lower ends of the tubes for the lower carbon and lower carbon holder mechanism. 7th. In an arc inclosing globe, a cleaner within the globe, a spring controlled drive wheel mounted upon the frame, a connection between said wheel and cleaner, and mechanism for controlling the movement of said wheel. 8th. In an arc lamp, the combination with a lamp frame, and an arc inclosing globe, of an automatic globe cleaner forced against the globe by spring pressure, a spring controlled wheel connected with said cleaner, and mechanism for controlling the rotation of the wheel. 9th. The combination with an arc lamp of a globe holder, and a hanger therefor, said hanger being centrally jointed, and adapted to be folded together to support the globe in position, and to be unfolded to suspend the globe at a distance from the lamp to facilitate re-carboning. 10th. The combination with an arc lamp, of a globe holder adapted to embrace the upper part of the globe, and a jointed hanger adapted to be folded and unfolded, substantially as described. 11th. An arc lamp frame comprising tubes 1, 3, 14 and 16, in combination with an arc inclosing globe located between the tubes 1 and 16, and a closing plate 72, whereby air is excluded from the arc inclosing globe. 12th. In an arc lamp, the combinatioon with an arc inclosing globe, of a wiper or cleaners arranged within the globe, and means controlled by the carbon supporting mechanism of the lamp for automatically operating said wiper or cleaner. 13th. In an arc lamp, the combination with an arc inclosing globe, of a cleaner arranged within the globe and comprising an expansible wiper, and means, controlled by the carbon supporting mechanism of the lamp, for automatically moving the wiper within the globe. 14th. In an arc lamp, the combination with an arc inclosing globe, a cleaner comprising a self expanding fibrous wiper and mechanism operated by the lower carbon holder for moving said wiper within the globe. 15th. In an arc lamp, the combination with an arc inclosing globe, of a wiper suspended within the globe by a supporting device, a rod secured to said supporting device, and mechanism operated by the movement of the lower carbon holder for reciprocating said rod. 16th. In an arc lamp, the combination with an arc inclosing globe, of tubes 14 and 16, the tube 14 having a concave socket, a valve seated in said socket, and a cap for the lower ends of the tubes. 17th. In an arc lamp, the combination with an arc inclosing globe, of tubes 14 and 16, and means substantially as described for excluding air from said globe. 18th. In an arc lamp the combination with an arc inclosing globe, of

cleaner supported within said globe, and means operated by the movement of one of the carbon holders for moving the cleaner. 19th. In an arc lamp the combination with an arc inclosing globe, of a cleaner supported with the globe, means operated by the movement of one of the carbon holders for moving the cleaner, and a device carried by the cleaner operating means for expanding the cleaner. 20th. In an arc lamp the combination with an arc inclosing globe, of a cleaner suspended within the globe, means operated by the movement of one of the carbon holders for moving the cleaner vertically, and a spring pressed rod for expending the cleaner. 21st. In an arc lamp the combination with an arc inclosing globe, of a cleaner suspended within the globe, and comprising a flexible wiper ring, means operated by the movement of one of the carbon holders for moving the wiper, and a spring pressed rod for expanding the flexible ring. 22nd. In an arc lamp, the combination with an arc inclosing globe, of a cleaner suspended within the globe, and comprising a flexible wiper, of a supporting ring from which the flexible wiper is suspended, a hollow operating rod secured to said supporting ring and adapted to be moved by the movement of one of the carbon holders and a spring pressed plunger rod arranged within the operating rod and adapted to expand the flexible ring. 23rd. In an arc lamp, the combination with an arc inclosing globe, of a cleaner comprising a flexible wiper suspended by brackets from a supporting ring, an operating rod secured to said supporting ring, mechanism for moving said rod by the movement of one of the carbon holders and a spring pressed rod carried by the operating rod for expanding the flexible ring. 24th. In an arc lamp, the combination with an arc inclosing globe, of a cleaner comprising a supporting ring, pivoted brackets depending from said ring, a wiper secured to said brackets, an operating rod secured to said supporting ring, mechanism between said rod and the lower carbon holder for moving the rod and a spring pressed plunger rod connected to two of said brackets to turn them on their pivots to expand the wiper. 25th. In an arc lamp, the combination with an arc inclosing globe of a cleaner comprising a supporting ring, brackets pivotally secured to said ring, a flexible wiper secured to said supporting ring, mechanism for operating said rod by the movement of one of the carbon holders, and a spring pressed plunger rod arranged within the operating rod, the lower end of said plunger rod being secured to two of the brackets to turn them on their pivots to expand the wiper.

67,793. Boiler Brace. (*Lien de chaudières.*)



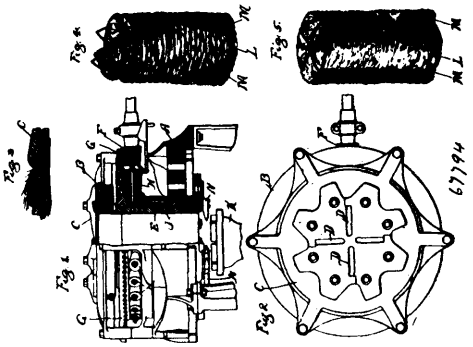
Patrick F. Dundon, San Francisco, California, U.S.A., 19th June, 1900; 6 years. (Filed 7th June, 1900.)

Claim.—1st. A brace or stay of the character described, slit at the ends to form two lugs, these latter bent outward to form footings at each end of the brace, equally at each side, and to suit the angles of the faces to which the brace is attached, substantially as specified and shown. 2nd. A brace or stay made of plate metal of uniform thickness and width, slit to form two lugs at each end, rivet ways in each lug all in like relation to the line of the brace and to sustain an equal strain, substantially as described. 3rd. A brace or stay made of plate metal, slit at the ends to form lugs 4, turned outward from the inside of the folded plate, and lugs 3 at the other end spread in an opposite plane, substantially as specified.

No. 67,794. Method of Compressing Materials.
(*Méthode de comprimer les materiaux.*)

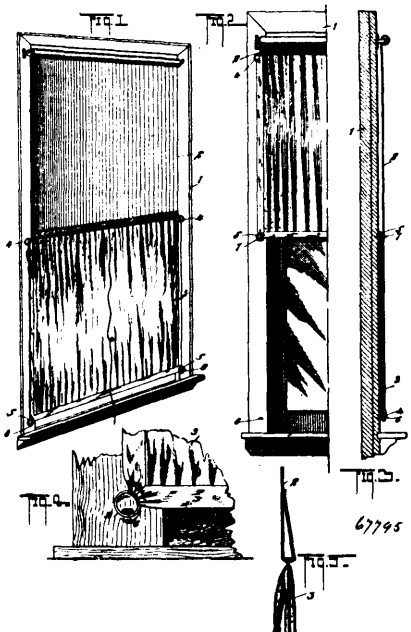
George Archibald Lowry, Chicago, Illinois, U.S.A., 20th June, 1900; 6 years. (Filed 7th June, 1900.)

Claim.—1st. The process of forming materials of various kinds into bales or packages in such manner as to destroy deleterious bacteria therein and to preserve the natural qualities of such material, which process consists in expressing the air from small quantities of such material, superposing such compressed increments upon each other under compression, and finally securing such superposed increments against expansion. 2nd. The process of preserving green or partially cured material in its natural state, consisting in expressing the air from thin layers of such material and superposing such layers upon



each other under compression. 3rd. The process of preserving green or partially cured material in its natural state, which consists in expressing the air from and between the particles of material, and superposing such particles upon each other in layers under compression, whereby the air is excluded from between such layers, and finally securing the package or bale against expansion, thereby sealing the same against the penetration of air. 4th. The process of sterilizing various materials to preserve the same, which consists in expressing the air from small quantities of the material, and applying thereto a high degree of heat, and superposing such increments upon each other under compression. 5th. The process of preserving and sterilizing various materials, which consists in expelling the air from and between the particles of small quantities of such material and subjecting such particles to heat, whereby the bacteria contained therein are destroyed and the material is sterilized, then superposing such particles upon each other in layers under pressure to exclude the air from between such layers and finally securing the package or bale against expansion, whereby such material is sealed sealed against the penetration of air. 6th. As a new article of manufacture, a package or bale of green material composed of a series of highly compressed superposed layers having the natural juices in the fibres thereof cooked and thereby sterilized, said package or bale being maintained against the admission of air. 7th. As a new article of manufacture, a package or bale of green fibrous or other material composed of thin layers or sheets from which the air has been excluded, and which layers or sheets are superposed upon each other under compression, whereby the air is excluded from between the layers, and such material is maintained in its natural state without deterioration.

No. 67,795. Combined Window Shade and Sash Curtain. (*Store de fénetre.*)



Frederick Kling, Roselle, New Jersey, U.S.A., 20th June, 1900. (Filed 7th June, 1900.)

Claim.—1st. As a new article of manufacture, the combination of a window shade and a transparent curtain attached to the lower

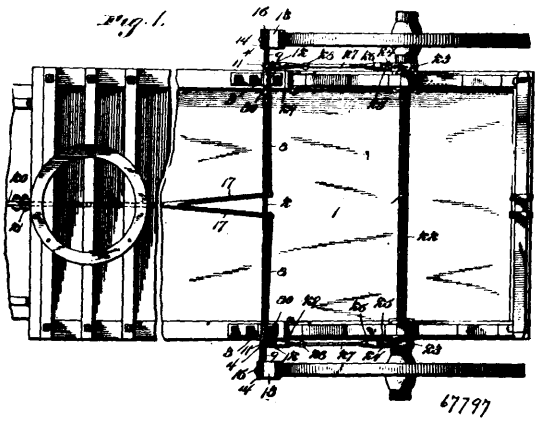
portion thereof, substantially as specified. 2nd. The combination with a window shade, of a transparent curtain secured to the lower end of said shade, and fastening devices on the lower corners of said curtain, substantially as specified. 3rd. The combination of a window shade and a transparent curtain secured to the lower end thereof, fastening devices at the lower corners of said curtain, and fastening devices at the upper corners of said curtain, substantially as specified.

No. 67,796. Process of Preserving Perishable Food *(Procédé pour préserver des aliments périssables.)*

Dr. Wilhelm Lanwer, Mittelstrasse 20, and Ernst Ruping, Karlsburg 4, both of Bremerhaven, Germany, 20th June, 1900; 6 years. (Filed 28th July, 1899.)

Claim.—1st. The process for preserving perishable articles, which consists in sterilizing the object, then dipping it into an alcoholic solution of resin and permitting the alcohol to evaporate, then dipping it into a solution of gelatine, glue and dextrine, then dipping it into a solution of formaline, and finally placing it in a drying room at a temperature of between 30° to 40° centigrade. 2nd. The process of preserving perishable articles, which consists in sterilizing the object, then dipping it in fat, then dipping it into an alcoholic solution of resin and permitting the alcohol to evaporate, then dipping it into a solution of gelatine, glue and dextrine, then dipping it into a solution of formaline, and finally placing it in a drying room at a temperature of between 30° to 40° centigrade.

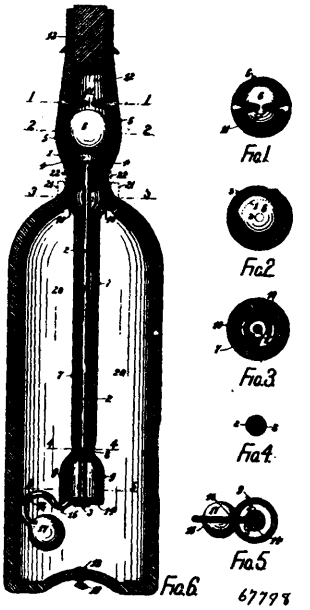
No. 67,797. Vehicle Brake. *(Frein de véhicule.)*



John Ferrell, Zanesville, Ohio, U.S.A., 20th June, 1900; 6 years. (Filed 17th April, 1900.)

Claim.—1st. A brake mechanism for a vehicle, comprising brake shoes having a swinging movement in a horizontal plane and rotatably adjustable around the axes to vary the angle of contact of their faces, supporting parts for said shoes, and longitudinally adjustable rods movably connected to said shoes and supporting parts and the axle of the vehicle to which the brake is applied, and having their rear ends pivoted to move in a vertical plane. 2nd. A brake mechanism for vehicles, comprising a supporting rod having its opposite ends depending vertically and provided with bearings, sleeves rotatably mounted on the said bearings and having inner and outer arms at varying elevations, brake shoes adjustably mounted on the outer arms of the sleeves, and an operating rod attached to the inner arms of said sleeves. 3rd. A brake mechanism for vehicles, comprising a supporting rod having vertically depending bearings, sleeves rotatably mounted on the said bearings and provided with outwardly and inwardly extending arms at varying elevations, brake shoes mounted on the outwardly extending arms, and an operating rod having diverging arms at its rear end attached to the inner ends of the inwardly extending arms of said sleeves. 4th. A brake mechanism for vehicles, comprising a supporting rod having opposite vertically depending rods provided with bearings and lower terminal screw threads, sleeves rotatably mounted on the said bearings and having outwardly projecting short arms and inwardly projecting longer arms, said arms being at different elevations, brake shoes adjustably mounted on the said short arms, an operating rod attached at its rear portion to the longer arms, caps removably fitted on the terminal screw threads of the bearings, and adjustable rods movably connected to said caps and the axle of the vehicle. 4th. A brake mechanism for vehicles, comprising a continuous supporting rod having vertically depending ends, sleeves rotatably mounted on the said depending ends of the supporting rod and provided with outwardly and inwardly projecting arms, brake shoes removably and ajustably attached to the outwardly extending arms of the sleeves, and operating means movably connected to the inwardly projecting arms of said sleeves.

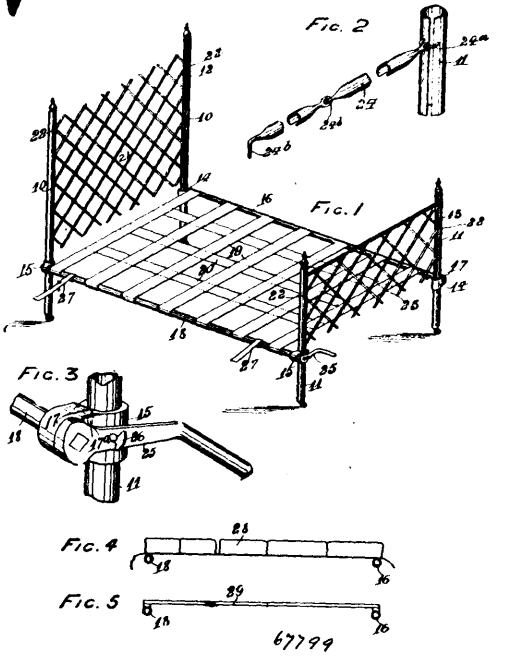
No. 67,798. Nonrefillable Bottle. *(Bouteille non réemplissable.)*



Achilles Peter Rimoldi and John Dixon Rand, both of Forbes, New South Wales, 20th June, 1900; 6 years. (Filed 4th June, 1900.)

Claim.—1st, In unrefillable bottles the combination with a weighted valve such as 1, having a stem such as 2, of a bearing such as 8, having a cup such as 9, the edge whereof is adapted to form a fulcrum, and a lever weight such as 17, substantially as herein described and explained and as illustrated in the drawing. 2nd. The improved unrefillable bottle having all glass closure and stoppers, substantially as herein described and explained and as illustrated in the drawing.

No. 67,799. Folding Bed. *(Lit pliant.)*

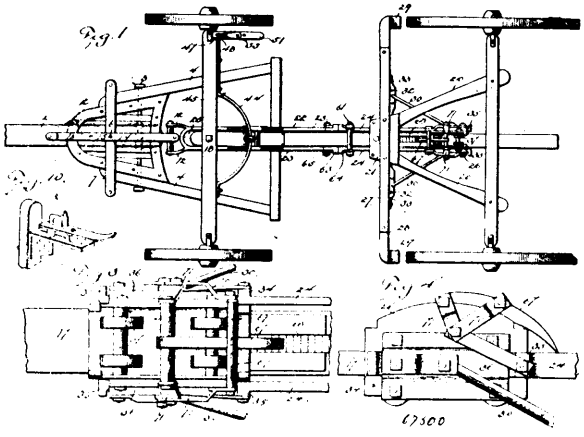


Andrew Russell and Cornelius Isaac Cunningham, both of Vancouver, British Columbia, Canada, 20th June, 1900; 6 years. (Filed 4th June, 1900.)

Claim.—1st. In a bed of the class described, the combination with the corner posts of tubular form having slots on their inner sides, and lattice composed of half round strips pivoted together so that it

will close up forming the head and foot of the bed frame, the upper corners of said lattice being pivoted to the posts and the lower pivoted edges of same lying in the slots on the inner sides of the posts, as and for the purposes set forth. 2nd. In a folding bed having corner posts of tubular form with slots on the inner sides thereof, casting fixed to such posts at an even distance from their lower ends, recesses in such castings, a side bar 10 having castings rigidly fixed to the opposite ends having tongues designed to lie in the recesses in the castings fixed to the posts, a bar 18 on the other side of the frame having castings loosely mounted on its ends with the tongues to take into the recesses in the casting aforesaid, straps 19 connecting the side bars together and straps 20 connecting the first mentioned straps at intervals, and means for turning the bar 18 and locking it where desired, and lattice work 21 and 23 connecting the head and foot posts together above the side bars.

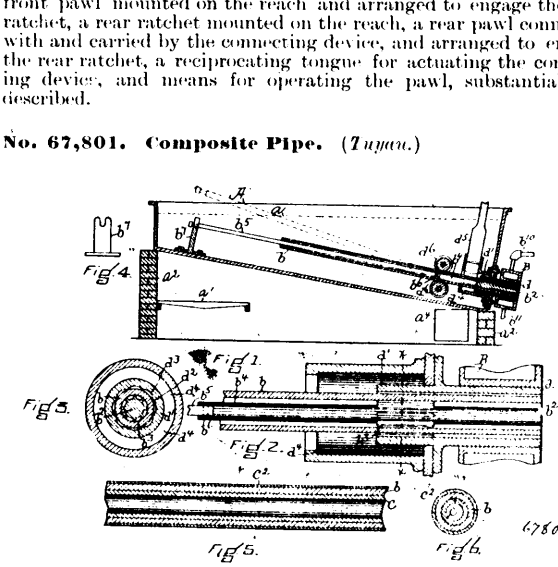
No. 67,800. Brake. *(Frein.)*



Henry Paden, East Grand Forks, Minnesota, U.S.A., 20th June' 1900; 6 years. (Filed 14th April, 1900.)

Claim.—1st. In an automatic vehicle brake, the combination with a running gear having a longitudinal movable tongue, of brake shoes arranged to engage the hind wheels, a sleeve mounted on the reach, connections between the sleeve and the brake shoes, whereby the latter will be applied when the sleeve is moved rearward, a connecting device extending from the tongue to the sleeve and provided with reversely arranged ratchets, a pawl pivoted between its ends, and arranged to engage either of the ratchets, a rock shaft mounted on the running gear and connected with the pawl, substantially as and for the purpose described. 2nd. In an automatic vehicle brake, the combination with a running gear, of a connecting device provided with oppositely disposed ratchets, a pawl pivoted between its ends and adapted to engage either of the ratchets, a rock shaft mounted on the front portion of the running gear and having a curved arm or bend slidingly connected with the pawl, and means for operating the rock shaft, substantially as described. 3rd. In an automatic vehicle brake, the combination with a running gear, of a connecting device provided with oppositely disposed ratchets, a pawl pivotally mounted between its ends and arranged to engage either of the ratchets, a link connected with the pawl and having a forked upper end, a roller mounted in the forked upper end of the link, and a rock shaft, mounted on the front portion of the running gear and having a curved bend or arm passing through the fork of the link and arranged to engage the roller, substantially as described. 4th. In an automatic vehicle brake, the combination of a connecting device having ratchet teeth, a pawl for engaging the same, a rock shaft connected with the pawl and having an arm, a bracket slotted to receive the arm and having perforations, and a spring actuated latch lever fulcrumed on the arm and provided with a lug adapted to engage the perforations and the slot of the bracket, substantially as described. 5th. In an automatic vehicle brake, the combination of a connecting device having ratchet teeth, a pawl for engaging the ratchet teeth, a rock shaft connected with the pawl and having an arm, a bracket forming a guide for the arm, and a spring actuated latch lever extending longitudinally of the bracket and fulcrumed on the arm and adapted to engage the said bracket, substantially as and for the purpose described. 6th. In an automatic vehicle brake, the combination of a connecting device having ratchet teeth, a pawl for engaging the same, a rock shaft connected with the pawl and having an arm, the latter being extended horizontally at its upper end, a horizontal bracket forming a guide for the arm and located beneath the upper end thereof, an approximately horizontal latch lever fulcrumed on the arm and arranged to engage the bracket at the upper face thereof, a stem extending from the latch lever and guided on the upper end of the said arm, and a spring disposed on the stem and engaging the latch lever, substantially as described. 7th. In an automatic vehicle brake, the combination with a running gear having front hounds and provided with a transverse rod connecting the same, a pivoted guide mounted on the transverse rod and arranged between the hounds, said guide being provided with upper and lower longitudinal slots, a tongue arranged to slide in the pivoted guide and having a horizontal slot to receive the said rod, a whiffletree having a pivot arranged in the slots of the guide and adapted to engage a solid portion thereof to hold the tongue against longitudinal movement, brake shoes, and connections between the brake shoes and the tongue, substantially as described. 8th. In an automatic vehicle brake, the combination with a running gear, of brake shoes, a ratchet mounted on the reach, a sliding sleeve also mounted on the reach, connections between the sliding sleeve and the brake shoes, and a pawl carried by the sleeve and engaging the ratchet, substantially as described. 9th. In an automatic vehicle brake, the combination of a running gear, brake shoes, a ratchet mounted on the reach, a sliding sleeve, connections between the brake shoes and the sliding sleeve, a pawl mounted on the latter and adapted to engage the ratchet, and links connecting the pawl with the sleeve and adapted to support the former in an elevated position, substantially as described. 10th. In an automatic vehicle brake, the combination with a running gear, of a ratchet mounted thereon, a sliding sleeve, a pawl arranged to engage the ratchet and pivotally mounted on the sliding sleeve, said pawl being provided with laterally disposed arms, the links 71 pivoted together at their inner ends and similarly secured at their outer ends to the sleeve, and the links 70 connecting the arms of the pawl with the inner ends of the links 71, substantially as described. 11th. In an automatic vehicle brake, the combination with a running gear, of a sleeve mounted on the reach, brake shoe connections between the brake shoes and the sleeve, upper and lower anti-friction rolls journalled on the sleeve and engaging the reach, a connecting device having side bars located at opposite sides of the reach and provided with lugs arranged in pairs and engaging the sleeve at the front and back thereof, and a longitudinally reciprocating tongue for actuating the connecting device, substantially as described. 12th. In an automatic vehicle brake, the combination with a running gear, of a transverse brake beam suspended from the running gear, plates or bars secured to the transverse beams and provided with perforations, a sliding sleeve, rods pivoted to the sleeve and provided with hooks or arms for operating the sleeve, substantially as described. 13th In an automatic vehicle brake, the combination with a running gear having a longitudinally reciprocating tongue, of a connecting device extending rearward from the tongue and composed of side bars located at opposite sides of the reach and connected together at their front ends, a sliding sleeve connected with the rear ends of the side bars of the connecting device, anti-friction rollers carried by the connecting device and by the running gear, brake shoes, and connections between the brake shoes and the sleeve, substantially as described. 24th. In an automatic vehicle brake, the combination with a running gear provided at the rear hounds with a cuff, and having spaces between the rear hounds and the reach, said cuff being provided with plates and having anti-friction rollers, the plates being located continuous to the reach, of a connecting device composed of side bars passing between the anti-friction rollers and the plates and composed of front and rear sections, a sliding sleeve mounted on the reach and connected with the rear sections of the side bars, a transverse beam suspended from the running gear and provided with brake shoes, and a reciprocating tongue for connecting device, substantially as described. 15th. In an automatic vehicle brake, the combination with a running gear, of a connecting device provided at the front portion of the running gear with a ratchet, a front pawl mounted on the reach and arranged to engage the said ratchet, a rear ratchet mounted on the reach, a rear pawl connected with and carried by the connecting device, and arranged to engage the rear ratchet, a reciprocating tongue for actuating the connecting device, and means for operating the pawl, substantially as described.

No. 67,801. Composite Pipe. *(Tuyau.)*



Edward Irving, Braddock, Medford, Massachusetts, U.S.A., 20th June, 1900; 6 years. (Filed 19th August, 1899.)

Claim.—1st. A composite pipe, consisting of two axially concentric tubes of metal molecularly united together, the outer one of

iron or steel, and the inner one of non-corrodible metal of relatively lower melting point, such as tin, zinc, lead or their alloys. 2nd. A composite pipe, consisting of an iron or steel tube inclosed between and molecularly united to two axially concentric tubes of non-corrodible metal of relatively lower melting point, such as tin, zinc, lead or their alloys. 3rd. A composite pipe, consisting of an iron or steel tube, a tube of non-corrodible metal such as specified within said iron or steel tube and molecularly united thereto, and a second tube of non-corrodible metal as specified on the outside of the iron or steel tube, and molecularly united thereto and of less thickness than the non-corrodible tube within said iron or steel tube.

67,802. Harvester and Binder.

(Moissonneuse et lieuse.)

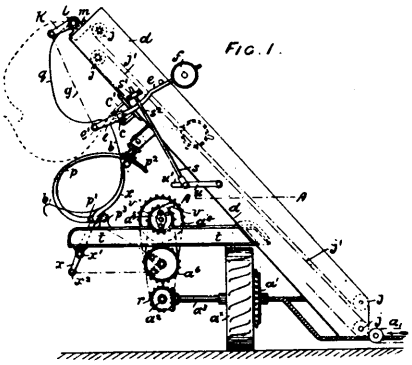


FIG. 1.

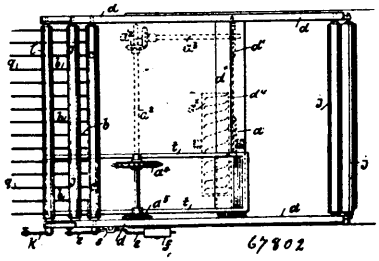


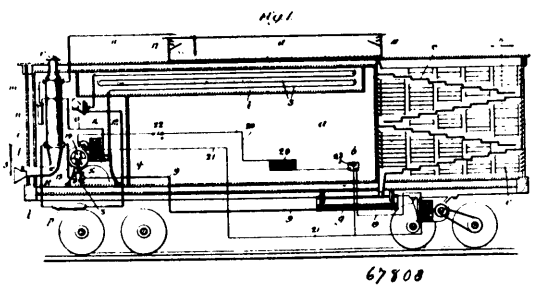
FIG. 2.

67802

Joseph B. Leatherbarrow, Manchester, England, and Thomas Butlin Margetts, Table Cape, Tasmania, 20th June, 1900; 6 years. (Filed 6th June, 1900.)

Claim.—1st. In sheaf binding harvesters the combination with an ordinary reaping machine in which elevators as j^1 are employed, of a guard as q a balance lever or levers as c, and a cradle as b, automatically actuated by the weight of the grain by which a connection is intermittently formed by levers s and u with the binder attachments, in the manner shown and described and for the purpose set forth. 2nd. In sheaf binding harvesters the combination with mechanism hereinbefore described of a needle as p that is fitted so that the needle point is inwards when the sheaf is being tied by the knotter in the manner herein described.

No. 67,803. Refrigerator Car. *(Char refrigerant.)*



67803

The Consolidated Electric Lighting and Equipment Company, assignee of Max E. Schmidt and Thomas Jefferson Ryan, both of New York City, U.S.A., 20th June, 1900; 6 years. (Filed 7th June, 1900.)

Claim.—1st. In a car of the class described, the combination of a car provided with an insulated body portion, a cooling tank or similar receptacle arranged on the roof of the car lengthwise thereof and provided with openings at each end thereof through which air may circulate, pipes for conveying and guiding the cooling water to the roof tank, a force pump for circulating the cooling water through the confining and guiding pipes to the roof tank, and means for operating the force pump, substantially as described. 2nd. In a car of the class described, the combination of a car provided with an insulated body portion, a cooling tank arranged on the outside of and on the roof of the car extending longitudinally therewith and provided with openings at each end thereof to permit the air to circulate through the same, a vertical pipe or tube arranged in the car and provided with an opening to receive air by the movements of and while the car is in motion, a pipe or pipes for confining and guiding a cooling medium through the car and through the vertical tank, a condensing coil or coils in the vertical tank for the cooling medium, a force pump arranged to circulate the cooling medium through the confining and guiding pipes and the condensing or cooling coils, and means for operating such force pump, substantially as described. 3rd. In a class described, the combination of a car provided with an insulated body portion, a cooling tank arranged on the roof of the car longitudinally thereof and provided with openings at each end thereof, a pipe or pipes for confining and guiding a cooling medium through the car, a vertical cooling condensing tank, a cooling coil arranged in the water chamber of the vertical cooling tank and connected with the conveying and guiding pipes, a force pump connected with the confining and guiding pipes for circulating a cooling medium therethrough, a second pump for furnishing a supply of water to the water chambers of both tanks, and means for operating the above named pumps, substantially as described. 4th. In a car of the class described, the combination of a car provided with an insulated body portion, a cooling tank arranged on the roof thereof and provided with a water chamber, a vertical tank or chamber arranged in the car and provided with an opening at the upper and lower ends through which air may be inducted or exhausted, a pipe or pipes for confining and guiding the cooling medium through the car, a primary cooling or condensing coil arranged in the water chamber of the vertical cooling tank or chamber and connected with the confining and guiding pipes, a second cooling or condensing pipe arranged in the vertical chamber and connected with the first named cooling coil, a force pump connected with the cooling pipes for confining and guiding the cooling medium for circulating such medium therethrough, a pump for furnishing a water supply to the water tanks, a waste chamber for the water beneath the car and connected with the water pump, and means for operating the above named pumps, substantially as described. 5th. In a refrigerator car, the combination of means for generating energy by and during the movements of a car, means for circulating a cooling medium through the car, and means for storing up energy when the car is in motion and operating the circulating means when the car is stationary, substantially as described. 6th. In a refrigerator car, the combination of a dynamo connected with the car axle for generating power by and during the movementsof the car, a storage battery connected therewith and arranged to store up energy when the car is in motion, a motor connected with the battery, and means connected with the motor for circulating a cooling medium through the car when the car is in motion or stationary, substantially as described. 7th. In a refrigerator car, the combination of a generator driven by the car axle, a storage battery, and an electric motor, all three in electrical series circuit with each other, substantially as described. 8th. In a car of the class described, the combination of a car body provided with a ventilating opening or openings and an open channel or duct for conveying water arranged in the car body and adjacent to the ventilating openings, substantially as described. 9th. In a car of the class described, the combination of a car body provided with a ventilating opening or openings, and a gradually declining open channel or duct for conveying water arranged adjacent to the ventilating opening or openings, substantially as described. 10th. In a car of the class described, the combination of a car body provided with one or more ventilating openings, and an open inclined guide or channel arranged in a series of steps adjacent to the ventilating openings so as to convey water, substantially as described. 11th. In a car of the class described, the combination of a car body provided with one or more ventilating openings, a plurality of inclined slats in each opening, and an open inclined guide or channel arranged in a series of steps adjacent to the ventilating openings, substantially as described. 12th. In a car of the class described, the combination of a car body provided with one or more ventilating openings in the sides thereof, a set of open stepped channels arranged back and forth along the car body and adjacent to the ventilating openings so as to convey water therein, a supply tank at or near the roof of the car, a receiving or waste tank at or near the bottom portion of the car, and a force pump for taking water from the waste tank and supplying it to the supply tank, substantially as described. 13th. In a car of the class described, the combination of an expanding coil for ammoniacal or similar liquors arranged on a space at or near the roof of the car, and a false roof arranged below the expanding coil and forming in connection with the roof a cooling space in which such coil is arranged, substantially as described. 14th. In a car of the class described, the combination of a vertical water tank, means for introducing cool water near the bottom of the tank, means for withdrawing the warmer water near the top of the tank, means arranged for cooling the water, a condensing coil for ammoniacal liquor arranged in the water tank, an expanding coil in the car connected with the upper part of the condensing coil, and means for compressing the liquor and introducing it into the lower part of the condensing coil, sub-

stantially as described. 15th. In a car of the class described, the combination of an expanding coil for ammoniacal liquor arranged in a cooling space at or near the roof of the car, and a false roof arranged below the expanding coil provided with an upturned lateral edge and an unobstructed edge and forming in connection with the roof the cooling space in which said expanding coil is arranged, substantially as described. 16th. In a car of the class described, the combination of means for circulating a cooling medium, such as ammoniacal liquor, through the car, means for cooling the ammoniacal liquor by causing water to flow contiguous thereto, means for cooling the water by and during the movements of the car, means for storing the energy by and during the movements of the car, and means for using the stored energy and operating the cooling medium and water circulating means when the car is stationary or in motion, substantially as described. 17th. In a car of the class described, the combination of a water cooling chamber formed by and between the side walls of the car and provided with ventilated openings at or near each end thereof to provide a circulation of air therethrough by and during the movements of the car, substantially as described. 18th. In a refrigator car, a cooling tank for ammoniacal or similar liquors formed of an outer casing and provided with two sets of helical condensing coils arranged therein, an expanding pipe or pipes in the car connected with the condensing coils, a compressing engine connected with the condensing coils, in combination with a water supply pipe connected with the lower part of the cooling tank, and a water exhaust pipe connected with the upper part of the cooling tank, substantially as described. 19th. In a car of the class described, a cooling tank for ammoniacal liquors formed of an outer casing and provided with two sets of helical condensing coils arranged therein one set within the other, vertical air pipes extending entirely through the cooling tank, a single outlet for the air connected with the air pipes, an inlet for the air divided into two sections and arranged outside the car so that air is forced through the air pipes by the motion of the car as it moves in either direction, substantially as described. 20th. In a refrigerator car, the combination of a cooling tank for ammoniacal or similar liquors formed of an outer casing and provided with two sets of condensing coils arranged therein, one within the other, air pipes extending entirely through the cooling tank from top to bottom through the heads thereof and passed between the condensing coils, means for forcing air through these air pipes by the motion of the car as it moves in either direction, an expanding pipe arranged in the car and connected with one end of the condensing coils, a water circuit in which is inserted a force pump and connected with the upper and lower ends of the cooling tank for forcing cool water in at the bottom and heated water at the top, substantially as described. 21st. In a refrigerator car, a cooling tank provided with condensing coils for ammoniacal or similar liquors to pass therethrough, air pipe mechanism extending through the cooling tank, and mechanism extending through the cooling tank, and means for forcing air through these vertical pipes by the movements of the car as it runs in either direction, substantially as described. 22nd. In a refrigerator car, a vertical cooling tank provided with condensing coils for ammoniacal liquors extending therethrough, air pipe mechanism extending vertically through the cooling tank and providing an outlet for the air pipes, an inlet pipe arranged so as to cover the lower end of the air pipes and divide it into sections extending outside the car and arranged so that the air is forced therethrough by the movements of the car when it runs in either direction, substantially as described.

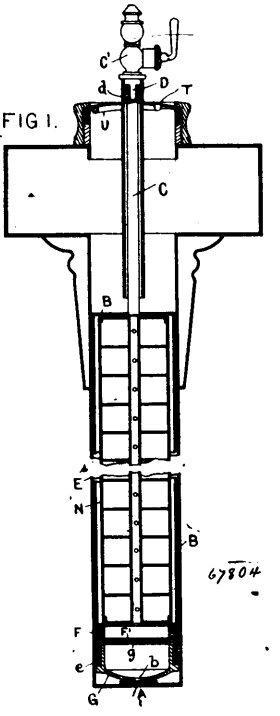
No. 67,804. Acetylene Gas Generator.

(Générateur de gaz acétylène.)

The Imperial S. C. Acetylene Gas Company, Manchester, England, assignee of Eau Evans, Llanrwst, Denbigh, Wales, 20th June, 1900; 6 years. (Filed 22nd March, 1899.)

Claim.—1st. In acetylene lamps or generators, the combination, with the water container, of a pad or washer in said container, and an adjustable carbide holder immersed therein adapted to be pressed with its water inlet against or moved clear of said pad to close or open the water inlet as required, substantially as and for the purpose hereinbefore described. 2nd. In acetylene lamps or generators, the combination with the water container, of a pad or washer on the bottom thereof, a carbide holder immersed therein and having a water inlet in its bottom over said pad, and means for slightly elevating or depressing the carbide holder to open or close the water inlet according as it is depressed on to or held clear of said pad, substantially as and for the purpose described. 3rd. In acetylene lamps or generators the combination with the water container, of a pad A, adjustable carbide holder B having a water inlet *b*, and gas discharge tube C having one end connected to the holder B and its other end provided with a bayonet joint D, substantially as described. 4th. In acetylene lamps or generators, the combination with the water container and carbide holder, of a valve placed to control the water inlet of said carbide holder, said valve being adapted to admit water under normal conditions of working but to be closed by any excess pressure of gas in the holder, substantially as and for the purpose set forth. 5th. In acetylene lamps or generators, the combination, with the water container and carbide holder, of a flap valve placed within the carbide holder over the water inlet, for the purpose of automatically regulating or controlling the water feed and thereby governing the generation of gas substantially as described. 6th. In acetylene lamps or generators, the combination, with the water container, of a carbide holder immersed

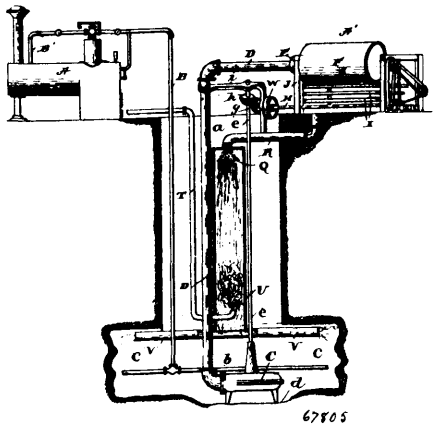
FIG I.



therein and having a removable double bottom or plug provided with a water inlet, and a flap valve adapted to automatically control the flow of water therethrough into the carbide holder, substantially as hereinbefore described, 7th. In acetylene lamps or generators, the combination with the water container of a carbide holder immersed therein and having a water inlet controlled by a flap valve formed of a central circular piece attached at one side to an enclosing ring all in one piece of flexible material substantially as hereinbefore described. 8th. In acetylene lamps or generators, the combination, with the water container, of a pad or washer on the bottom thereof, a carbide holder immersed therein having a water inlet over said pad, means for elevating or depressing the carbide holder to open or close the water inlet, and an automatic valve over said water inlet adapted to be lifted or opened by the water unless the pressure of gas in the carbide holder reaches an excess, in which case it will close substantially as hereinbefore described. 9th. In acetylene lamps or generators, the combination with the water container, of a carbide holder having a water inlet in the bottom, a pipe or passage leading from said water inlet upward in the water container, and a screw down valve adapted to be operated from the exterior of the water chamber to open or close the upper end of said pipe or passage, substantially as described. 10th. In an acetylene lamp or generator, the combination with the water container, or washer L, carbide holder B, having an open bottom, means for screwing the carbide holder down onto the washer, means for opening and closing the flow of water through the washer into bottom of the carbide holder and means for automatically controlling the said flow to avoid an excess of gas pressure, substantially as described. 11th. In acetylene lamps or generators, the combination with the carbide holder or gas generating chamber of a layer or layers of gauze arranged in the path of the generated gas to the discharge for the purpose of cleansing it from impurities, substantially as described. 12th. In acetylene lamps or generators, a carbide holder comprising a series of superimposed compartments formed of trays or shelves threaded on a central tube having side perforations, a sheath enclosing said compartments and tube, and a cylinder receiving said sheathed compartments through its open lower end, in combination, substantially as described. 13th. In acetylene lamps or generators, a carbide holder comprising a central tube having side perforations, shelves threaded thereon, a sheath enclosing said shelves and tube and having a door or doors affording access to the shelves, and a cylinder receiving said sheathed shelves through its lower open end, in combination, as described. 14th. In acetylene lamps or generators, a valve for controlling the inflow of water to the carbide consisting of a screw down valve having a wire depending into the water feed pipe, to cause the water to drip through, substantially as described. 15th. In acetylene lamps or generators, a carbide holder comprising a central tube having side perforations and a disc or head at its bottom end, shelves adapted to be threaded loosely thereon alter-

nately with carbide, a sheath enclosing said shelves, and a gas generating cylinder or carbide holder to receive said sheathed shelves, and having a removable bottom to carry the same, in combination, substantially as described. 16th. In acetylene lamps or generators, a carbide holder comprising a central tube having side perforations and a disc or head at its bottom end, shelves adapted to be threaded loosely thereon alternately with carbide, a sheath enclosing said shelves, a gas generating cylinder or carbide holder to receive said sheathed shelves on a removable bottom, said cylinder being of larger diameter than the sheath to form a space around the sheathed shelves for the accumulation of gas and to keep the outer case cool, and an insertion of absorbent matter in the lower part of said gas space, in combination, substantially as and for the purpose described. 17th. An acetylene lamp or generator, comprising a water container, a gas generating cylinder or chamber below said water container, a water inlet to said cylinder a screw down valve for controlling the flow of water, a removable bottom to the generating cylinder carrying a sheath containing the carbide, means for dividing the carbide into layers, and for admitting the water to the bottom of the sheath, a space around the sheath for the accumulation of gas and an absorbent material in the bottom of said space, in combination, substantially as described. 18th. In acetylene lamps and generators having an air inlet to the water container to allow of the water level falling as required to enter the carbide chamber, the combination with said air inlet of a curved tube forming an internal prolongation thereof adapted to prevent danger of explosion through accumulation of gas an the upper part of the water container, substantially as described.

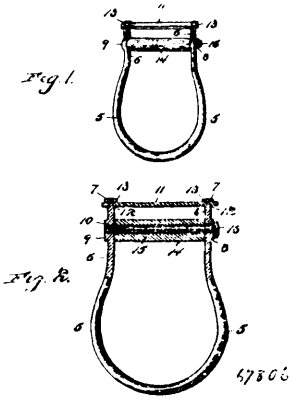
No. 67,805. Mining Apparatus. *(Appareil à miner.)*



Josephus A. Laycock, Litchfield, Illinois, U.S.A., 20th June, 1900; 6 years. (Filed 23rd March, 1898.)

Claim.—1st. The combination with a mine containing a supply of water, of a steam generator, a pipe connected at one end with the steam generator and having its opposite end extending within the mine and delivering steam directly to the water therein, a pump in communication with the water contained within the mine, and a return pipe receiving the water delivered by the pump and adapted to return it to the mine, substantially as described. 2nd. The combination with a mine containing a supply of water, of a heating device, a pipe having one end in communication with the heating device and the opposite end extending within the well and provided with an elongated horizontal portion for supplying the heat directly to the water within the mine, a pump in communication with the water, and adapted to deliver it outside of the mine and a return pipe in communication with the water delivered from the mine and adapted to return it thereto, substantially as described. 3rd. A mining apparatus comprising a heating device, a pipe extending therefrom and delivering heat within the mine, a water supply, a pump situated within the mine and having a discharge pipe thereabove, a separator, a water delivery pipe having one end connected with the separator, a vertical chamber within the opening to the mine to which the opposite end of the water delivery pipe communicates, and a pipe from the heating device delivering heating medium within the said chamber, the lower end of the chamber having exists within the mine, substantially as described. 4th. An improved mining apparatus comprising a water supply and heating device for the mine, a centrifugal pump situated within the mine and having an outlet outside of the mine, a rotating and reciprocating separator, the outlet pipe being in communication with the rotating element of the separator, a vertical revoluble shaft connected with the centrifugal pump within the well and extending to a point above and outside of the well, and a horizontal shaft having one end operatively connected with the pump shaft and the opposite end operatively connected with the recipro ating and rotating element of the separator, substantially as described.

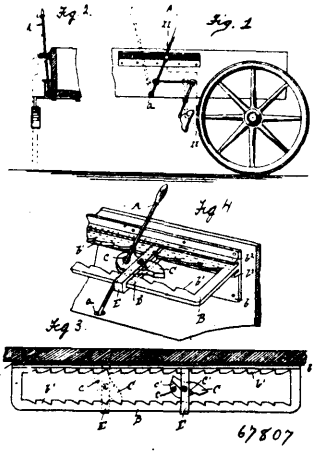
No. 67,806. Neck Yoke. *(Joug.)*



Ira Lincoln Baker, Coalgate, Indian Territory, U.S.A., 20th June, 1900; 6 years. (Filed 7th June, 1900.)

Claim.—1st. As a new article of manufacture, a neck yoke attachment comprising a clip having parallel arms arranged to form an open end, a clip plate secured removably to said arms to span the space at the open end of the clip, and a roller mounted removably in the clip and within the removable plate, whereby the clip plate firmly braces the divided end of the clip, and the clip plate and roller are both removable to leave an unobstructed opening through the clip, substantially as described. 2nd. As a new article of manufacture, a neck yoke attachment comprising a clip having the parallel arms arranged to form an open end and provided with the extended threaded studs, a plate fitted removably to said studs and spanning the space at the open end of the clip, nuts screwed on the studs and binding the plate firmly against the clip, a roller between the arms of the yoke or clip and parallel to the plate, and a screw supporting the roller and connected removably to the clip arms, substantially as described.

No. 67,807. Wagon Brake. *(Frein de wagon.)*

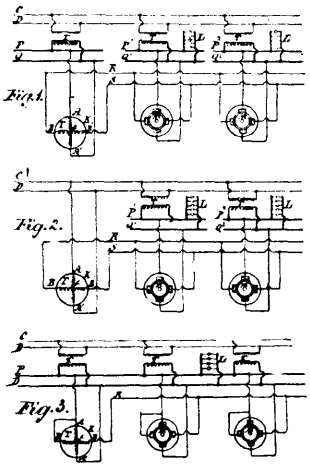


Jacob Dobler, Galena, Kansas, U.S.A., 20th June, 1900; 6 years. (Filed 21st April, 1900.)

Claim.—1st. In a wagon brake mechanism, the combination of a pivoted brake lever, an open rectangular ratchet frame mounted horizontally on the side of the box, and provided with ratchet teeth on its inner edges, a sliding cross bar on said frame and a pawl pivoted on said bar in position to engage the teeth of the frame and operatively connected to said brake lever, substantially as set forth. 2nd. In a wagon brake mechanism, the combination of a pivoted brake lever, an open frame mounted horizontally above the pivotal point of said lever and provided with ratchet teeth on its inner edges, a sliding cross bar on said frame with its inner end moving in slots in the vertical portion of said frame, a doubly pointed pawl pivoted on said bar in position to engage the teeth of the ratchet frame, with an opening in the end of said pad through which said brake lever passes, substantially as set forth. 3rd. In a wagon brake mechanism, the combination of a pivoted brake lever, an open frame mounted horizontally above the pivotal point of said lever and provided with ratchet teeth on its inner edges, a sliding cross bar on said frame, a doubly pointed pawl pivoted between the

upper and lower members of said bar, with shoulders on said pawl to engage the side edges of said bar, and operative connection between said pawl and brake lever, substantially as set forth.

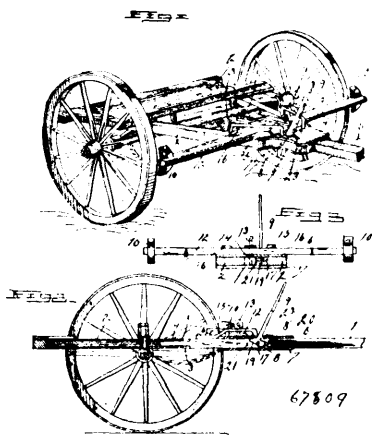
No. 67,808. Electrical Distribution System.
(Système de distribution électrique.)



Galileo Ferraris and Ricardo Arno, both of Turin, Italy, 20th June, 1900; 6 years. (Filed 29th June, 1896.)

Claim.—1st. In a single phase alternating current system, of electric distribution, the combination of the high tension mains, of an ordinary transformer, of the secondary conductors thereof, of a voltage and phase transformer having two relatively movable elements, one of which has wound thereon coils closed upon themselves connected directly to the high tension mains, of a connection between the secondary coil of the voltage and phase transformer to the secondary coil of the ordinary transformer, and of a single secondary conductor leading from the other terminal of the secondary coil of the voltage and phase transformer and forming with the secondary conductors of the ordinary transformer a three branched two phase low tension system, substantially as described. 2nd. In an alternating current system of electric distribution, the combination of the high tension mains, of an ordinary transformer, of the secondary conductors thereof, of a voltage and phase transformer connected directly to the high tension mains, of a connection between one terminal of the secondary coil of the voltage and phase transformer to the central point of the secondary coil of the ordinary transformer, and of a single secondary conductor leading from the other terminal of the secondary coil of the voltage and phase transformer and forming with the secondary conductors of the ordinary transformer a three branched three phase low tension system, substantially as described. 3rd. In a system of electrical distribution the combination of a plurality of single phase transformers, connections from the secondaries to translating devices, a conductor joining one end of all of said secondaries, a tension and phase displacing transformer having primary and secondary windings independent of each other, connected to the translating devices and the secondary mains, substantially as described. 4th. In a system of electrical distribution, the combination of an ordinary transformer, secondary conductors leading therefrom, a tension and phase displacing transformer having primary and secondary windings, and connected to one of said secondary conductors, and a third wire leading from said phase displacing transformer, to the translating devices, substantially as described. 5th. In a system of electrical distribution the combination of a single phase transformer and a phase displacing transformer, and a connection from the secondary of the phase displacing transformers to an intermediate point in the secondary of the single phase transformer, substantially as described. 6th. In a system of electrical distribution the combination of an ordinary transformer and a phase displacing transformer, and a connection from one terminal of one of said transformers to an intermediate point in the winding of the other, substantially as described. 7th. The combination of a source of single phase currents, an ordinary transformer, and a tension and phase displacing transformer having stationary and rotary elements and having independent secondary windings, and connections between the secondaries of said transformers whereby three phase current is supplied to the translating devices, substantially as described. 8th. In a system of electrical distribution, the combination of single phase mains, an ordinary transformer connected thereto, secondary conductors leading therefrom, a phase displacing transformer with its secondary connected network, and a conductor joining predetermined appropriate points in the secondaries of both transformers, substantially as described. 9th. In a system of electrical distribution, the combination of single phase mains, a tension and phase displacing transformer having rotary and stationary elements, a tension reduction transformer connected thereto, and a three wire system connected to the secondaries of said transformers, substantially as described. 10th. The method of producing multiphase currents from single phase currents, which consists in generating alternating single phase electric currents, transmitting them to any desired point or points, producing by the said currents at the said point or points relative rotation of magnetic media with relation to each other, generating by the rotation of the said magnetic media out-of-phase electromotive forces or currents, combining said out-of-phase electromotive forces or currents with the electromotive forces or currents of the single phase system in proper proportion so as to produce electromotive forces of a desired phase angle, and so combining these electromotive forces in various circuits as to produce in said circuits multiphase currents of a phase angle different from that existing between the single phase electromotive forces and the out-of-phase electromotive forces. 11th. The method of producing multiphase currents from single phase currents, which consists in generating alternating single phase electric currents, transmitting them to any desired point or points, producing by the said currents at the said point or points relative movement of stationary and moving circuits with relation to each other, generating by the movement of the said stationary and moving circuits out-of-phase electromotive forces or currents, combining said out-of-phase electromotive forces or currents with the electromotive forces or currents of the single phase system in proper proportion so as to produce electromotive forces of a desired phase angle, and so combining these electromotive forces in various circuits as to produce in said circuits multiphase currents of a different number of phases. 12th. The method of producing multiphase currents from single phase currents, which consists in generating alternating single phase electric currents, transmitting them to any desired point or points, producing by the said currents at the said point or points relative rotation of the elements of an induction motor with relation to each other, generating by the rotation of the said elements of an induction motor of phase electromotive forces or currents, combining said out-of phase electromotive forces or currents with the electromotive forces or currents of the single phase system in proper proportion so as to produce electromotive forces of a desired phase angle, and so combining these electromotive forces in various circuits as to produce in said circuits multiphase currents of a different number of phases from the currents flowing in the two stationary circuits of the phase transformer. 13th. The method of producing multiphase currents of one order from multiphase currents of another order, which consists in producing electromotive forces, producing electromotive force or forces of different phase by the relative movement of circuits having inductive relation to each other, combining the said first electromotive force or forces with the second electromotive force or forces in the desired proportion, producing multiphase secondary electromotive forces, and causing said secondary electromotive forces to produce in circuit properly interrelated multiphase currents of a different number of phases from the primary multiphase electromotive forces.

No. 67,809. Vehicle Brake. *(Frein de bicycle.)*

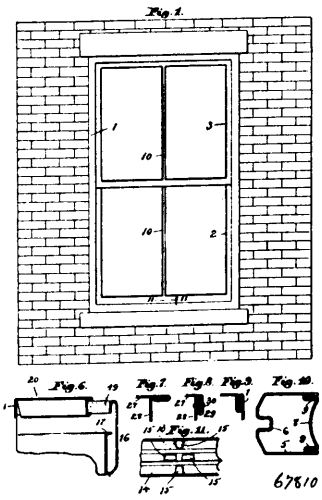


Aaron L. Parker, Philadelphia, Mississippi, U.S.A., 20th June, 1900; 6 years. (Filed 9th May, 1900.)

Claim.—1st. In an automatic vehicle brake, the combination of a running gear having a tongue capable of longitudinal movement, a brake beam connected with the tongue and adapted to be actuated by the same and provided with brake shoes, projections extending from one side of the tongue, and a lever fulcrumed on the running gear at a point between the said projections and arranged to engage either of them, whereby the brake shoes are locked in and out of

engagement with the wheels, substantially as and for the purpose described. 2nd. In an automatic vehicle brake, the combination of a running gear having a sliding tongue, a brake beam connected with and operated by the tongue, projections extending from one side of the latter, and a substantially T-shaped lever fulcrumed on the running gear at one side of the tongue, at a point between the said projections and provided at the ends of its arms with recesses or notches adapted to receive the said projections, substantially as and for the purpose described. 3rd. In an automatic vehicle brake, the combination of a running gear, having front hounds and provided with upper and lower plates connecting the same, the upper plate being slotted and having resilient tongues or springs arranged at the ends of the slot, a sliding tongue arranged between the hounds and provided with stops, and a substantially T-shaped lever extending through the slot and fulcrumed on the adjacent hound at a point adjacent to the said stops, and arranged to engage the same, the upper arm being adapted to be engaged by the adjacent tongue or spring, substantially as described. 4th. In an automatic vehicle brake, the combination of a running gear having upper and lower plates connecting its front hounds, the upper plates slotted, said running gear being provided in rear of the said plates, with a transverse bar having a guide opening, a tongue slidably mounted between the plates and having its rear end reduced and arranged in the guide opening of the transverse bar, a brake beam arranged upon the upper plate, connected with the tongue and provided with brake shoes, loops or keepers mounted on the running gear and supporting the brake beam, and means for locking the tongue against longitudinal movement, substantially as described.

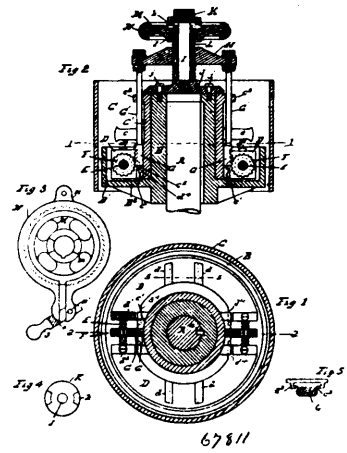
No. 67,810. Fire Proof Window. *Fenêtre à l'épreuve du feu*



Daniel Bradford Badger, Winchester, and Arthur Campbell Badger, Boston, Massachusetts, U.S.A., 20th June, 1900; 6 years. (Filed 8th June, 1900.)

Claim.—1st. In a fire proof window, a sheet metal frame having a plate or panel constituting the lower part of the stile or sash guide and detachable from the body of the frame as to expose the weights, the upper end of said panel fitting behind the fixed upper section of the stile or guide, the frame having a fixed up-turned lip back of the lower end of the panel, movable catches on the panel securing the lower end of the panel to the said up-turned lip and adjustable from the inner or exposed face of the panel, and means to limit the outward movement of the panel. 2nd. In a fire proof window, a sash having a hollow sheet metal top rail slotted vertically for the introduction of the pane, the body of said rail terminating on top in separated downwardly bent lips forming guides, and a slide forming the top of said rail and substantially flush with the vertical front and rear faces of the rail body, said slide being movable lengthwise of the body of the rail into and out of engagement with and having guides engaging the guides on the rail body and consisting of lips bent around the said lips or guides on the rail body. 3rd. In a fire proof window, a sheet metal frame having the joints between its vertical and horizontal rails lapped and riveted on the faces, and the inner sides thereof interlocked and doubled over and riveted, as set forth. 4th. In a fire proof window, a sheet metal sash having a cross rail composed of two strips bent to form grooves on the opposite sides of the rail to receive the pane, one edge of each strip being continued across the interior of the rail to form an inner strengthening web. 5th. In a fire proof window, a sash having a hollow sheet metal rail, and a hollow sheet metal cross rail connected to it, the connection being by means of a series of integral prongs formed on the end of the cross rail and passing through holes in the nearest wall of the first said rail and bent over within the interior of said rail parallel to said wall. 6th. In a fire proof window, a frame having a removable panel forming the lower part of the stiles or guides for both sashes and detachable from the upper part, and a web attached to said removable panel and constituting the lower part of the partition before the weight boxes.

No. 67,811. Clutch. *(Griffes.)*

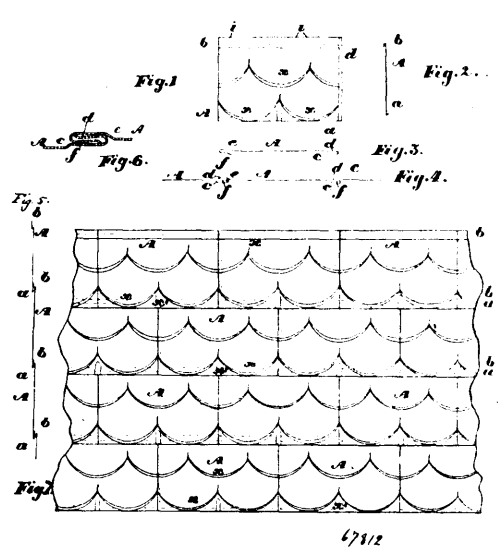


John Curruthers and Edwin J. Fithian, both of Grove City, Pennsylvania, U.S.A., 20th June, 1900; 6 years. (Filed 17th April, 1900.)

Claim.—1st. In a friction clutch, the combination with the driving and driven members, of a friction device interposed between said members comprising friction shoes arranged to be moved into and out of operative engagement by movement in a radial direction, a screw for moving said shoes into engagement, means actuated by the relative movement of the members one ot the other for actuating said screw, and means for actuating said screw in a reverse direction while the clutch members are in motion. 2nd. In a clutch, the combination with the driving and driven members, of means for locking said members rotatively together, a male screw journalled with the axis of the clutch as an axis, an auxiliary clutch device for locking it with the driving member, and means actuated by the rotative action of its threads when said screw is locked with the driving member upon a relatively stationary part of the driven member for moving the means for locking said clutch members together into locking position. 3th. In a clutch, the combination with the driving and driven members, of means locking said members rotatively together, a male sleeve screw journalled with the axis of the clutch as an axis, an auxiliary clutch device for locking it with the driving member, and means actuated by the rotative action of its threads when said screw is locked with the driving member upon a relatively stationary part of the driven member for moving the means for locking said clutch members rotatively together into locking position. 4th. In a clutch, the combination with the driving and driven members, of means for locking said members rotatively together, a male sleeve screw journalled with the axis of the clutch as an axis, an auxiliary clutch device for locking it with the driving member, a nut on said screw locked to rotate with the driven member, and a connection between said nut and the means for locking said clutch members rotatively together, whereby said members are moved into locking engagement with a relative movement of the clutch members one to the other. 5th. In a clutch, the combination with the driving and driven members, means for locking said members together, mechanism for moving said locking means into and out of locking position, the rods G, for actuating said mechanism, cross head H, to which said rods are secured, the extension I, carried by the driving member, the sleeve screw L, journalled on said extension I, and having its threads arranged to operate with threads in the cross head H, the clutch plate K, secured to the extension I, the hand wheel M, feathered on the screw sleeve L, and having a means for being brought into and out of engagement with the clutch plate K. 6th. In a friction clutch, the combination with the driving and driven members, of a friction device interposed between said members comprising friction shoes arranged to be moved into and out of operative engagement by movement in a radial direction, a screw journalled with the axis of the clutch as an axis for moving said shoes into engagement, and means actuated by relative movement of the members, one to the other, actuating said screw. 7th. In a friction clutch, the combination with the driving and driven members, of a friction device interposed between said members comprising friction shoes arranged to be moved into and out of operative engagement by movement in a radial direction, a screw journalled with the axis of the clutch as an axis, for moving said shoes into engagement, means actuated by relative movement of the members one to the other for actuating said screw, and means for actuating said screw in a reverse direction.

8th. In a friction clutch, the combination with the driving and driven members, of a friction device interposed between said members comprising friction shoes arranged to be moved into and out of operative engagement by movement in a radial direction, a male screw journalled with the axis of the clutch as an axis, for moving said shoes into engagement, and means actuated by relative movement of the members one to the other for actuating said screw. 9th. In a friction clutch, the combination with the driving and driven members, of a friction device interposed between said members comprising friction shoes arranged to be moved into and out of operative engagement by movement in a radial direction, a male screw journalled with the axis of the clutch as an axis, for moving said shoes into engagement, means actuated by relative movement of the members one to the other or actuating said screw, and means for actuating said screw in a reverse direction. 10th. In a friction clutch, the combination with the driving and driven members, of a friction device interposed between said members, comprising friction shoes arranged to be moved into operative engagement by movement in a radial direction, reversely threaded screws interposed between said shoes, gears on said screws for turning said screws, and means actuated by the relative movement of the members one to the other for actuating said gears. 11th. In a friction clutch, the combination with the driving and driven members, of a friction device interposed between said members, comprising friction shoes arranged to be moved into operative engagement by movement in a radial direction, reversely threaded screws interposed between said shoes, gears on said screws for turning said screws, means for actuating said gears, mechanism journalled with the axis of the clutch as an axis for actuating said means with a relative movement of the clutch members, and an auxiliary clutch for locking and disengaging said mechanism from and with the driving member. 12th. In a friction clutch, the combination with the driving and driven members, of a friction device interposed between said members, comprising friction shoes arranged to be moved into operative engagement by movement in a radial direction, reversely threaded screws interposed between said shoes, gears on said screws for turning said screws, racks arranged in mesh with said gears, means for moving said racks in axial direction, and mechanism actuated by the relative movement of said members one to the other for actuating said means. 13th. In a friction clutch, the combination with the driving and driven members, of a friction device interposed between said members, comprising friction shoes arranged to be moved into operative engagement by movement in a radial direction, reversely threaded screws interposed between said shoes, gears on said screws for turning said screws, racks arranged in mesh with said gears, a screw journalled with the axis of the clutch as an axis, means for locking it with the driving member, and means actuated by the rotative action of its thread for moving said racks for the purposes specified. 14th. In a friction clutch, the combination with the driving and driven members, of a friction device interposed between said members, comprising friction shoes arranged to be moved into operative engagement by movement in a radial direction, reversely threaded screws interposed between said shoes, gears on said screws for turning said screws, racks arranged in mesh with said gears, a screw and nut mechanism journalled with the axis of the clutch as an axis, means for locking one of the elements of said screw and nut mechanism with the driving member and the other with the driven member, and a connection for transmitting the relative and axial movement of the screw and nut to said racks. 15th. In a friction clutch, the combination with the driving and driven members, of a friction device interposed between said members, comprising friction shoes arranged to be moved into operative engagement by movement in a radial direction, reversely threaded screws interposed between said shoes, gears on said screws for turning said screws, racks arranged in mesh with said gears, a screw journalled with the axis of the clutch as an axis, means for communicating the action of the screw to said racks, means for disengaging the screw from the driving member, and means for giving it movement in a reverse direction relatively to the driving member. 16th. In a friction clutch, the combination with the driving and driven members, of a friction device interposed between said members, comprising friction shoes arranged to be moved into operative engagement by movement in a radial direction, reversely threaded screws interposed between said shoes, gears on said screws for turning said screws, racks arranged in mesh with said gears, a screw and nut mechanism journalled with the axis of the clutch as an axis, means for locking one element of the screw and nut mechanism with the driving member and the other with the driven member, a connection for transmitting the relative axial movement of the screw and nut to said racks, means for disengaging the screw or nut from the driving member, and means for giving the screw or nut so disengaged movement in a reverse direction relatively to the driving member. 17th. In a friction clutch, the combination with the axle A, the driving member comprising the hub B, spider B^2, flange B^1, secured to the axle, the driven member C, having the hub C^1, journalled on the hub B^1, the reverse screws E, between the ends of said friction shoes, the gears F, on said screws, the racks G, arranged to engage said gears, the rods G^1, extending from said racks, the cross head H, to which said rods are secured, the extension I, secured to the driven member, the screw sleeve L, journalled on said extension I, the auxiliary clutch plate K, on said extension, and the hand wheel M, feathered on the sleeve L, and arranged to engage the clutch plate K.

No. 67,812. Metallic Shingle. (*Bardeau métallique.*)



Hugh David Walker, Smithville, Ontario, Canada, 21st June, 1900; 12 years. (Filed 6th June, 1900.) NOTE.—Patent No. 67,812 is a re-issue of Patent No. 46,251, which bears date June 5th, 1894.

Claim.—1st. A metallic shingle comprising a plate having a single turned down fold at the bottom and a turned up fold at the top adapted to receive and be covered by the down-turned fold, an upwardly turned flat hook-shaped fold at the right hand side, and a correspondingly downwardly turned hook-shaped fold at the left hand side adapted to lock into the hook-shaped fold at the right hand side of the adjacent shingle, such hook shaped folds having an incline formed in the metal at their base or inner sides, so as to form channels or waterways, as and for the purpose specified. 2nd. A metallic shingle comprising a plate having a single turned down fold at the bottom, and a double turned up fold at the top adapted to receive and be covered by the down-turned fold, an upwardly turned flat hook-shaped fold at the right hand side, and a correspondingly downwardly turned hook-shaped fold at the left hand side adapted to lock into the hook-shaped fold at the right hand side of the adjacent shingle, such hook-shaped folds having an incline formed in the metal at their base or inner sides, so as to form channels or waterways, the incline of the lowermost hook-shaped interlocking fold being bent away from the base of the hook, and the incline of the upper flat hook-shaped fold being bent down, so as to contract the opening into the hook, as and for the purpose specified. 3rd. A metallic shingle comprising a plate having a single turned down fold at the bottom, and a double turned up fold at the top adapted to receive and be covered by the down-turned fold, an upwardly turned flat hook-shaped fold at the right hand side, and a correspondingly downwardly turned hook-shaped fold at the left hand side adapted to lock into the hook-shaped fold at the right hand side of the adjacent shingle such hook-shaped folds having an incline formed in the metal at their base or inner edges, so as to form channels or waterways, and both flat hook-shaped edge folds being provided with outwardly flaring inclined edges on the free ends to form waterways, as and for the purpose specified. 4th. A metallic shingle comprising a plate having a single turned down fold at the bottom and a double turned up fold at the top adapted to receive and be covered by the down-turned fold, an upwardly turned flat hook-shaped fold at the right hand side, and a correspondingly downwardly hook-shaped fold at the left hand side adapted to lock into the hook-shaped fold at the right hand side of the adjacent shingle, such hook-shaped folds having an incline formed in the metal at their base or inner edges, so as to form channels or waterways, and a raised configuration x^1, forming a recess, substantially in the centre of the bottom edge of the shingle, whereby the hook-shaped locked side edges of the two adjacent shingles below are straddled and covered at the top, as specified.

No. 67,813. Process of Treating Eggs.

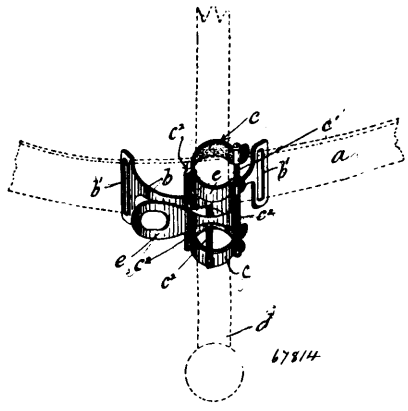
(*Procédé pour le traitement des oeufs.*)

David Douglas Wilson and John A. Wilson, both of Seaforth, Ontario, Canada, 21st June, 1900; 6 years. (Filed 20th July, 1899.)

Claim.—1st. The herein described process of restoring eggs to their natural appearance after having been through a pickling or preserving process, which consists in subjecting the eggs to the action of a chemical solution of sufficient strength to quickly loosen the deposit therein without attacking the shell of the egg, and thereafter immediately cleansing the eggs, substantially as and for

the purpose described. 2nd. The herein described process of restoring eggs to their natural appearance after having been through a pickling or preserving process, which consists in subjecting the eggs to the action of a chemical solution of sufficient strength to quickly loosen the deposit thereon without attacking the shell of the egg, and thereafter immediately cleansing the eggs and finally drying the eggs thoroughly, substantially as and for the purpose described. 3rd. The herein described process of restoring eggs to their natural appearance after having been through a pickling or preserving process, which consists in first rinsing the eggs in water, then subjecting the eggs to the action of a chemical solution of sufficient strength to quickly loosen the deposit thereon without attacking the shell of the egg, and thereafter immediately cleansing the eggs, substantially as and for the purpose described. 4th. The herein described process of restoring eggs to their natural appearance after having been through a pickling or preserving process, which consists in first rinsing the eggs in water, then subjecting the eggs to the action of a chemical solution of sufficient strength to quickly loosen the deposit thereon without attacking the shell of the egg, and thereafter immediately cleansing the eggs and finally drying the eggs thoroughly, substantially as and for the purpose described.

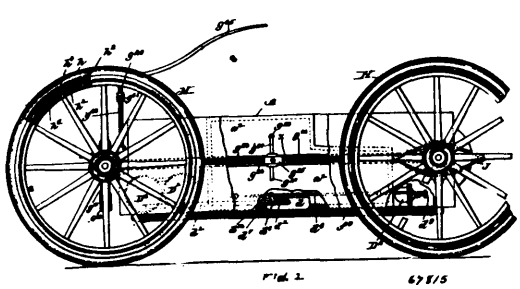
No. 67,814. Umbrella Holder. *(Porte-parapluie.)*



Maud Thornton, North Bovey Rectory, Newton Abbot, Devonshire, England, 21st June, 1900; 6 years. (Filed 11th December, 1899.)

Claim.—The belt attachment for holding an umbrella or the like above a person's head, so as to leave the handles free, consisting in a clip comprising an arm b having end eyes b^1, through which the belt a passes, so as to allow the clip to be moved about thereon, and two spring jaws c lined with yielding material and being open at the front and having their ends bent away from one another or diverged, said spring clips being connected together by vertical bars c^2, to which is fixed a lever e for opening the said spring jaws, substantially as described and illustrated.

No. 67,815. Steam Motor Vehicle. *(Véhicule à vapeur.)*



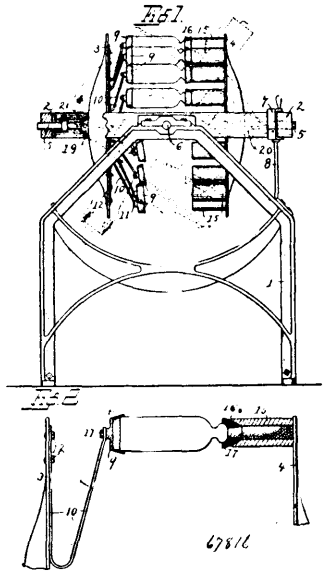
W. P. Kidder, Boston, Massachusetts, U.S.A., and Charles C. Colby, Stanstead, Quebec, Canada, 21st June, 1900; 6 years. (Filed 15th March, 1900.)

Claim.—1st. The combination, in a motor vehicle, of a running gear comprising a driven axle, with a motor supporting frame operatively mounted in said running gear, an elastically mounted motor, a crank shaft, crank shaft bearings rigidly mounted in the running gear, means which operatively connect the motor with the crank driven axle, and a mechanism which holds the moter at a constant distance from the crank shaft. 2nd. The combination in a motor vehicle, of a running gear comprising a driven axle, with a motor supporting frame operatively mounted in said running gear, an elastically mounted motor, a crank shaft, crank shaft bearings rigidly mounted in the running gear, means which operatively connect the motor with the crank shaft and rotate it, gearing connecting the crank shaft with the driven axle, and a mechanism which holds the motor at a constant distance from the crank shaft, the driven axle being made up of the wheel carrying numbers, and differential gear mechanism which operatively connects said driven axle members. 3rd. The combinaton, in a motor vehicle, of a front axle, wheels therefor, a rear axle comprising independent members, a differential gear mechanism operatively connecting and rotating said members, wheels for the rear axle, a steam engine, means which elastically support the cylinders of the engine, a crank shaft, a link mechanism connected with the crank shaft supports, and means for operatively connecting the crank shaft with the differential gear. 4th. In a running gear for vehicles, the combination of a front and rear axle and wheels therefor of a U-shaped load supporting frame, a horizontal king bolt connecting the front end of the frame with the front axle and means for connecting said frame with the rear axle, said king bolt being attached to the load supporting frame and being movable endwise in its connection with its front axle. 5th. In a running gear for vehicles, the combination of front and rear axles, and wheels therefor, of a connecting load supporting frame, a pivotal connection between said frame and the front axle, means for connecting said frame to the front axle, and side braces from near the wheel ends of the front axle to opposite sides of said frame, said front braces being pivotally connected with the front axle and also pivotally connected with said frame. 6th. In a running gear for vehicles, the combination of front and rear axles and wheels therefor, of a load supporting frame pivotally connected with the front axle, means for connecting it with the rear axle, side braces from near the wheel ends of the front axle to opposite sides of said frame, said braces being pivotally connected with front axle and also pivotally connected with said frame, an under truss extending lengthwise of the front axle, and a spring between said truss and said supporting frame. 7th. In a motor vehicle, a running gear comprising in combination a front and rear axles and wheels therefor, a load supporting frame connecting said axles, the frame being pivotally connected with said front axle, front braces pivotally connected with the front axle and pivotally connected with said frame, an under truss extending lengthwise of the front axle and supported thereby, a spring between said truss and frame, brackets at the rear end of said frame, and under truss extending lengthwise of the rear axle and carried thereby, and springs between said truss on the rear axle and the brackets of said frame, an upper truss extending lengthwise of said rear axle, vertical braces connecting said upper and lower truss of the rear axle, rear side braces extending from near the wheel ends of the rear axle to opposite sides of said frame, and pivotally connected with said frame and with the rear axle, said rear axle consisting of two main wheel carrying members, and a differential gear mechanism which couples the inner ends of said rear axle members. 8th. In a motor vehicle, the combination of front and rear axles and wheels therefor of a supporting frame connected with the front axle and having a spring connection with the rear axle, an engine supported by said frame, a crank shaft in fixed relation to the rear axle, means for supporting said shaft rotatively in said relation, a driving mechanism connecting the crank shaft with the rear axle, means of operating the engine and a yielding mechanism connecting an engine cylinder with the crank shaft. 9th. In a motor vehicle, the combination of front and rear axles, and wheels therefor, with a supporting frame pivotally connected with the front axle and having a spring connection with the rear axle, an engine supported by said frame, a crank shaft in fixed relation to the rear axle, hangers depending from said frame, a truss, links connecting said hangers with said truss, brackets connected to said truss and supporting the said crank shaft, links connecting said engine with said brackets, a driving mechanism connecting the crank shaft with the rear axle, means of operating the engine, and a yielding mechanism connecting an engine cylinder with the crank shaft. 10th. In a motor vehicle, the combination of front and rear axles, and wheels therefor, with a supporting frame pivotally connected with the front axle, a truss supporting bearing for said rear axle, springs resting upon said truss, brackets fast to said frame and resting upon said springs, braces pivotally connected to said frame and said truss, an engine carried by said frame, means for operating the engine, a driving mechanism operatively connecting the engine with the rear axle, a rocker shaft journalled in said frame, and a rocker lever fast to said rocker shaft, the free end of said lever being socketed in said truss. 11th. In a motor vehicle, the combination of front and rear axles and wheels therefor with a supporting frame pivotally connected the front axle, means for elastically connecting said frame with the rear axle, an engine carried by said frame, means for operating the engine, means for operatively connecting the engine with the rear axle to rotate the same, and mechanism which connects said frame with the rear axle and holds the rear end portion of the frame in parallelism with the rear axle. 12th. In a motor carriage, a rear axle, an upper lengthwise extending truss for the axle, an under lengthwise extending truss for the axle, vertical cross braces connecting said trusses, said axle comprising two members, a bevel gear on the inner portions of each axle member, a bevel gear intermeshing with and operatively connecting the bevel gears on the inner portions of the axle, a spur gear loose on the rear axle and having a chamber within which that bevel gear which intermeshes with the bevel gear on the axle member rotatively mounted, a driving shaft supported by said rear axle, suitable supports for said driving shaft and a pinion which is fast on the driving shaft and meshes with said driving gear on the rear axle. 13th. In a motor

vehicle, the combination of front and rear axles, and wheels therefor, with a supporting frame, a rocker shaft journalled in said frame, a rocker lever fast upon said rocker shaft, the free end of said lever being socketed in a truss, said truss supporting bearings for said rear axle, and mechanism for propelling said vehicle.

No. 67,816. Bottle Washing Machine.

(Machine à laver les bouteilles.)



Friedrich Lugviel, Oconomowoc, Wisconsin, U.S.A., 21st June 1900; 6 years. (Filed 25th April, 1900.)

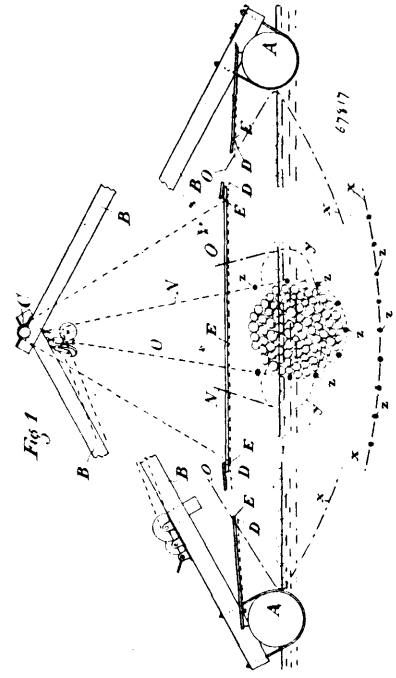
Claim.—1st. In a bottle washing machine, the combination with a supporting frame, of an oscillatory frame journalled therein, and a pair of bottle supporting discs revolubly supported in said oscillatory frame, whereby said discs are free to revolve in the oscillatory frame, and the latter is free to tilt or revolve in the supporting frame. 2nd. In a bottle washing machine, the combination with a supporting frame, of an oscillatory frame mounted therein, a journalled shaft having bearings in said oscillatory frame at right angles to the line of the supporting bearings of said frame, a pair of bottle supporting discs adjustably secured to said journalled shaft, means for temporarily holding the oscillatory frame against rotation, an annular series of pockets connected with one of said discs, and a corresponding annular series of caps yieldingly secured to the other of said discs. 3rd. In a bottle washing machine, the combination with an oscillatory frame, of a revoluble journal having bearings in said frame, a pair of bottle supporting discs, each longitudinally movable upon said journal, set screws for securing said discs to said journal for adjustment, an annular series of pockets connected with one of said discs, a corresponding annular series of flat metallic springs doubled to form an angle, and secured to the other of said discs, and socket plates removably secured to the free ends of said springs. 4th. In a bottle washing machine, the combination with a revoluble journal, of a pair of bottle supporting discs, each longitudinally movable upon said journal, set screws for securing said discs to said journal, for adjustment, an annular series of pockets connected with one of said discs, flexible caps adapted to fit the mouths of said pockets and of the bottles, and provided with central apertures adapted to provide a passage between the pockets and the bottles, corresponding series of angularly formed springs radially secured to the other of said discs, and a series of bottle supporting caps removably secured to the free ends of said springs.

No. 67,817. Machine for making Timber into Bundles.

(Machine à encager le bois.)

Albert Krank, Warkaus, Finland, 21st June, 1900; 6 years. (Filed 12th March, 1900.)

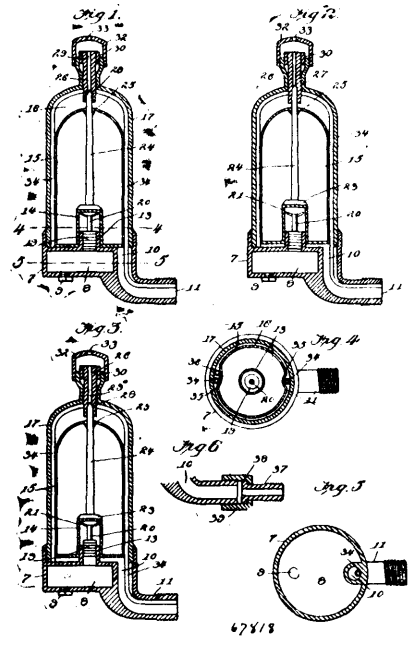
Claim.—1st. General arrangement of an apparatus for making up timber into bundles by hand power, substantially as described above, illustrated in drawings. 2nd. Arrangement of two winches that may be coupled together and chains running through the said winches in the manner described and illustrated for the purpose of



forming bundles of timber, the timber being borne up by the water during the whole process.

No. 67,818. Air Vale for Radiator.

(Soupape à air pour calorifère.)

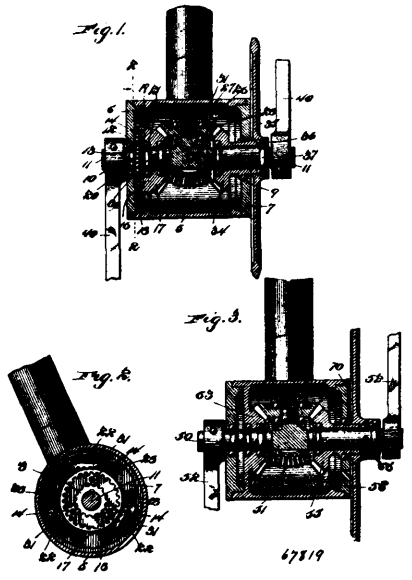


Frank A. Headson, L. Pottlitzer, J. Pottlitzer, H. Pottlitzer and Max Pottlitzer, all of Lafayette, Indiana, U.S.A., 21st June, 1900; 6 years. (Filed 31st January, 1900.)

Claim.—1st. In an automatic air valve mechanism, the combination with a hollow base, for containing an expansible liquid, a shell or cylinder mounted thereon and provided with an air passage in its upper and having a valve seat, of a float in the shell, a valve stem carried by the float and projecting into the air passage, an open ended cylinder rising from the hollow base, a piston therein adapted to rest on the expansible liquid, and a piston rod from the

piston, bearing under the float, substantially as described. 2nd. The combination with the shell or cylinder, having a constricted neck, a hollow screw plug threaded therein and provided with a valve seat, a float in the shell, having an upwardly extending recess in its bottom, a valve stem resting on the top of said recess and passing through the top of the float and into the valve seat, a hollow base supporting the shell, an open cylinder extending upward from the base into the recess in the float, a piston in said cylinder, a piston rod projecting up therefrom, and a spring on the upper end of the piston rod in contact with the top of the recess of the float, substantially as described.

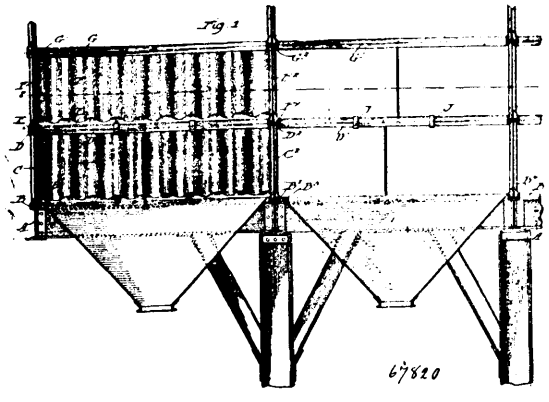
No. 67,819. Bicycle. (*Bicycle.*)



Alford Brady, G. Reijmershoffer, M. Rosenberger, and Meyer Maunce Levy, all of Galveston, Texas, U.S.A., 21st June, 1900; 6 years. (Filed 29th March, 1900.)

Claim.—In a bicycle the combination with a tubular crank hanger having discs engaged with its ends, said discs being movable into and out of the crank hanger, of a crank shaft passed through the discs and hanger and having a gear fixed thereon, a bevel gear mounted loosely upon the crank shaft and carrying an internal gear, said internal gear encircling the gear fixed upon the crank shaft, pinions mounted upon a disc adjacent the internal gear and movable with the disc into and out of engagement with the internal gear and the gear that is fixed upon the crank shaft, a plurality of stub shafts upon the crank shaft, bevel gears rotatably mounted upon the stub shafts and engaging the first named bevel gears, a bevel gear mounted loosely upon the crank shaft and engaging the bevel gears upon the stub shafts, and a sprocket secured to the loosely mounted gear.

No. 67,820. Building. (*Edifice.*)



Louis A. Stinson, Chicago, Illinois, U.S.A., 21st June, 1900; 6 years. (Filed 8th June, 1900.)

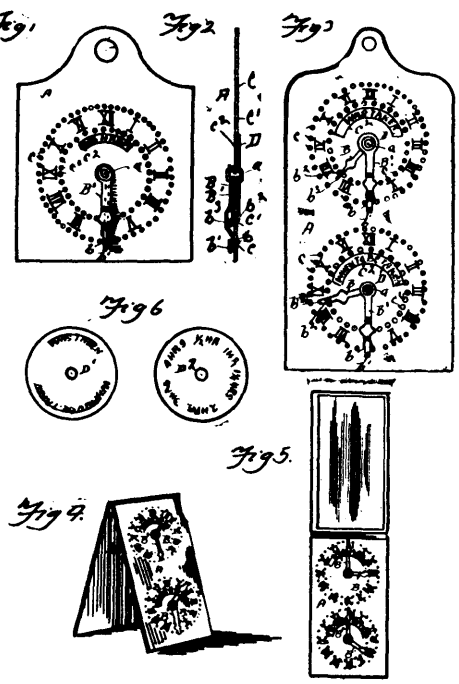
Claim.—1st. A building having plural horizontal courses of sheathing, flanged beams arranged between each course of sheathing and the next and supported solely by the course of sheathing immediately below them, said beams being overlapped at their intersections, and means for securing together the overlapped portions of the beams, thereby forming of them a connected horizontal frame work, substantially as described. 2nd. A building having plural horizontal courses of sheathing made up of vertically corrugated plates, means for directly securing together the meeting vertical edges of the sheathing plates, flanged beams arranged between each course of sheathing and the next, the horizontal edges of the sheathing plates being confined between the upturned and downturned flanges of the beams, said beams being overlapped at their intersections, and means for securing together the overlapped portions of the beams, thereby forming of them a connected horizontal frame work, substantially as described. 3rd. A building having plural horizontal courses of sheathing made up of vertically corrugated plates, means for securing together the vertical edges of the plates, plural horizontal courses of flanged beams arranged above and below each course of sheathing plates, so that the horizontal edges of the sheathing plates are confined between the flanges of the beams, and tie rods connecting each course of flanged beams with a course above it and a course below it, substantially as described. 4th. A building having plural horizontal courses of sheathing made up of vertically corrugated plates, means for securing together the vertical edges of the plates, plural horizontal courses of flanged beams arranged above and below each course of sheathing plates, so that the horizontal edges of the sheating plates are confined between the flanges of the beams, the beams being overlapped at their intersections, and means for securing together the overlapped portions of the beams, thereby forming of them a connected horizon al frame work, substantially as described. 5th. A building made up of a horizontal course of beams having flanges presented upward, a horizontal course of sheathing made up of vertically corrugated plates having their lower edges confined between the flanges of said beams, means for securing together the vertical edges of the sheathing plates, a superposed horizontal course of sheathing plates similar to the first course, means for securing together the vertical edges of said sheathing plates, flanged beams interposed between the two courses of sheathing plates and having flanges projecting downward and confining the upper edges of the lower course of sheathing plates, and flanges projecting upward and confining the lower edges of the upper course of sheathing plates, said beams being overlapped at their intersections, means for securing together the overlapped portions of the beams, a course of flanged beams resting upon and supported by the upper course of sheathing plates and having flanges presented downward between which the upper edges of the upper course of sheathing plates are confined, and means for connecting together the several courses of beams so as to prevent their separation, substantially as described. 6th. A building having a horizontal course of sheathing made up of vertically corrugated plates, the final corrugations in the vertical edges of adjacent plates being brought together, means for securing said final corrugations together, a horizontal course of flanged beams located below said course of sheathing plates and having flanges presented upward and confining the lower edges of the sheathing plates, a horizontal course of flanged beams located above said course of sheathing plates and having flanges presented downward and confining the upper edges of said sheathing plates, one or more repetition in vertical courses of the parts above described, and tie rods for connecting the several courses of flanged beams, substantially as described. 7th. A building made up of alternating courses of flanged beams and sheathing plates, each course supporting those above it, the top and bottom edges of the plates being confined between the flanges of the beams, and a filling occupying the space between the flanges of the beams and plates, the top surface of said filling being sloped toward the flanges, substantially as described. 8th. A building having plural courses of sheathing plates and channel irons arranged in two horizontal courses between each course of sheathing plates and the next, the channel irons of one course having their flanges presented downward and the channel irons of the other course having their flanges presented upward, the channel irons of one course being arranged to break joints with the channel irons of the other course, substantially as set forth. 9th. In a building, a horizontal course of channel irons arranged in intersecting rows, the sections of channel irons in each row being staggered, and a second horizontal course of channel irons similarly arranged and breaking joints with the channel irons of the first course, substantially as set forth.

No. 67,821. Medical Dose Indicator.
(*Indicateur de dose de médecine.*)

Joseph B. Mowry, Mansfield, Ohio, U.S.A., 21st June, 1900; 6 years. (Filed 22nd June, 1899.)

Claim.—As a new article of manufacture, a medicine dose indicator, consisting of the time dial having viewing openings and concentric series of perforations or apertures therein, a centrally or axially pivoted or movable back portion or disc having required data thereon, and pointers or indices centrally pivoted with relation

to the aforesaid parts, and formed with bent up lateral detents or projections to engage said series of perforations, respectively, and



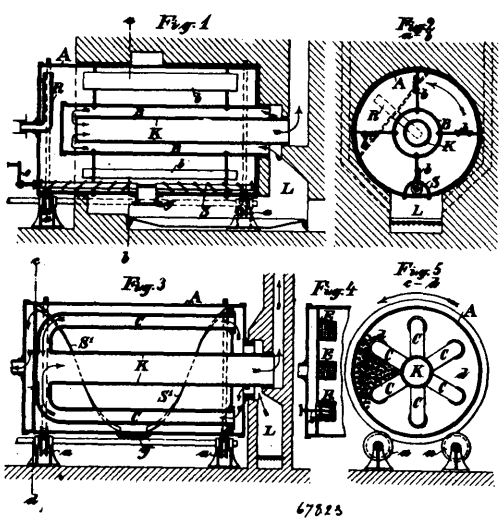
having raised or off-set terminals in alignment with, and at right angles to, said lateral detents or projections, substantially as set forth.

No. 67,822. Explosive. (*Explosif.*)

Charles William Curtis, London, England, and Leyshon Davies Kyles of Bute, Argyleshire, Scotland, 21st June, 1900; 6 years. (Filed 18th May, 1899.)

Claim.—An improved explosive compounded of a mixture of nitrate of potash and carbon in the form of lignite or brown coal in the proportion of about 85 per cent. of the former to 14 per cent. of the latter, in which is or may be added about 1 per cent. of sulphur.

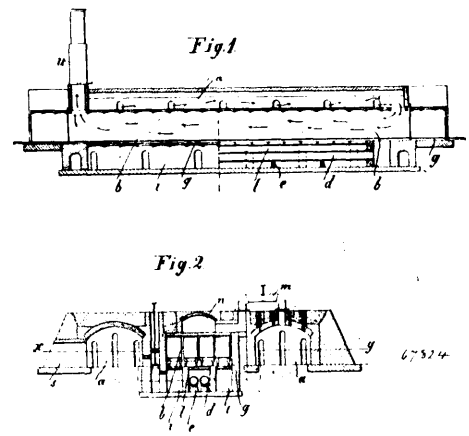
No. 67,823. Apparatus for the Dry Distillation of Wood Coal. (*Appareil pour la distillation sèche du bois, charbon, etc.*)



Edouard Martin Johan Larsen, 12 Norrevoldgade, Denmark, 21st June, 1900; 6 years. (Filed March 7th, 1899.)

Claim.—1st. In an apparatus for the dry distillation of wood, the combination with a cylindrical retort capable of rotation, of a central interior flue extending longitudinally and terminating at the outer end within the retort, flues communicating with the central flue, a furnace discharging its hot gases into the outer flues, and a chimney receiving said gases from the central flue, all the outer flues having communication with the central flue at their end farthest from said furnace, substantially as described. 2nd. In an apparatus for the dry distillation of wood, the combination with a cylindrical retort capable of rotary movement, of a central flue, a series of interior outer flues extending longitudinally, of a furnace discharging its heated gases into the outer flues, a chimney receiving said gases from the central flue, and a common chamber at the end of the retort most remote from the furnace into which the ends of all the flues open, substantially as described. 3rd. In an apparatus for the dry distillation of wood, the combination with a cylindrical retort capable of rotary movement, of a central flue, a series of independent interior longitudinal flues, a heating furnace near one end of the retort, a chimney near said end, an opening from the end of the retort to both furnace and chimney, and a chamber at the other end of the retort with which the ends of the flues all communicate, whereby the hot gases from the furnace enter the outer flues, and pass from the central flue to the chimney, and a chamber having communication with said chamber, substantially as described. 4th. In an apparatus for the dry distillation of wood, the combination with a retort capable of rotary movement, of an interior series of horizontal flues, a central flue with which they all communicate, a furnace communicating with the outer flues at one end of the retort, a chimney receiving the hot gases from the central flue at the same end of the retort, and a chamber at the other end to receive the products of distillation, said chamber being separated from the retort by a perforated wall, substantially as described. 5th. In an apparatus for the distillation of wood, the combination with a retort, capable of rotary movement, of a series of inner horizontal flues, a central flue with which they communicate, a furnace communicating with the outer flues at one end of the retort, a chimney receiving the hot gases from the central flue at the same end of said retort, a chamber for the products of distillation at the other end, a series of perforated cages in the wall dividing said chamber from the retort, and rotary brushes in said cages, to clear the perforations, substantially as described.

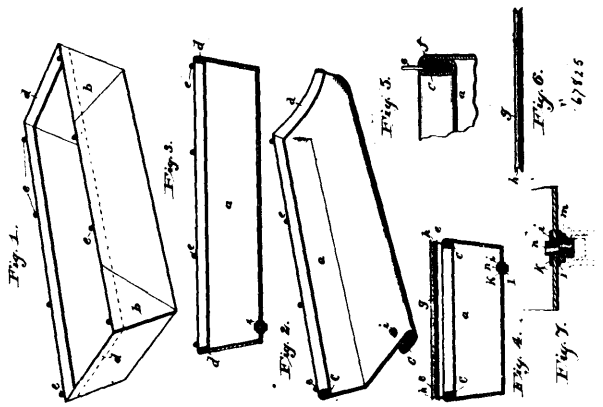
No. 67,824. Drying Oven and Kiln. (*Four à sécher.*)



Henri Franz Joseph Weijers, Bahnhofstrasse, Tilburg, Holland, 21st June, 1900; 6 years. (Filed 14th July, 1899.)

Claim.—1st. A combined drying oven and kiln, surrounded along its whole length by chambers or channels containing hot gases so that the heat radiated from such chambers or channels is used for drying, constructed and arranged substantially as hereinbefore described. 2nd. A combined drying oven and kiln, having a drying chamber in the form of a channel, arranged between two rows of kiln chambers and at the same level with the same and between channels above and below, for the passage respectively of the hot air drawn off from from the kiln chambers and the gases of combustion, so that the heat radiated from these chambers and channels is utilized for drying in the drying chamber, constructed and arranged substantially as hereinbefore described. 3rd. In a combined drying oven and kiln, having a drying chamber in the form of a channel arranged between two rows of kiln chambers, a system of pipes arranged lengthwise in a channel or chamber communicating with the drying chamber, so that during the passage of the hot gases of combustion through these pipes the heat of such hot gases is radiated from the pipes and communicated to the whole length of the drying chamber, constructed and arranged substantially as hereinbefore described. 4th. A drying oven and kiln, as described, with a drying chamber arranged between the kiln chambers, having a channel *n* above the drying chamber for collecting the hot air, which is cooling, and a channel *l* below the drying chamber provided with pipes for collecting and carrying off the gases of combustion, constructed and arranged substantially as and for the purpose hereinbefore described.

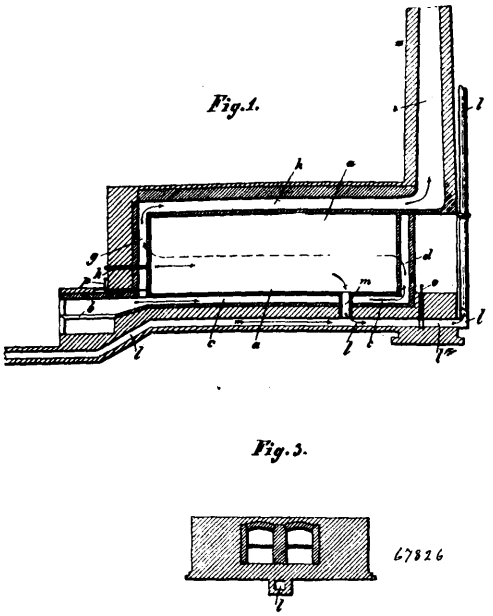
No. 67,825. Bath Tub. (*Bain.*)



Charles B. Ulrich, Duluth, Minnesota, U.S.A., 21st June, 1900; 6 years. (Filed 7th March, 1900.)

Claim.—1st. A flexible bath tub having the body thereof formed of flexible material, longitudinal side bars engaged with the lateral marginal edges of said material, the ends of the body being left flexible, said side bars provided with means for the attachment of a lifter thereto. 2nd. A flexible bath tub having the body thereof formed of flexible material, longitudinal side bars engaged with the lateral marginal edges of said material, the ends of the body being left flexible, said side bars provided with means for the attachment of a lifter thereto, said body and one extremity thereof provided with a discharge device. 3rd. A flexible bath tub having the body thereof formed of flexible material, longitudinal side bars engaged with the lateral marginal edges of said material, the ends of the body being left flexible, said side bars provided with means for the attatchment of a lifter thereto, and in combination therewith adjustable end braces. 4th. A bath tub having the body thereof formed of flexible material and provided with longitudinal side bars engaged with the lateral marginal edges of said material, said side bars provided with means for the attachment of a lifter thereto.

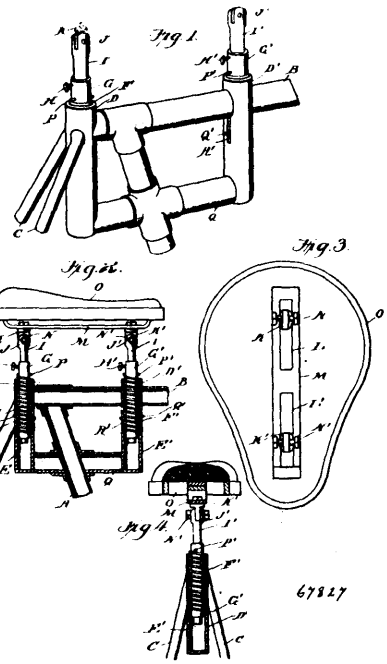
No. 67,826. Kiln Furnace for Ovens for Ceramics.
(Fournaise de four.)



Ernst M. B. Rohardt and F. A. Jeifke, both of Veckersen Morrege, German Empire, 21st June, 1900; 6 years. (Filed 7th July, 1899.)

Claim.—1st. A kiln furnace or oven for ceramics in which the flame and gases have to pass through flues *c*, *d*, *f*, *g*, *h*, in order to act successively on the greatest possible surface of a burning chamber *a* closed to such flame and gases, before the latter pass to an uptake *i*, the circulation of air in the chamber *a* being effected by the introduction of preliminary heated air thereinto and the escape of air and vapour therefrom, in order to expose the articles to be burnt to radiating heat only, which may be obtained to the largest possible extent by the long passage, the fire gases have to make around, and their consequent long contact with the chamber, constructed and arranged, substantially as hereinbefore described. 2nd. In a kiln furnace or oven for ceramics as described, having a slide *p* in a smoke flue or chamber *g* so that the gases may pass to the uptake *i* by the shortest route, substantially as hereinbefore described.

No. 67,827. Bicycle Seat Support.
(Support de siège de bicycles.)



Peter Smith, Riverside, Illinois, U.S.A., 21st June, 1900; 6 years (Filed 17th April, 1900.)

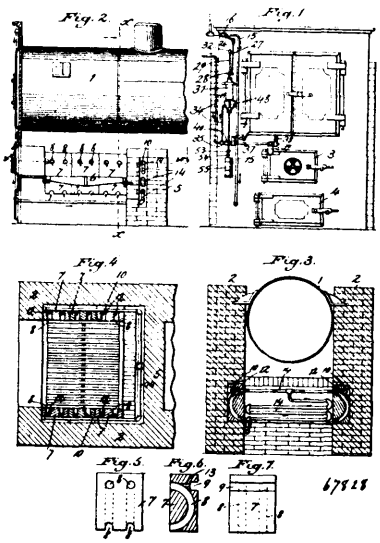
Claim.—1st. A bicycle seat, provided with a vertically slidable and yielding supports at the front and rear, in combination with means for raising and lowering either or both of said supports, substantially as described. 2nd. A bicycle seat, provided with a longitudinally slotted plate secured to its under surface, in combination with the frame of the machine having two vertical openings, blocks slidably seated in the slots of the seat plate, vertical rods pivotally connected to said blocks, tubes around the rods, means for locking the rods within the tubes, stops for limiting the vertical movement of the tubes, and springs coiled around said tubes, the lower ends of which are supported within the frame of the bicycle, and pins in the tubes for engaging with the upper ends of the springs above the frame, substantially as described. 3rd. The combination with a frame of the bicycle having vertical openings, of the seat, the inner tubes, each provided with stops, the rods secured therein and slidably pivoted to the seat, and working in the frame opening, the springs coiled around the inner tubes, the upper ends of which bear against said stops, the other tubes in the frame openings around the springs and inner tubes, and the reinforcement of said outer tubes forming the lower bearings of the spring, substantially as described. 4th. The combination with the top bar, of the slotted outer tube secured therein and provided with shoulders, the inner tube and spring within the outer tube, the spring resting on the shoulders therein, the pins projecting from the inner tubes through the slots of the outer tubes, the pins in the inner tubes above the springs, the rods in the inner tubes, their set screws, the seat and slidable pivotal connections between the rods and seat, substantially as described.

No. 67,828. Smoke Preventer. *(Arrête-fumée.)*

Ralph Waggett Cavenaugh, Saint Paul, Minnesota, U.S.A., 21st June, 1900; 6 years. (Filed 2nd January, 1900.)

Claim.—1st. The combination with a suitable furnace, of a series of tiles arranged along the walls of the furnace and extended above and below the furnace grate, said tiles being formed with channels describing substantially an arc of a circle and opening at their lower ends below the grate and at their upper ends above the grate, sub

stantially as described. 2nd. The combination with a suitable furnace, of a series of tiles along the wall of the furnace, said tiles



being formed with channels describing substantially an arc of a circle and opening at their lower ends below the grate and at their upper ends above the grate, a steam pipe extending across said tiles at their upper portion below the top thereof, and steam jets or nipples projecting from said pipes and arranged to inject steam into the upper part of the channels formed in the tiles, substantially as described. 3rd. The combination, with a suitable furnace, of a series of tiles arranged along the walls of the furnace and extended above and below the furnace grate, said tiles being formed with channels describing substantially an arc of a circle and opening at their lower ends beneath the grate and at their upper ends above the grate, a pipe extending across the tiles at their upper portion below the top thereof, and nipples extending from said pipe and discharging into the channels formed in the tiles, said nipples having conical passageways the largest area of which is towards the channels in the tiles, substantially as described. 4th. In a furnace smoke preventer, the combination of a pipe leading to the fire box from a source of supply, a valve in said pipe, said valve comprising an apertured vertically disposed partition and an apertured member movable in a vertical plane, the apertures in the partition and said member registering with each other, a pressure cylinder containing a piston and having a vertically moving piston rod comparatively connected with said valve, a pressure supply pipe communicating with said cylinder, a valve in said pipe, a rock shaft connected with the said valve to positively move it in both directions and having a member arranged in the path of movement of the furnace door so as to turn the valve in the cylinder pressure supply pipe when the door is open, and means for regulating the escape of the pressure agent from the pressure cylinder, substantially as described. 5th. In a smoke preventer, the combination of a pipe leading to the fire box from a source of supply, a valve movable in a vertical plane in said pipe, a pressure cylinder below said valve and provided with a piston and having a vertically movable piston rod extending through the cylinder head, a vertically extending link connecting said piston rod with said valve, a pipe connecting with said cylinder for supplying a pressure agent to act on said piston, a valve controlling the supply of the pressure agent to the cylinder, means connecting the said valve operatively with the furnace door whereby said valve will be opened by the opening of the furnace door, and means for the escape of the pressure agent from the cylinder, substantially as described. 6th. In a furnace smoke preventer, the combination of a pipe leading to the fire box from a source of supply, a valve movable in a vertical plane in said pipe, a pressure cylinder located below said valve and provided with a piston having a piston rod extending through the cylinder head, a line connected with said valve at one end and having its other end pivotally and adjustably connected the piston rod, a pipe conecting with said cylinder for supplying a pressure agent to act on said piston, a valve controlling the supply of the pressure agent to the cylinder means, connecting the said valve operatively with the furnace door whereby said valve will be actuated by the opening of the furnace door, and means for the escape of the pressure agent from the cylinder, substantially as described. 7th. In a furnace smoke preventer, the combination with a pipe leading to the fire box from a source of supply and provided with a valve comprising a vertically disposed apertured partition and a rotary apertured member, the apertures in said rotary member and said partition registering with each other, of a pressure cylinder containing a piston whose rod moves vertically through the cylinder head, a vertically arranged link pivotally connected with said piston rod at one end and at the other end connected with said valve, a pressure supply pipe communicating with said cylinder and provided with a valve, and mechanism operatively connecting said valve with the furnace door whereby said valve is opened and closed in the movement of said door, substantially as described. 8th. In a furnace smoke preventer, the combination of a pipe leading to the fire box from a source of supply a valve in said pipe, a pressure cylinder provided with a piston and its rod, means connecting the piston with said valves, a pipe connecting with said cylinder for supplying a pressure agent to act on said piston, a valve controlling the supply of the pressure agent to the cylinder, means connecting said valve operatively with the furnace door, and means for the escape of the pressure agent from the cylinder, said means comprising a valve, a dial and an index finger, and the dial so graduated relatively to the port in the valve as to determine the requisite adjustment of the valve to restrict the discharge of the pressure agent from the pressure cylinder and the movement of the valve in the supply pipe leading to the fire box for a predetermined period, substantially as described. 9th. In a furnace smoke preventer, the combination of a pipe leading to the fire box from a source of supply, a valve in said pipe, a pressure cylinder provided with a piston having a connection with said valve, a pipe leading to the said cylinder for supplying a pressure agent to act on said piston, a valve controlling the supply of the pressure agent to the cylinder, means connecting said valve operatively with the furnace door, a valve for controlling the escape of the pressure agent from the cylinder, the index being provided with a scale so graduated relatively to the port in the valve as to determine the requisite adjustment of the valve to restrict the discharge of the pressure agent from the pressure cylinder and the movement of the valve in the supply pipe leading to the fire box for a predetermined period, substantially as described. 10th. In a furnace smoke preventer, the combination of a pipe leading to the fire box from a source of supply, a valve in said pipe, a pressure cylinder provided with a piston having a connection with said valve, a pipe leading to said cylinder for supplying a pressure agent to act on said cylinder, a valve controlling the supply of the pressure agent to the cylinder, means connecting said valves operatively with the furnace door, and means for the escape of the pressure agent from the cylinder, said means comprising a casting formed with a dial and provided with a valve carrying an index finger, said casting being formed with a port registering with a port in the valve and provided with means for its attachment to the pressure cylinder, and the dial being so graduated relatively to the port in the valve as to determine the requisite adjustment of the valve to restrict the discharge of the pressure agent from the pressure cylinder and the movement of the valve in the supply pipe leading to the fire box for a predetermined period, substantially as described.

No. 67,829. Carbon Electrodes for Electric Arc Lights.

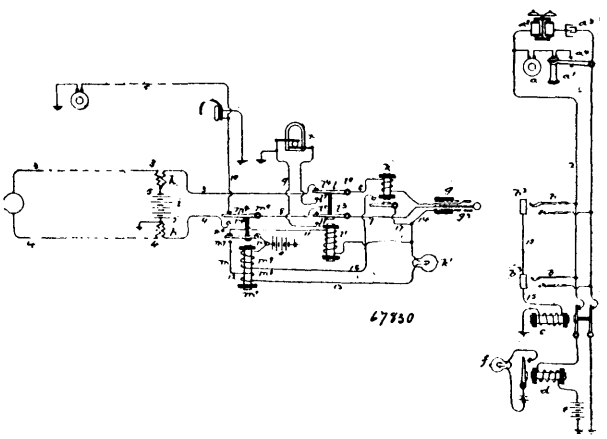
(Traitement d'électrode de carbone pour lumières électriques à arc.)

John Tilghman Robinson and James Henry Ferguson, both of New York City, New York, U.S.A., 22nd June, 1900; 6 years. (Filed 25th January, 1900.)

Claim.—The process of treating carbon electrodes for improving their quality which consists in soaking them bodily in a compound solution obtained by subjecting asbestos to the dissolving action of a solution of caustic alkali, substantially as herein described.

No. 67,830. Telephone Calling Apparatus.

(Appareil d'appel pour téléphones.)

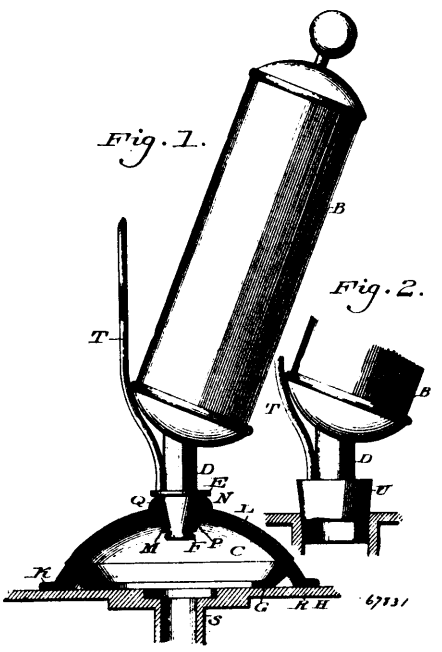


The Bell Telephone Company of Canada, Montreal, Quebec, assignee of Charles Ezra Scribner, Chicago Illinois, U.S.A., 22nd June, 1900; 6 years. (Filed 27th May, 1898.)

Claim.—1st. The combination with telephone lines having call balls at their substations and switches for changing the resistance

of the lines, and a terminal plug of a trunk circuit for making connection with a line of an electro-magnet controlling a break in the trunk circuit, said break being closed when the electro-magnet is inert, a switch spring actuated by the magnet adapted to connect a contact piece of the terminal plug with a source of calling current, a second electro-magnet responsive to current in the line produced by the operation of the switch at the station thereof, a local circuit and means for closing the same in the act of making connection with the line by means of said plug, the magnet winding of said first mentioned magnet being included in said local circuit, and switch contacts of said second mentioned electro-magnet controlling the continuity of the local circuit, whereby said first mentioned magnet applies calling current to a telephone line with which connection is made, but is deprived of current and closes the break in the plug circuit when the telephone at the called station is taken for use, as described. 2nd. The combination with telephone lines, call bells connected therewith, and switches at the stations thereof operated in the use of the telephones for diminishing the resistance in the line circuit, of a trunk line and the terminal plug thereof for making connection with any line, a calling appliance consisting of a magnet and a switch spring actuated thereby normally closing a break in the trunk circuit, and adapted, when actuated, to open the said break and connect a source of calling current with the terminal plug, a second electro-magnet controlled by current through the subscriber's line when increased by the diminution of the line resistance, a local circuit including the magnet of said calling appliance closed in registering contact pieces of the plug and the spring jack of a line, and switch contacts of said second mentioned electro-magnet normally completing said local circuit, but adapted to break it when the magnet is excited, a local circuit for said second mentioned electro-magnet, and switch contacts actuated by the electro-magnet to close the local circuit thereof, whereby the trunk line is interrupted and calling current is applied to a line when connection is made therewith, but the source of calling current is disconnected in the use of the telephone at the substation and remains disconnected thereafter during the use of the line, as described. 3rd. The combination with telephone lines, each provided with a call bell at its station and with a switch and means controlled thereby for changing the resistance of the line in the use of the telephone, with spring jacks for making connection with the line, of a trunk line and a terminal plug thereof, a magnetically controlled calling switch and a magnetically controlled telephone switch, switch contacts of the telephone switch forming a normal break of the trunk circuit and connecting the testing contact of the terminal plug with the operator's telephone or testing appliance, switch contacts of the calling appliance normally completing the conductor leading to said testing contact, but adapted, when the magnet is excited, to break such normal connection and apply one pole of a source of calling current to said contact, a local circuit including the electro-magnet of said calling appliance and registering contacts of the plug and spring jack adapted to complete the said local circuit auxiliary switch contacts of the telephone switch adapted to break the circuit through the magnet of said calling appliance when the magnet of the telephone switch is excited, means for exciting the magnet of the telephone switch in response to increase of current in the line circuit with which the plug is connected, a local circuit including a winding of the magnet of the telephone switch together with switch contacts of the said switch closed when the magnet is excited, and means for breaking the said local circuit when the plug is withdrawn from the springjack, substantially as described. 4th. The combination with a telephone line having a high resistance call bell at its station and a switch for cutting out the call bell in the use of the telephone, a spring jack for the line, and a local circuit conductor terminating in a contact piece thereof, a trunk line, a terminal plug therefor, and a relay in the trunk circuit adapted to respond to current in the line when the said bell is cut out, of a magnetically controlled calling switch having switch contacts normally completing breaks in the different line conductors of the trunk circuit, but adapted, when excited, to apply the poles of a source of calling current to the conductors leading to said terminal plug, a local circuit including the magnet of said calling switch, said local circuit terminating in a switch contact of the plug adapted to make connection with the local circuit of a telephone line to excite the magnet, a magnetically controlled telephone switch having a switch spring normally forming a break in the conductor of the trunk circuit leading to the test contact of the terminal plug, and connecting the said test contact with a telephone or other testing appliance, but adapted to close said break and disconnect the said telephone appliance, a branch of the local circuit closed between the plug and springjack including the magnet of said telephone switch, said branch being controlled by the supervisory relay, other switch contacts of said telephone switch normally completing the circuit through the magnet of said calling switch but adapted to break the same when the magnet is excited, a local circuit including a winding of the magnet of said telephone switch, said circuit being a branch of the local circuit closed between the plug and springjack, and switch contacts controlled by the same magnet to complete the said circuit when the magnet is excited, substantially as described. 5th. The combination with telephone lines, each having a call bell at its station and a switch for reducing the resistance of the line in the use of the telephone, a springjack for the line, a trunk line and a terminal plug thereof for making connection with the springjack, a supervisory relay in the trunk line and a supervisory signal associated with the terminal plug, of a magnetically controlled calling switch having switch contacts normally closing the different line conductors of the trunk line, but adapted to break the said conductors and to connect the poles of a source of calling current with the line conductors to the terminal plug, a local circuit, contact pieces of the plug and springjack adapted to complete the said local circuit, and a branch of the circuit including the magnet of said calling switch, a telephone switch, switch contacts thereof forming a normal break in the conductor of the trunk circuit leading to the testing contact of said plug, and connecting the said testing contact with an operator's telephone or other testing appliances, said switch contacts being adapted to sever the connection with the telephone and complete the connection with the trunk circuit when the controlling magnet is excited, a second branch of the said local circuit including the controlling magnet of said telephone switch, said second branch being controlled by the switch contacts of the supervisory relay, other switch contacts of the telephone switch normally closing the branch of the local circuit through the magnet of the calling switch, but adapted to break the said circuit when the magnet of the telephone switch is excited, a third branch of the local circuit including the supervisory signal, together with a winding of the magnet of the telephone switch, controlled by switch contacts of the telephone switch, closed when the magnet is excited, said winding being of comparatively low resistance, substantially as described. 6th. The combination with trunk line and terminal plugs thereof for use in multiple switchboards, of an electro-magnetic appliance having a controlling magnet in a local circuit closed in registering contacts of the plug and springjack, switch contacts of the said appliance normally breaking the connection of the test contact of said plug with the remainder of the trunk circuit and connecting it with the operator's telephone for testing, substantially as described. 7th. The combination with a trunk line and a terminal plug therefor adapted for connection with multiple springjacks of the telephone line, of calling and switching mechanism for controlling magnets in a local circuit closed in registering contacts of the plug and springjack, said mechanism being adapted when inert to disconnect the testing contact of the plug from the remainder of the trunk line and to connect it with a terminal of the operator's telephone, and when excited to disconnect the operator's telephone and connect a source of calling current with the terminal plug, substantially as described.

No. 67,831. Pump. (*Pompe.*)



Emil Noppel and Edward Adolph Noppel, both of Philadelphia, Pennsylvania, U.S.A., 22nd June, 1900; 6 years. (Filed 17th April, 1900.)

Claim.—1st. In a combined force and suction pump, a pumping device, and a cup provided with means for holding the same in operative contact with the surface to which it is applied, said means being actuated by both the force and suction of the pumping device. 2nd. In a combined force and suction pump, a pumping device, and a cup provided with means upon the open end thereof for holding the same in operative contact with the surface to which it is applied, said means being actuated by both the force and suction of the pumping device. 3rd. In a combined force and suction pump, a pumping device, and a cup provided with oppositely

acting means for holding the same in operative contact with the surface to which it is applied, said means being actuated by the force and suction of the pumping device. 4th. In a combined force and suction pump, a pumping device, and a cup provided with independent and oppositely acting means for holding the same in operative contact with the surface to which it is applied, said means being actuated by the force and suction of the pumping device. 5th. In a combined force and suction pump, a pumping device, and a cup provided with a yielding bifurcated open end. 6th. In a combined force and suction pump, a pumping device and a cup, the open end of said cup being provided with separated and yielding outer and inner members. 7th. In a combined force and suction pump, a pumping device and a cup, the open end of said cup being provided with separated and yielding outer and inner members, the free edges of said members being provided with outwardly and inwardly projecting flanges respectively. 8th. In a combined force and suction pump, a pumping device, and a cup provided with a yielding bifurcated open end. 9th. In a combined force and suction pump a pumping device, a cup provided with a yielding bifurcated open end, and a strengthening or stiffening cap over the body portion of said cup. 10th. In a combined force and suction pump, a pumping device, a pump provided with a yielding bifurcated open end, and a strengthening or stiffening cap over the body portion of said cup, the outer edge of said cap being situated at the junction of the bifurcations of the cup. 11th. The combination of a pumping device having a nozzle, a cup having a socket to receive said nozzle, and an apertured cap upon the outside of said cup, said cup being provided with a groove that receives the edge portion of said cap and surrounding the aperture therein. 12th. The combination of a pumping device having a nozzle provided with a tapered end, flanges at the ends of said tapered portion, a cup having a socket to receive said nozzle, said socket being retained between said flanges, and an apertured cap upon the outside of said cup, said cup being provided with a groove to receive the edge portion of the cap surrounding the aperture therein. 13th. The combination of a pump provided with a nozzle, a cup having an aperture, extensions or collars integral with said cup and surrounding said opening to form a socket for said nozzle, the collar or extension on the outside of said cup being provided with a groove, and an apertured cap upon the outside of said cup, the portion of said cap adjacent the aperture therein being situated within said groove.

No. 67,832. Alkaline Zinc Collecting Battery.

(Pile pour récueillir les zincs d'alcalin.)

Titus de Micalowski, Cracow, Galizia, Austria-Hungary, 22nd June, 1900; 6 years. (Filed 20th March, 1900.)

Claim.—The process herein described for the construction of alkaline zinc, collecting batteries with nickel oxide (ni_2, O_3) as the depolarizator, consisting in covering the nickel serving as a positive electrode with a firmly adherent conducting coating of nickel oxide by a suitable oxidizing agent, substantially as shown and described.

No. 67,833. Explosive. *(Explosif.)*

Alfred Luck Brentcote, Dartford, Kent, and Charles Frederick Cross, 4 New Court, London, both in England, 22nd June, 1900; 6 years. (Filed 4th August, 1899.)

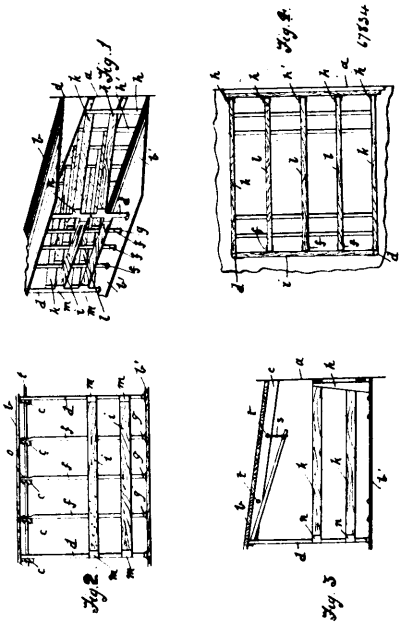
Claim.—In the treatment of nitro-cellulose, for the manufacture of explosives and other products, subjecting the nitro-cellulose to the action of a diluted solvent so as to render it more or less structureless and to clear it from impurities, susbstantially as described.

No. 67,834. Cattle Pen and Horse Stall.

(Parc et stalle à bétail.)

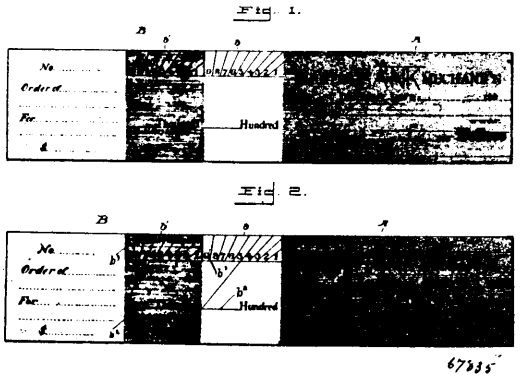
Henry Wood, Herne Hill, and Alfred Strover Williams, London, both in England, 22nd June, 1900; 6 years. (Filed 3rd July, 1899.)

Claim.—1st. In a cattle pen for use on ships and other vessels, the combination of the stanchions d, d at each end of the pen attached to the deck beams c at their upper ends and to the deck planking b^1 at their lower ends and having brackets m, m, n, n, thereon with uprights h, h secured to the side of the vessel and removable boards i, i and k, k supported by the said stanchions and uprights and forming the front and sides of the pen, the back of the pen being formed by the side of the vessel and the top and bottom of the pen by the decks of the vessel, substantially as set forth. 2nd. In a cattle pen for use on ships and other vessels, the combination of stanchions d, d permanently secured to the deck beams c at their upper ends and to the deck planking b^1 at their lower ends and having brackets m, m, n, n, thereon and uprights h, h secured to the side of the vessel, the said stanchions and uprights being adapted to support removable boards i, i and k, k with stanchions f, f, f, intermediate between the stanchions d, d hinged at their upper ends to the deck beams c, c, c and detachably connected at their lower ends to sockets g, g, g secured to the deck planking b^1, uprights h^1, h^1, h^1 opposite the said stanchions and removable boards l, l, l forming the partitions between the stalls supported by the stanchions f, f, f and the uprights h^1, h^1, h^1, substantially as and for the purposes set forth. 3rd. In a cattle pen for use on ships and other vessels, the stanchions f, f, f of channel section hinged to the deck beams c, c, c at one end and provided with stop pieces p, p, and having a bolt p moving in a slot q



at the lower end of the said stanchions to secure the stanchions to the sockets g, g, g, the said sockets being secured to the deck b^1 and having recesses v to receive the bolt r, all substantially as set forth.

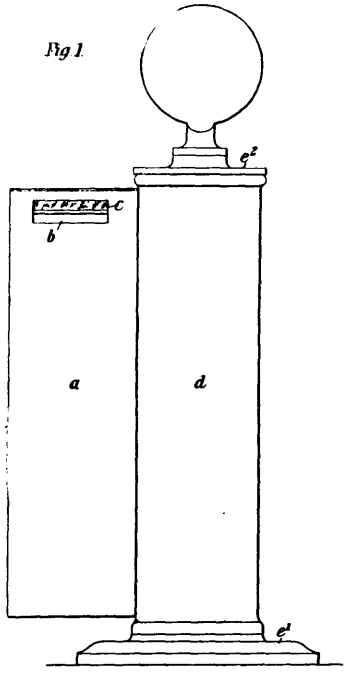
No. 67,835. Check. *(Chèque.)*



Frederick Heinz, Davenport, Iowa, U.S.A., 22nd June, 1900; 6 years. (Filed 6th November, 1899.)

Claim.—1st. A check or the like, having a continuation divided into sections, there being on each section a line having adjacent to it an indication denoting the denomination of the section, and a series of lines on each section extending toward the line indicating the denomination of the section each of the series of lines having adjacent to it a number indicating the amount of the denomination of the section on which it is placed, so that if the section be cut or torn along one of the said series of lines the line indicating the denomination of the section will be intersected, substantially as described. 2nd. A check or the like, having a continuation divided into sections, each section having thereon a line at the end of which is indicated the denomination denoted by the section, and a series of inclined lines numbered as described, the inclination of the lines being such that if continued they will intersect the line indicating the denomination at the edge of the section farthest removed from the body of the check, substantially as described. 3rd. A check or the like, comprising a main portion of one colour, a continuation constituting a stub divided into sections, each section being a colour different from the main portion and from adjacent sections, and denoting amounts of different denominations, lines having adjacent thereto words indicating the denominations of the sections, inclined lines on each section numbered as described, the inclination of the lines being such that if continued they will intersect the lines indicating the denominations at the edges of the respective sections farthest removed from the body of the check, substantially as described.

No. 67,836. Cash Register. (*Régistre à monnaie.*)



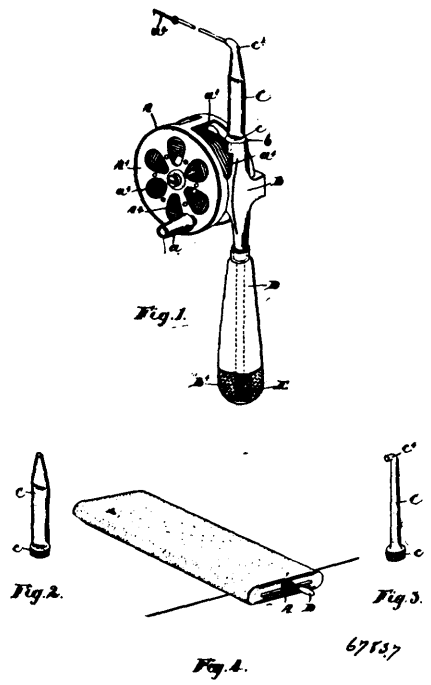
Marshall George Wood, Brighton, Sussex, England, 22nd June, 1900; 6 years. (Filed 6th April, 1900.)

Claim.—1st. In cash registers of the kind which turn upon an upright pillar or support, the combination with the said support of a casing, a paper band held in the casing and adapted to be wound upon a drum, a window in the casing in front of which the paper passes, and means for automatically feeding forward the said paper when the casing is turned upon the upright pillar, substantially as hereinbefore described. 2nd. In a cash register, the combination of an upright, a casing pivotally mounted thereon, a paper roll held in the said casing, a drum onto which the paper is wound, the said paper passing in front of a window or opening in the casing, a feed roller over which the paper passes and which frictionally drives the drum, and means for actuating the said feed roller when the casing is turned upon the pillar, substantially as described. 3rd. In a cash register, the combination of an upright pillar or support, a casing pivotally mounted thereon, a paper roll held in the casing, a drum pivotally mounted in the casing, a feed roller pivotally mounted in the casing and arranged to frictionally drive the drum and feed the paper in front of a window in the casing on to the said drum and ratchet and pawl gear for actuating the feed roller when the casing is turned upon the upright pillar or support, substantially as hereinbefore described. 4th. In a cash register, the combination of an upright pillar or support, a casing pivotally mounted thereon, a paper roll loosely held in the bottom of the casing, a receiving drum pivotally mounted in the casing, a feed roller pivotally mounted in the casing, and arranged to frictionally drive the said drum and feed the paper in front of a window in the casing and on to the said drum, a ratchet wheel rigidly secured to the feed roller, a pawl lever pivotally mounted in the casing, and having a pawl engaging with the ratchet wheel, and a projecting pin adapted to engage with a fixed tappet or pin upon the upright pillar, substantially as hereinbefore described. 5th. In a cash register, the combination of an upright pillar or support, a casing pivotally mounted thereon a paper roll loosely held in the bottom of the casing, a receiving drum pivotally mounted in the casing, a feed roller pivotally mounted in the casing and arranged to frictionally drive the drum and feed the paper in front of a window in the casing and on to the drum, a ratchet wheel rigidly secured to the feed roller, a pawl lever pivotally mounted in the casing, and having a pawl engaging with the ratchet wheel, and a projecting pin adapted to engage with a fixed tappet or pin upon the upright pillar, and a spring attached to the casing and the pawl lever, substantially as and for the purpose hereinbefore described.

No. 67,837. Measuring Device. (*Appareil à mesurer.*)

George Alexander Shaw, Toronto, Ontario, Canada, 22nd June, 1900; 6 years. (Filed 20th April, 1900.)

Claim.—1st. In a measuring device, the combination with the hollow finger, and a handle arranged in alignment with the said finger, and a suitable connecting portion between the finger and the handle having a passageway extending through to the hollow finger,



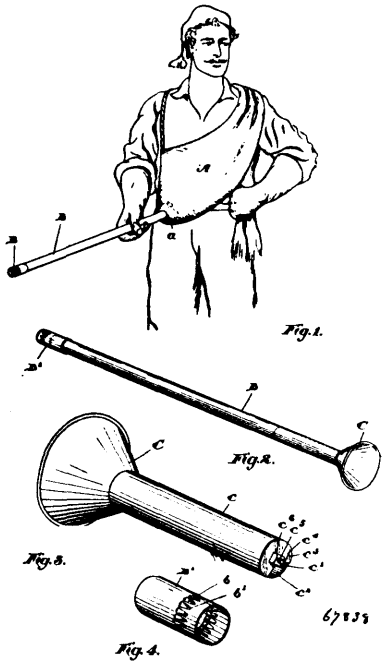
of a reel attached to the connecting portion between the hollow finger and the handle and adapted to carry a tape or cord, which extends through the passageway in the connecting portion and out through the hollow finger as specified. 2nd. In a measuring device, the combination with the hollow finger having a point bent substantially at right angles to the finger, and a handle arranged in alignment with the said finger, and a suitable connecting portion between the finger and the handle having a passageway extending through to the hollow finger, of a reel attached to the connecting portion between the hollow finger and the handle and adapted to carry a tape or cord, which extends through the passageway in the connecting portion and out through the hollow finger as specified. 3rd. The combination with the hollow finger, the reel and connecting portion attached to the reel and to the hollow finger, of a handle swivelled on a rod forming an extension of the connecting portion and adapted to allow of the finger turning without effecting the turning of the handle as specified.

No. 67,838. Grass Seeder. (*Semoir.*)

Nelson McPherson, Silverdale Station, Ontario. Canada, 22nd June, 1900; 6 years. (Filed 10th April, 1900.)

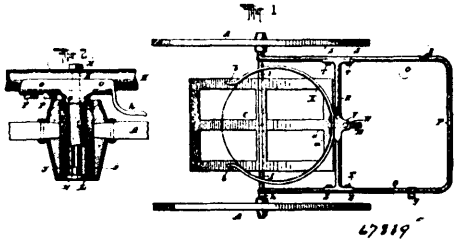
Claim.—1st. The combination with a seed bag having an opening at the bottom, of a tube extending through such opening and provided at the discharge end with a series of inwardly extending deflecting fingers, as and for the purpose specified. 2nd. The combination with the tube having a circle of deflecting fingers extending inwardly into the tube at one end, of a funnel extending outwardly from the opposite end, as and for the purpose specified. 3rd. The combination with the tube having a circle of deflecting fingers extending inwardly into the tube at one end, of a funnel extending outwardly from the opposite end and having a tubular portion extending into the feed end of the tube, and means in such portion for regulating the feed, as and for the purpose specified. 4th. The combination with the tube having a circle of deflecting fingers extending inwardly into the tube at one end, of a funnel extending outwardly from the opposite end and having a tubular portion extending into the feed end of the tube provided with a closing plate having an opening in the same and a supplemental plate having a similar sized opening to the closing plate and rotatably held on same and clamped in position by a slot and nut, as and for the purpose specified. 5th. A seeder comprising a tube having a series of inwardly deflecting fingers extending into the tube and having the points of the fingers forward of the base and arranged in a circle, as and for the purpose specified. 6th. A seeder comprising a tube having a series of inwardly deflecting fingers extending into the tube and having the points of the fingers forward of the base and arranged in a circle, such fingers being formed or stamped out of the tube, as and for the purpose specified. 7th. The combination with the tube having a circle of deflecting fingers extending inwardly

into the tube at one end, of a funnel extending outwardly from the opposite end, and having a tubular portion extending into the feed



end of the tube provided with a closing plate having an opening in the same and a supplemental plate having a similar sized opening to the closing plate and rotatably held on same, as and for the purpose specified.

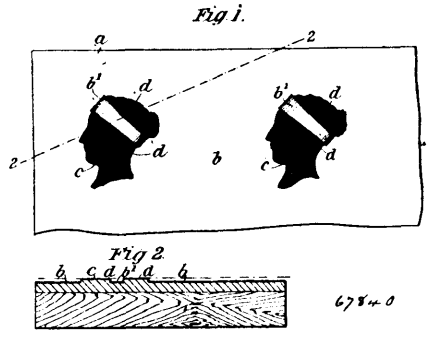
No. 67,839. Push Wagons, (*Wagon.*)



Thomas Hill, Jersey City, New Jersey, U.S.A., 22nd June, 1900; 6 years. (Filed 21st April, 1900.)

Claim.—1st. The wagon having the wheels and handle portion, combined with the platform suspended below the axles to receive the can, and the spring to detachably retain the can upon said platform, substantially as set forth. 2nd. The wagon having the frame and side wheels, combined with the rearwardly extending handle, the platform suspended below the axles of said wheels to receive the can, the wheel at the rear end of said platform, the vertical rod intermediate the said platform and main frame, and the spring for clasping the upper portion of the can, substantially as set forth. 3rd. The wagon comprising the portion B having the sections F, G, H, I, and the side wheels mounted upon axles secured to said sections H, combined with the platform secured upon said sections I, the transverse rod connecting said sections G, and the spring X secured to said rod R and opening frontward to clasp the can to be placed upon said platform, substantially as set forth. 4th. The wagon comprising the handle, the vertical sections H carrying the axles for the side wheels, and the sections I extending inward toward one another from the lower ends of the sections H, combined with the platform C having the tubular portion *d* to receive the inner ends of said sections I, and the wheel E at the rear end of said platform, substantially as set forth. 5th. The wagon having the handle F, the downwardly inclined sections G, and the vertical sections H, combined with the axles for the side wheels secured upon said sections H, the wheel at the rear end of said platform, and means for detachably retaining the can to be carried on said platform, substantially as set forth. 6th. The wheels, the side sections H carrying the axles for said wheels, the platform secured to the lower ends of said side sections H, and a handle, combined with means for engaging the upper portion of the can to be carried on said platform, substantially as set forth. 7th. The wheels, the side sections H carrying the axles for said wheels, the platform secured to the lower ends of said side sections H, and a handle, combined with the spring X opening frontward and to clasp the upper portion of the can carried upon said platform, substantially as set forth. 8th. In a wagon, the side wheels and frame, combined with the platform suspended below the axles of said wheels, and the opening spring above said axles and over said platform to detachably retain the can to be carried upon said platform, substantially as set forth. 9th. The wagon frame comprising the handle portion B, the sections G, the transverse rod R connecting said sections G, and the vertical sections H to which the axles of the side wheels are secured, combined with the platform, the vertical rod W extending intermediate said platform and said transverse rod R, and the opening spring X secured to said rod R, substantially as set forth. 10th. In a wagon, the handle, the side sections H, the brackets secured to said sections and having the tubular axles, the side wheels mounted on said axles, and the bolts which enter said tubular axles and secure the said wheels thereon, combined with the platform secured to said sections H below said axles, and the spring X over said platform, substantially as set forth.

No 67,840. Plates for Printing. (*Plaque à imprimer.*)



George Richard Hilyard, 22 East Dulwich Road, Surrey, England 22nd June, 1900; 6 years. (Filed 17th November, 1899.)

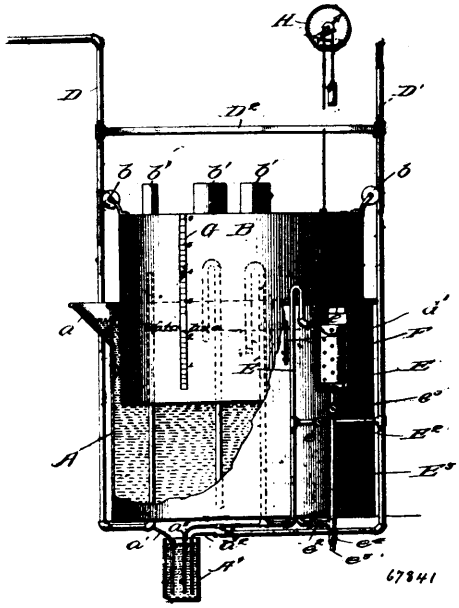
Claim.—1st. In the manufacture of plates for printing, the mode or process hereinbefore described of treating the plates after the designs to be reproduced have been transferred to or drawn thereon in the required positions and the work has been placed under acid resist, which mode or process consists in altering the nature or structure of the parts of the surface of the plate between the designs thereon and also of any parts that correspond with whites in the designs into an extremely fine grain with needle point like tops as hereinbefore described, whereby the said parts will not in the printing process transfer any ink to the paper or other material brought in contact therewith, no water being necessary to produce the effect. 2nd. In the manufacture of plates for printing, the mode or process hereinbefore described of treating the plates after the design or designs to be reproduced have been transferred to or drawn thereon in the required positions and the work has been placed under acid resist, which mode or process consists in first biting out the plate to a slight depth, then applying thereon a thin coating of a tacky substance such as a lithographic varnish and in then submitting the plate to the action of a biting or etching solution, substantially as and for the purpose set forth.

No. 67,841. Gas Generator. (*Générateur à gaz.*)

Alexis Louis Mangin, Aylmer, Quebec, Canada, 22nd June, 1900; 6 years. (Filed 8th July, 1899.)

Claim.—1st. An acetylene gas apparatus comprising a gasometer, a generator arranged exteriorly to the gasometer on the water line thereof, a water supply pipe leading from said generator and through the gasometer tank, a gas pipe connected to the generater and extending into the gasometer, the end of said pipe having a goose neck terminating below the water line, an escape pipe, and a valved connection between the gas pipe and the escape pipe, substantially as described. 2nd. An acetylene gas apparatus comprising a gasometer having a floatable bell, an indicating scale arranged on the side of said bell, an indicator connected with said bell and adapted to be operated by the movement thereof, and a generator communicating with said bell, substantially as described. 3rd. An acetylene gas apparatus comprising a gasometer, a generator arranged on the outside of the gasometer and having a removable cover, a perforated

carbide pail removably fitted in said generator, a gas pipe connected with the upper part of the generator and extending into the gasometer tank upwardly to the bell thereof, and a combined drain and water supply pipe connected to the bottom of the generator and communicating with said tank, substantially as described.



No. 67,842. Vehicle Axle and Boxing.
(*Essieu et boite de voiture.*)

Charles A. Martin, Detroit, Texas, U.S.A., 22nd June, 1900; years. (Filed 1st September, 1899.)

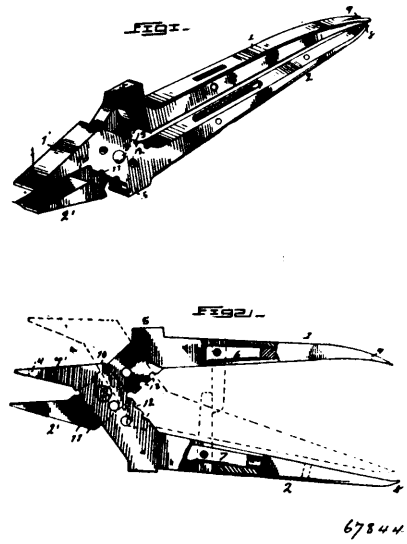
Claim.—The combination with the axle having spindle with smooth end, of a collar 13, a set screw for securing it on the axle, the boxing 6 having closed outer end and exteriorly threaded inner end, and the nut swiveled on the axle inside of the collar and provided with threaded annular flange engaging the inner threaded end of the boxing, substantially as described.

No. 67,843. Electrolytic Deposition of Nickel, etc.
(*Déposition électrolytique de nickel, etc.*)

Dr. Moritz Kugel, Berlin, Germany, 22nd June, 1900; 6 years. (Filed 27th April, 1900.)

Claim.—1st. The process for the electrolytic production of tough, rollable nickel and similar metals, and its allied metals characterized by keeping sour the electrolyte the temperature of which is above 30°C, by means of additional of a strong mineral acid not chemically variable by the current. 2nd. The process according to claim 1 characterized by the addition of a highly concentrated solution of a light metal not to be altered by the current in order to facilitate the maintenance of an even acidity without the addition of fresh acid or the like. 3rd. The use of the described process in combination with one of the ordinary electrometallurgic processes for the electrolytical production of nickel or its allied metal from ores.

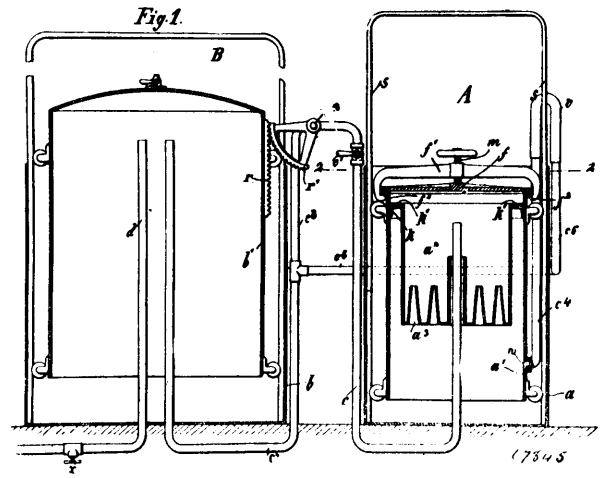
No. 67,844. Tool. (*Outil.*)



James S. Scott, Archer City, Texas, U.S.A., 22nd June, 1900; 6 years. (Filed 11th April 1900.)

Claim.—1st. A pair of pincers having two members joined by an adjustable pivotal connection, said members having each a plurality of wire cutting edges arranged so that a cutting edge of one member will co-act with a cutting edge of the other member in each of the various pivotal adjustments of the members. 2nd. A pair of pincers having two members joined by a pivot, a plurality of holes in each member each adapted to receive the pivot, said members having each a plurality of wire cutting edges forward of the pivotal connection and a plurality of wire cutting edges in rear of the pivota connection, whereby opposing cutting edges of the members are in operative situation under various pivotal adjustments, substantially as described.

No. 67,845. Acetylene Gas Generator.
(*Générateur de gaz acétyline.*)

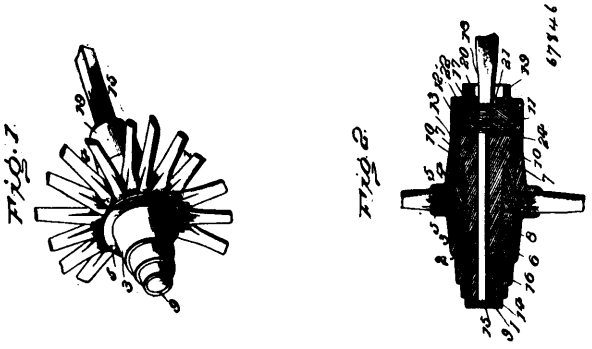


Gustav Nowak, 49 Marktplatz, Bistritz, Hungary, 22nd June, 1900; 6 years. (Filed 14th July, 1899.)

Claim.—1st. In an acetylene apparatus, the combination of a generator A, gasometer B, bell b^1, bell a^1, tubes c, valve c^2, and operating connection between bell b^1, and valve c^2, all constructed

and arranged, substantially as hereinbefore described and for the purpose set forth. 2nd. The improved acetylene apparatus, in which the generator and reservoir are connected by two tubes c and c^4, c^5, which both open out into the tube c, being provided with a valve c^2, on the spindle of which a toothed segment r^1, is fitted, which engages in a toothed rack r, so that, after the gasometer has been filled to a certain extent, the entrance of gas is automatically cut-off, constructed and arranged, substantially as hereinbefore described. 3rd. In an acetylene apparatus as described, the carbide vessel a^2, with conical tubes a^3, through which the water can pass to the carbide in order to effect the decomposition from the top towards the bottom, constructed and arranged, substantially as hereinbefore described.

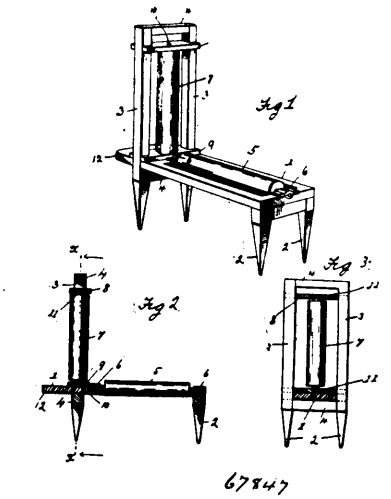
No. 67,846. Hub and Axle. *(Moyeu et essieu.)*



Albert Hodson, Toronto, Ontario, Canada, 22nd June, 1900; 6 years. (Filed 21st April, 1900.)

Claim.—In combination with an axle having a spindle of uniform diameter throughout its length shouldered at its inner end, and having the inner portion threaded, and a sleeve adjustably mounted upon the threaded portion of the spindle, a tapered box mounted upon the spindle and having its inner end recessed to receive the adjustable sleeve and exteriorly threaded, and having its outer end closed and externally threaded, a core slipped upon the box and interlocking therewith to prevent relative turning, a nut applied to the outer threaded end of the box and bearing against the outer terminal of the core, thimble mounted upon the end portions of the core and having outer flanges at their inner ends, the outer thimble overlapping the joint between the nut and the end of the core and the inner thimble terminating flush at its inner end with the inner terminal of said core, and a cap burr making screw thread connection with the inner end of the box and recessed to receive and bear against the aforesaid adjustable sleeve and having its rim abutting against the inner extremities of the core and inner thimble and coming flush with the outer side of the latter, substantially as described.

No. 67,847. Belt Guide. *(Guide de courroie.)*

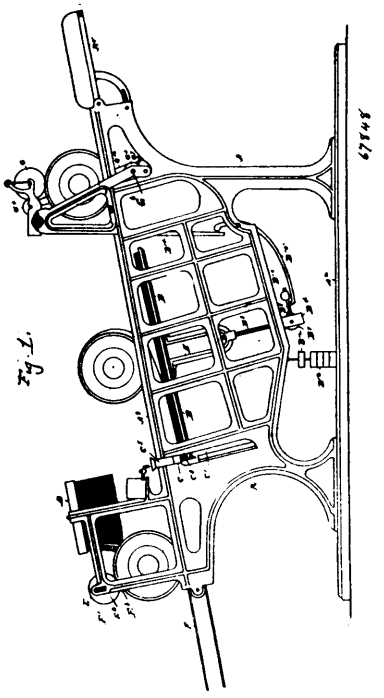


Henry E. Gehring, Batdorf, Ohio, U.S.A., 22nd June, 1900; 6 years. (Filed 21st April, 1900.)

Claim.—A belt guide comprising a horizontal frame provided at one end with depending prongs, and having opposite recesses adjacent to its opposite end, a vertical frame consisting of parallel standards fitting the recesses of the horizontal frame and sharpened at their lower ends to form prongs, and cross bars connecting said standards, one of said bars supporting the end of the horizontal frame, a roller mounted in said horizontal frame, a vertical roller, and means for supporting the latter consisting of cross bars recessed at their ends to fit the standards of the vertical frame, and formed with central bearings for the roller journals.

No. 67,848. Can Labelling Machine.

(Machine à étiqueter les bidons.)

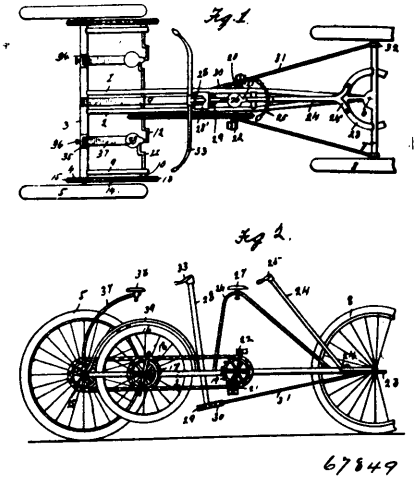


Henry Thomas Atkinson, Oakland, California, U.S.A., 22nd June, 1900; 6 years. (Filed 19th September, 1899.)

Claim.—1st. In a can labelling machine, in combination with an inclined track A^1, of a label holder B, located between the said tracks and adapted to hold the labels lengthwise thereof, an adhesive spreading device G, located forward of the said labels, so that the can in its rotation will present a spread surface to the forward end of the labels, an adhesive supplying device C, resting upon the rear end of the labels to hold the same in contact with the adhesive, and suitable retaining and spreading devices such as E, D and F, adapted to spread the label on the can by the rotation of the same and to compress the lapped ends of the labels, substantially as described. 2nd. In a can labelling machine, the combination with an inclined track A^1, of a label holder B, located between the side tracks and adapted to hold the labels lengthwise thereof, an adhesive spreading device G, located forward of the said labels, so that the can in its rotation will present a spread surface to the forward end of the labels, an adhesive applying device C, resting upon the rear end of the labels to hold the same in contact with the adhesive, suitable retaining and spreading devices, such as D, E and F, adapted to spread the said label upon the can by the rotation of the same and to compress the lapped ends of the labels, and a flexible delving belt F, constructed of a number of flexible strips, substantially as described, whereby the different portions of the lapped ends of the label are independently pressed. 3rd. In a can labelling machine, an adhesive spreading device consisting in a box like receptacle C, having the opening C^2 formed in the bottom thereof, adapted to lie upon the uppermost label across the end thereof and to form a constant feed of the adhesive upon the end of the label upon which the receptacle rests, substantially as described. 4th. In a can labelling machine, the combination with an adhesive spreading device consisting in a box-like receptacle C, having the opening C^2, formed in the bottom thereof, adapted to lie upon the uppermost label across the end thereof, of a reservoir C^5, to hold the adhesive provided with a suitable feeding device to deliver the said adhesive in the receptacle, substantially as described. 5th. In a can labelling machine, the combination with an inclined track A^1, of a holder for a package of labels B, adapted to hold the same lengthwise of the tracks, a suitable feeding mechanism adapted to be operated by the cans to raise the holder as the package of the labels are diminished in thickness, an adhesive spreading device G, located forward of the said label holder to spread the adhesive on

the can surface prior to reaching the labels, a box-like receptacle for adhesive C, having the opening C^2, formed in the bottom thereof, adapted to lie upon the uppermost label across the end thereof, and suitable retaining and spreading devices, such as D, E and F, adapted to spread the said label upon the can by the rotation of the same, and to compress the lapped ends of the labels, substantially as described.

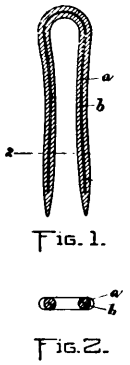
No. 67,849. Velocipede. *(Vélocipede.)*



William H. Miller, Canton, Ohio, U.S.A., 22nd June, 1900; 6 years. (Filed 21st April, 1900.)

Claim.—In a velocipede of the character described, the combination of a pair of supporting braces, a sleeve connected to the rear end thereof, an axle journalled in said sleeve having a wheel connected to each end thereof, a pair of extensions formed integral with said sleeve, a crank rod mounted in the said extensions, a sprocket wheel mounted on each end of said rod, a sprocket wheel mounted to each end of the said axle, means for connecting the said sprocket wheels together, a short shaft mounted in the said braces and provided at each end with a suitable pedal crank, a sprocket wheel mounted on one end thereof, a sprocket wheel mounted on the said crank rod, a chain connecting the two last named sprocket wheels together, a series of seats suitably supported upon the said braces, a front axle pivotally connected to the said braces having a wheel secured to each end thereof, a front steering rod suitably connected to the said axle, a rear steering rod suitably supported in said braces, a sprocket wheel connected to the lower end of said rod, and means for connecting the sprocket wheel to the front axle, substantially as set forth.

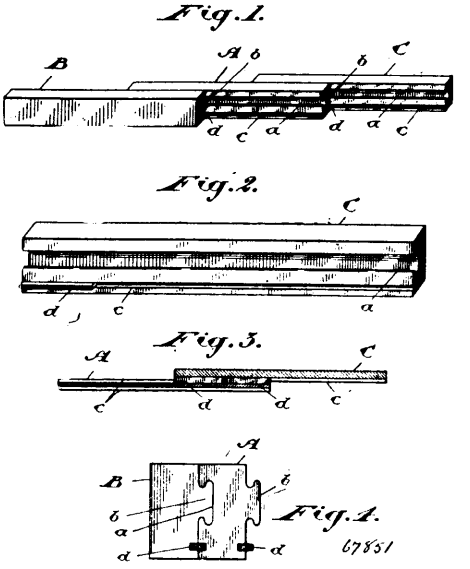
No. 67,850. Hair Pin. *(Epingle à cheveux.)*



Evelyn Faber, Boston, Massachusetts, U.S.A., 25th June, 1900; 6 years. (Filed 9th June, 1900.)

Claim.—A hair pin composed of a non-corrosive non-metallic body, and a reinforcing core entirely enveloped in and covered by said body, the points or ends of the legs of the body extending beyond the ends of the legs of the core.

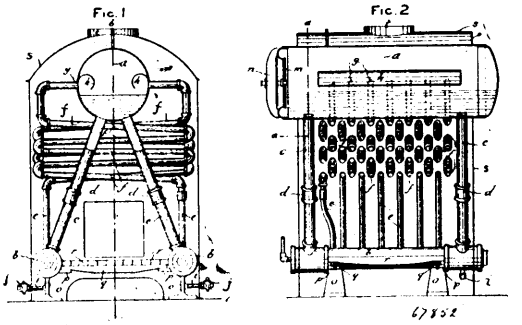
No. 67,851. Extension Table Slide.
(Glissoire de table à rallonge.)



James Hedley Flett, Mount Forest, Ontario, Canada, 25th June, 1900; 6 years. (Filed 8th June, 1900.)

Claim.—1st. In a slide for extension tables, the part A provided with the full length dovetail groove *a* with rounded angles, in combination with the part B provided with the full length tongue *b* adapted to fit the groove *a*, substantially as and for the purpose specified. 2nd. In a slide for extension tables, the part A provided with the full length dovetail groove *a*, a full length rectangular groove *c* and stop *d*, in combination with the part B provided with the full length tongue *b*, a groove *c*, and a stop *d*, substantially as and for the purpose specified. 3rd. In a slide for extension tables, the part A provided with the full length dovetail groove *a* with rounded angles, a full length rectangular groove *c* and stop *d*, in combination with the part B provided with the full length tongue *b*, a groove *c* and a step *d*, substantially as and for the purpose specified. 4th. In a slide for extension tables, the combination of the part A, provided with a full length dovetail groove *a*, two full length rectangular grooves *c*, a stop *d* in each rectangular groove, and full length dovetail tongue *b*, the part B provided with a full length dovetail tongue *b*, a rectangular groove *c*, and a stop *d* in the said groove, and the part C provided with a dovetail groove *a*, a rectangular groove *c* and a stop *d* in the groove *c*, substantially as and for the purpose specified.

No. 67,852. Pipe Boiler. *(Chaudière à tubes.)*

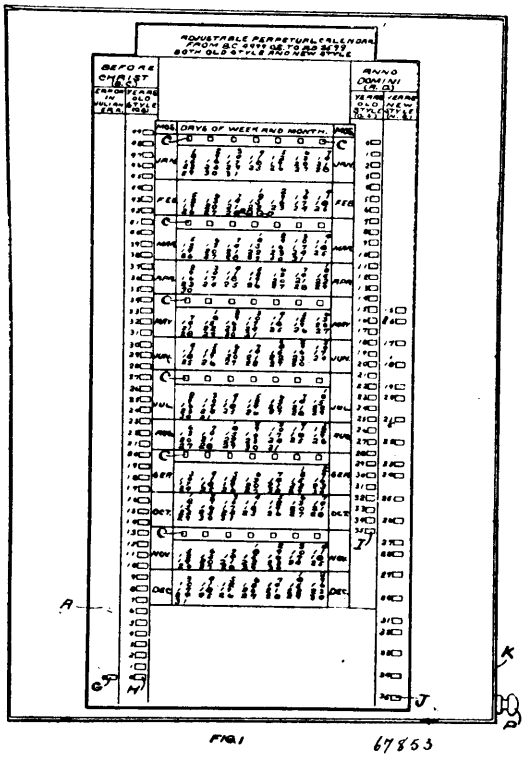


Joseph Alfred Proulx, Vancouver, British Columbia, Canada, 25th June, 1900; 6 years. (Filed 11th June, 1900.)

Claim.—1st. In a boiler of the class described, having a steam drum or dome and mud drums, forming the edges of a triangle, in combination with down pipes *c* connecting the steam drum with the mud drums near their opposite ends, side pipes *e* placed in parallel rows along the opposite sides of the mud drums and extending upwards, forming the sides of the fire box, thence passing zig-zag across horizontally from side to side, forming the roof of the fire box, thence back and forth and communicating with the outer sides

of the steem drum, and each row of pipes connecting on the opposite side of said steam drum from the mud drum to which it is connected. 2nd. A boiler having mud drums arranged on suitable supports parallel to each other on each side of a furnace grate, a steam drum located on a perpendicular line midway between the mud drums and at some distance above the same, down pipes communicating with the steam drum near its opposite ends and diverging downwards, connecting with the mud drums near their opposite ends and forming supports for the steam drum, in combination with rows of pipes along the upper sides of the mud drums, extending upwards and forming the side walls of the fire box, said pipes turning horizontally across from side to side at a suitable elevation, forming the roof of the fire box, thence zig-zag back and forth and communicating in the outer sides of the steam drum, and downwardly curved baffle plates arranged on the inner sides of the steam drum, just above the outlet of the side pipes, substantially as and for the purpose set forth

No. 67,853. Perpetual Calendar. (*Calendrier perpétuel.*)



Salmon Amos Buell, Minneapolin, Minnesota, U.S.A., 25th June 1900; 6 years. (Filed 21st November, 1899.)

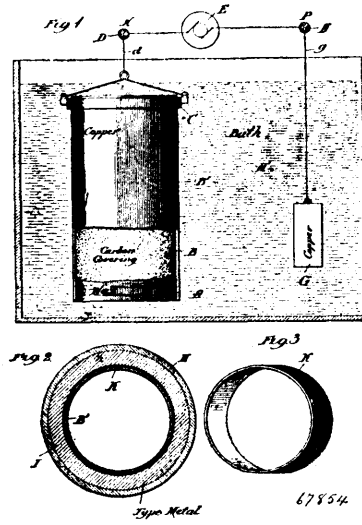
Claim.—1st. The combination in a calendar, with a front part provided with groups of figures representing the days of the months, and with successive rows of week-day openings, with seven openings in each row, of a movable back part provided with characters representing the week days in duplicate sets of rows that are progressively arranged, and means for guiding the movable part, whereby, as said movable part is moved, the rows of week-day characters are shown at said week-day openings, substantially as and for the purpose set forth. The combination in a calendar, with a front part provided with groups of figures representing the days of the months, and with successive rows of openings, with seven openings in each row, arranged in the described relation to said groups of figures, of a movable back part provided with duplicate sets of rows of week-day characters that are progressively arranged in series, as described, and means for guiding said movable part, substantially as and for the purpose set forth. 3rd. The combination in a calendar, with a front part, provided with groups of figures representing the days of the months, with successive rows of openings, with seven openings in each row, arranged as described over the month-day figures, and provided also with two openings in the same row or in one of the same rows of subdivisions with and in the column of subdivisions next following the figures representing February 28 (said last named openings being separated by one subdivision), of a movable back part provided with duplicate sets or rows of week-day characters that are progressively arranged and with the figures 2 and 9 arranged each on the adjoining subdivision on either side of the middle week-day character in one set of the duplicate sets that are progressively arranged, and means for guiding the movement of said movable part, substantially as and for the purpose set forth. 4th. The combination in a calendar, with a front part provided with groups of figures representing the days of the months, with successive rows of openings, having seven openings in each row, arranged over the month-day figures, as described, and provided also with two openings in the same row, or in one of the same rows of subdivisions with and in the column of subdivisions next following the figures representing February 28 (said last named openings being separated by one subdivision below and in the same column of subdivisions with the middle opening in the upper row of week-day openings), and provided also with one or more columns of openings preceded by figures or characters representing the hundreds and thousands of years, of a movable part provided with duplicate sets or rows of week-day characters that are progressively arranged, with seven characters in each set or row that are progressively arranged in the set or row, with the figures 2 and 9 arranged each in the adjoining subdivision on either side of the middle week-day character in one set of said duplicate sets that are progressively arranged, said movable part being also provided with columns of figures or characters representing the units and tens of the years, whereby when said movable part is adjusted to show, with figures on the front part, the number representing any year, whether a common or leap year, the two parts will also show the days of the week and days of the month for that year, substantially as described and for the purpose set forth. 5th. The combination, in a calendar, with a front part having century numerals thereon and openings adjacent thereto, having numerals for the days of the months and openings adjacent thereto, separate openings for the figures representing the 29th day of February, of a movable back part having week-day characters in duplicate sets that are progressively arranged, so that whenever week-day characters of one set of the duplicate sets appear through the openings in the front part corresponding to January and February, week-day characters from the other set of the duplicate sets appear in connection with the other months, said back part having also numerals for indicating the 29th day of February, and year numerals so arranged that when they indicate the desired year in connection with the century numerals, the calendar is set correctly for that entire year, substantially as described. 6th. The combination, in a calendar, with a front part provided with groups of figures representing the days of the months, and having successive rows of openings C for the week-day characters that with such figures complete the calendar for each month, and having separate openings for the figures representing the 29th day of February, of a movable back part having week-day characters F in duplicate sets that are progressively arranged and also having the figures 2 and 9 arranged upon the opposite sides of the middle character of each alternate set of the duplicate sets, said sets of week-day characters being progressively and continuously arranged and so related to the openings in the front part that when the week-day characters of one set of the duplicate sets appear through the openings in the front part for January and February, characters from the other set of the duplicate sets will appear in connection with the other months, and, on leap-years the figures 2 and 9 will appear in the February 29th openings, said front part also having year openings, and said back part having numerals arranged in order thereon and so related to the sets of duplicate sets of week-day characters that placing the figures for any leap year in said year openings will arrange said week-day characters in proper relation to the figures representing the days of the months for that year. 7th. A calendar, comprising a back part bearing week-day characters in duplicate sets that are progressively, successively and regularly arranged and said part also bearing year figures successively, but irregularly arranged, according to the kinds of years, and one set of each said duplicate sets having the figures 2 and 9, in combination with a face part bearing figures representing the days of the months, and having week-day, 29th of February and figured-year perforations so arranged that the indication of the year by the adjustment of the parts, completes the calendar for that year, whether a leap-year or a common year, substantially as described. 8th. The combination, in a calendar, with a front part provided with suitable openings and calendar indications, of a movable back part provided with week-day characters in duplicate sets that are progressively arranged, and said back part being also provided with the figures 2 and 9 arranged upon opposite sides of a character of each alternate set, for the purpose set forth. 9th. In a calendar, the combination with a front part provided with calendar indications, and with means whereby the indications on the front part and the characters on the back part may co-act, of a movable back part provided with duplicate sets of week-day characters that are progressively arranged, for the purpose set forth. 10th. In a calendar, the combination with a front part bearing calendar indications for the several months that are progressively arranged, so that whenever, for a common year, one set of a duplicate set co-act with said calendar indications upon the front part for January and February, the other set of like duplicate sets will co-act with the calendar indications upon the front part for the other months, substantially as described. 11th. In a calendar, the combination with a front part bearing calendar indications for the several months that are progressively arranged and provided with means whereby the indications on the front part and the characters on the back part can co-act, of a back part provided with week-day characters in duplicate sets that are progressively arranged, so that whenever, for a leap-year, one set of a duplicate set co-acts with the calendar indications upon the front part for January and February, the

other set of other duplicate sets, that next follow in the order of said progressive arrangement, a duplicate set like the duplicate set of which one set co-acts with the calendar indications upon the front part for January and February, will co-act with other calendar indications upon the front part for the other months, substantially as described. 12th. In a calendar, the combination with a front part bearing calendar indications for the several months that are progressively arranged and provided with means whereby the indications on the front part and the characters and figures on the back part can co-act, of a back part bearing week-day characters in duplicate sets that are progressively arranged, having a week-day character in one set of each duplicate set immediately preceded by the figures 2, and followed by the figure 9, so that whenever, for a leap year, one set of a duplicate set co-acts with the calendar indications upon the front part for January and February, the figures 2 and 9, in one set of another duplicate set will so co-act with the calendar indications on the front part for February as to complete such indications for that month, substantially as described. 13th. In a calendar, the combination with a front part bearing indications for centuries that are progressively arranged and calendar indications for the several months that are progressively arranged and provided with means whereby the indications on the front part and the indications and characters on the back part can co-act, of a back part bearing indications for the years in any century that are progressively arranged and week-day characters in duplicate sets that are progressively arranged, so that whenever, the indications upon the back part for any common year in any century co-acts with the indications upon the front part for any century, thus completing the calendar indications for that common year, one set of a duplicate set of the week-day characters upon the back part proper for January and February of that common year, will co-act with the calendar indications upon the front part for such months, and the other set of other like duplicate sets will co-act with the calendar indications upon the front part for the other months, substantially as described. 14th. In a calendar, the combination with a front part, bearing indications for centuries that are progressively arranged and provided with means, whereby the indications on the front part and the indications and characters and figures on the back part can co-act, of a back part bearing indications for the years in any century that are progressively arranged, and week-day characters in duplicate sets that are progressively arranged, having a week-day character of one set of each duplicate set immediately preceded by the figure 2, and followed by the figure 9, so that whenever, the indications upon the back part for any leap year in any century co-act with the indications upon the front part for any century, thus completing the calendar indications for that leap year, one set of a duplicate set of the week-day characters upon the back part proper for January and February of that leap year will co-act with the calendar indications upon the front part for such months, and the other set of other duplicate sets, that follow next in the order of said progressive arrangement, a like duplicate set to the duplicate set of which one set co-acts with the calendar indications upon the front part for January and February, will co-act with the calendar indications upon the front part for the other months, and the figures 2 and 9, in one set of another duplicate set will co-act with the calendar indications on the front part for February as to complete such indications for that month, thus forming a calendar for that month, thus forming a calendar for that leap year, substantially as described. 15th. In a calendar, the combination with a front part bearing calendar indications for the several months that are progressively arranged and provided with means whereby the indications on the front part and the indications and characters and figures on the back part can co-act, of a back part bearing week-day characters in duplicate sets that are progressively arranged, so that whenever one set of a duplicate set co-acts with the calendar indications on the front part for January and February, sets of other duplicate sets will co-act with the indications upon the front part for the other months respectively, one set of each duplicate set including the figures 2 and 9, and said front and back parts respectively bearing century and year indications co-acting to complete the calendar for any year, all substantially as and for the purpose specified.

No. 67,854. Phonograph Record Cylinder.
(*Cylindre enregistreur de phonographe*)

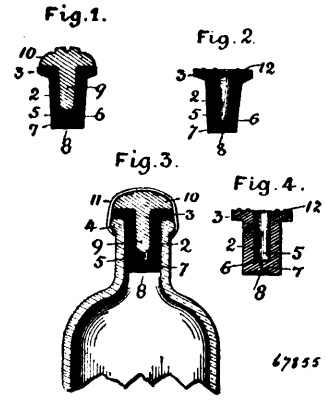
Thomas Bennett Lambert, Chicago, Illinois, U.S.A., 25th June, 1900; 6 years. (Filed 25th January, 1900.)

Claim.—1st. The method of producing record cylinders for phonographs, which consists in first forming a record on a cylinder of wax or other relatively soft material, rendering the surface of the wax cylinder electrically conductive, then electrolytically depositing metal thereon forming a matrix, and then outwardly expanding under pressure within the matrix a cylinder or tube composed of softened material sufficiently thick to maintain its shape while in the matrix and after disengagement therefrom to obtain and retain the indentations of the record, substantially as described. 2nd. The method of producing record cylinders for phonographs, which consists in first forming a record on a cylinder of relatively soft material such as wax, then coating such cylinder with carbon or other electric conducting material, then electrolytically depositing metal thereon forming a matrix, then shrinking the soft cylinder to remove the electrically formed matrix and backing such matrix to form a matrix mold, then outwardly expanding within the matrix under pressure a cylinder or tube composed of softened materia



such as cellulose sufficiently thick to maintain its shape while in the matrix and after disengagement therefrom for the pressure to reproduce on the outer surface the counterpart of the indentations in the matrix, and have such surface retain the indentations, then allowing such cellulose cylinder or tube to harden within the matrix, then removing the record cylinder or tube from the matrix, and then drying and hardening the record cylinder, substantially as described.

No. 67,855. Valve Stopper. (*Tampon de soupape.*)



Charles Marchand, New York City, New York, U.S.A., 25th June, 1900; 6 years. (Filed 8th June, 1900.)

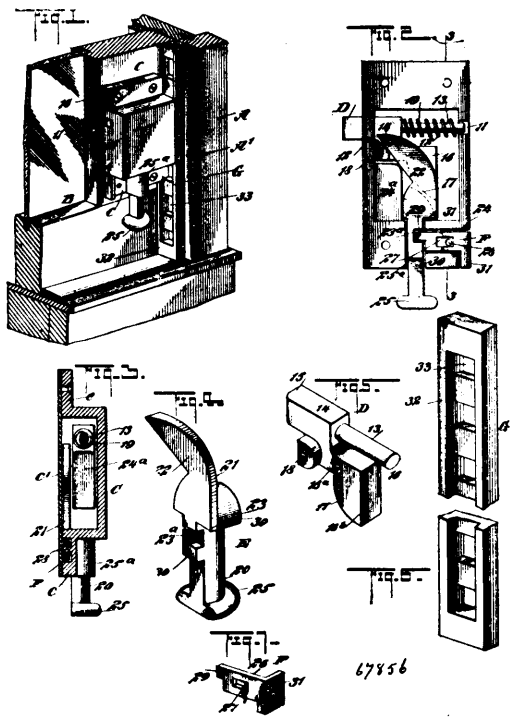
Claim.—1st. A bottle stopper consisting of an elastic body having a central cavity, a closing wall for said cavity integral with said body and within its recess, and having a pin hole through said wall, with the stopper head extended horizontally beyond the body of said stopper, substantially as described. 2nd. The combination of a bottle stopper consisting of an elastic body having a central cavity closed by a wall having a pin hole therethrough and a head extended around said body, projections upon said head and a plug within the cavity of the stopper, and having its head resting upon the top projections of the elastic head, substantially as described.

No. 67,856. Sash Holder. (*Arrête-châssis.*)

John Bohlen, Big Rapids, Michigan, U.S.A., 25th June, 1900; 6 years. (Filed 9th June, 1900.)

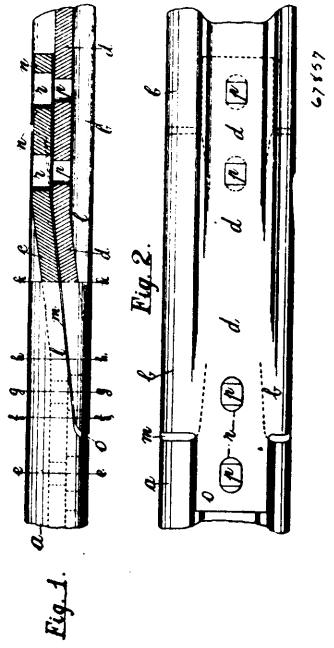
Claim.—1st. The combination of a casing, a bolt mounted to slide therein and provided with two inclined surfaces facing respectively toward the outer and the inner end of the bolt, and an operating arm having sliding movement in the casing and provided on one side with an inclined surface facing toward one end of the arm and arranged for contact with one inclined surface of the bolt, while on the other side the operating arm is provided with a second inclined surface facing toward the other end of the arm and arranged for contact with the second inclined surface of the bolt. 2nd. The combination of a casing, a bolt mounted to slide therein and provided with opposing inclined surfaces facing respectively toward

the inner and the outer end of the bolt, an operating arm having sliding movement between the said opposing inclined surfaces of



the bolt and provided on opposite sides with inclined surfaces each arranged to engage one of the inclined surfaces of the bolt, and a latch arranged to lock the said operating arm.

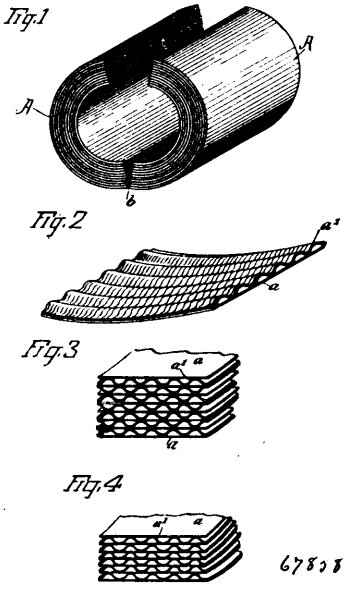
No. 67,857. Railway Rail Joint.
(*Joint de rail de chemin de fer.*)



Frank Brooks Hart, Manchester, Lancaster, England, 25th June 1900; 6 years. (Filed 11th June, 1900.)

Claim.—Forming rail joints, of the overlap or scarf character with bent overlapping webs provided with extensions beyond the bends, which extensions lie parallel to the ordinary webs of the rails, and are provided with a sufficient number of suitably formed bolt holes for the secure attachment of the rails to one another, the several parts being formed and arranged, substantially as hereinbefore described and as shown in the accompanying drawings.

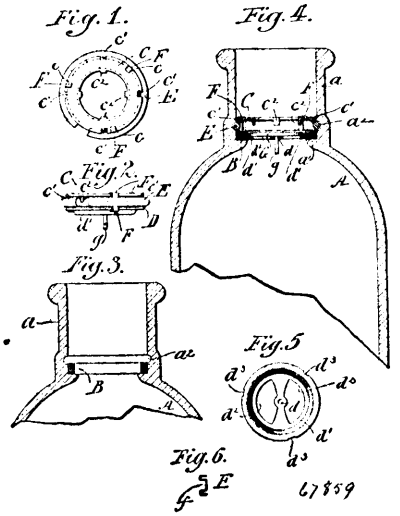
No. 67,858. Pipe Isolation. (*Isolation de tuyau.*)



William Grover Chapin, Brooklyn, New York, U.S.A., 25th June, 1900; 6 years. (Filed 11th June, 1900.)

Claim.—1st. As an improved article of manufacture, a tubular pipe covering having tiers of annular air cells extending roundwise of the tube, said cells being produced by superposed plies of corrugated paper material, the corrugations of which extend roundwise of the tube, substantially as set forth. 2nd. As an improved article of manufacture, a tubular pipe covering composed of alternate plies of plain and corrugated paper material, the corrugations extending roundwise of the tube, substantially as set forth. 3rd. As an improved article of manufacture, a tubular pipe covering of asbestos paper, said paper being in alternate plain and corrugated sheets, rolled and cemented together, the corrugations extending roundwise of the tube, substantially as set forth.

No. 67,859. Non-Refillable Bottle.
(*Bouteille non-réemplissable*)

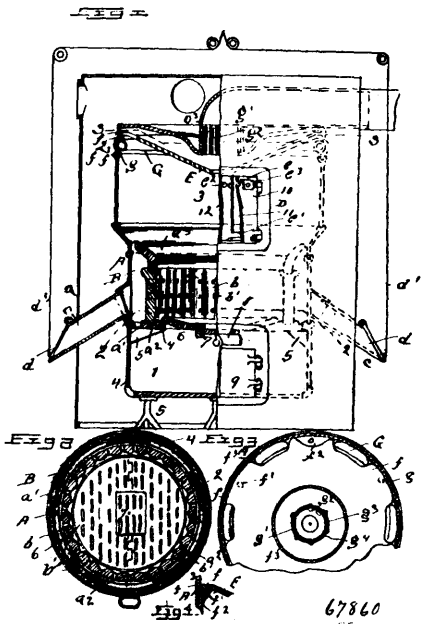


Harold Bennett Mason, Peterborough, Ontario, Canada, 25th June 1900; 6 years. (Filed 13th June, 1900.)

Claim.—1st. In a non-refillable bottle, the combination of a bottle having a shoulder in the lower portion of its neck, with an elastic washer thereon, an annular groove above said shoulder, a disc with ports therein engaging said elastic washer, a valve normally closing the said ports, a sheet metal ring located above the said disc, a split ring for fastening the device within said groove of the bottle neck, clamps for connecting the parts to each other, substantially as shown and described. 2nd. As a bottle closing device for engagement with a bottle neck having a groove therein, the combination of

a ring having a double set of projections extended downwardly therefrom, a disc with ports therein a valve engaged over said ports, a split spring metal ring, and clamps connecting the said parts together, substantially as shown and described.

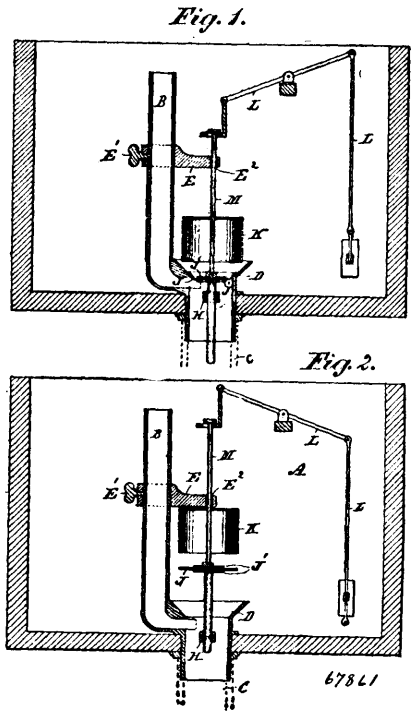
No. 67,860. Hot Air Furnace. *(Fournaise à air chaud.)*



Alfred M. Eley, New Philadelphia, Ohio, U.S.A.. 25th June, 1900; 6 years. (Filed 13th June, 1900.)

Claim.—1st. A furnace comprising a casing having a flared or enlarged portion forming a combustion chamber, a fire pot located within said casing below said combustion chamber, an air chamber having an upper contracted outlet passage being formed between said casing and said fire pot, said outlet passage leading into said combustion chamber, and cold air flues communicating with openings in the outer walls of said air chamber, substantially as set forth. 2nd. A furnace comprising a casing having a flared or enlarged portion forming a combustion chamber, a fire pot located within said casing and having its upper edge flared to approach the lower walls of said combustion chamber, an air chamber being formed between said casing and said fire pot and communicating with said combustion chamber around the flaring edges of said fir pot, and cold air flumes communicating with openings in the outer walls of said air chamber, substantially as set forth. 3rd. A furnace comprising a casing having a flared or enlarged portion forming a combustion chamber, a cylindrical fire pot located in said casing, an air chamber being formed between the same and the walls of said casing, said fire pot having transverse perforations therein, an upper flaring rim supported by said fire pot and forming with the wall of said casing, a contracted air passage between said air and combustion chambers, and cold air inlet flumes opening into said air chamber, substantially as set forth. 4th. A furnace comprising a casing having a flared or enlarged portion forming a combustion chamber, a cylindrical fire pot located in said casing, an air chamber being formed between the same and the walls of said casing, said fire pot being provided with longitudinal corrugations and transverse perforations, an upper flaring rim supported by said fire pot and forming, with the wall of said casing, a contracted air passage between said air and combustion chambers, upwardly inclined cold air flues communicating with said air chamber, and means for regulating the supply of air to said flues, substantially as set forth. 5th. A furnace comprising a casing having a combustion chamber, an annular rim secured to said casing and provided with flues or openings, a fire pot supported by said rim formed of two concentric members, one of which is provided with holes or ports, an air chamber being formed between said casing and said fire pot and communicating at its top with said combustion chamber, and cold air flues leading into said air chamber, substantially as set forth. 6th. A furnace comprising a casing having a combustion chamber, an annular rim located therein having a groove in its top surface and provided with flues or openings, a cylindrical fire pot having its lower edge resting in said groove and having a corresponding groove in its upper edge, an air chamber being formed between said fire pot and said casing, an upper flaring rim or section resting in the groove of said fire pot and forming a contracted air passage between the air and combustion chambers, and cold air flues leading into said air chamber, substantially as set forth. 7th. A furnace comprising a casing having a combustion chamber, an annular rim located within said casing and provided with flues or openings and having an annular groove, a grate supported by an annular flange of said rim, a fire pot resting within said groove and provided with holes or ports, an air chamber being formed between said casing and said fire pot and communicating with said combustion chamber, and cold air flues leading into said air chamber, substantially as set forth.

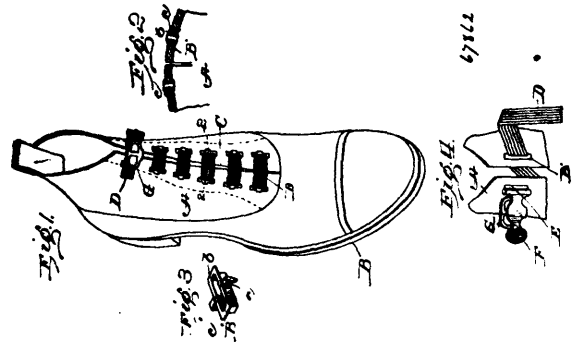
No. 67,861. Water Closet Flushing Valve.
(Appareil à nettoyer les latrines à eau.)



John A. McAvity, St. John, New Brunswick, Canada, 25th June 1900; 6 years. (Filed 11th June, 1900.)

Claim.—The combination in a flushing tank having an overflow pipe B, connected with a truncated inverted valve seat D, and a discharge pipe C, having a spider or bridge piece H, provided with a central guide hole, of an tdjustable arm E, provided with a guide hole E^2, near its extremity, sleeved on said overflow pipe and held by a binding or set screw E^1, a valve stem F, sliding in said holes, a thin rubber or flexible diaphragm J, between two metal discs J^1, secured to the valve stem, said diaphragm descending against the valve seat to close the valve, and a single inverted air cup K, carried by said valve stem and above said diaphragm, as and for the purposes set forth.

No. 67,862. Shoe. *(Chaussure.)*

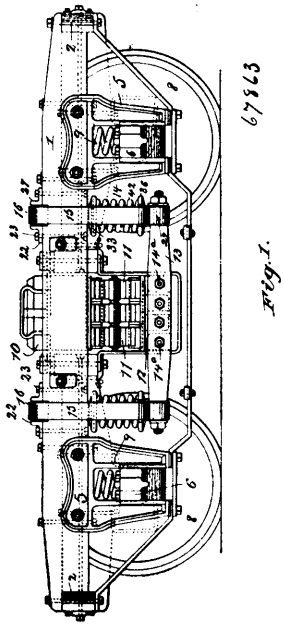


Lewis Alexander Roberts, Carbondale, Pennsylvania, U.S.A., 25th June, 1900; 6 years. (Filed 11th June, 1900.)

Claim.—1st. A laced shoe such as described, having the lacing opening extending down through the upper, a wide flat ribbon lacing and a series of eyelets located in the upper on each side of the lacing opening, each of said eyelets being long and narrow, whereby openings corresponding to the cross section of the lacing are provided and each having on the side opposite the lacing opening a toothed

arm exeending out transversely therefrom to engage the body of the upper a suffcient distance away from the body of the eyelet to prevent the upper from tearing or drawing away from the central part of the elongated eyelet, substantially as described. 2nd. The com bination with a shoe, having the lacing opening extending down through the upper, a series of relatively long and narrow eyelets in the edge of the upper in proximity to the edge of the lacing opening and a wide flat lacing, of a clamp at the top of the shoe having a locking lever co-operating with the lacing while the latter is flat and a spring retainer for confining the free or tag end of the lacing, sub stantially as described.

No. 67,863. Pivotal Car Truck. *(Chassis de chars à pivot.)*

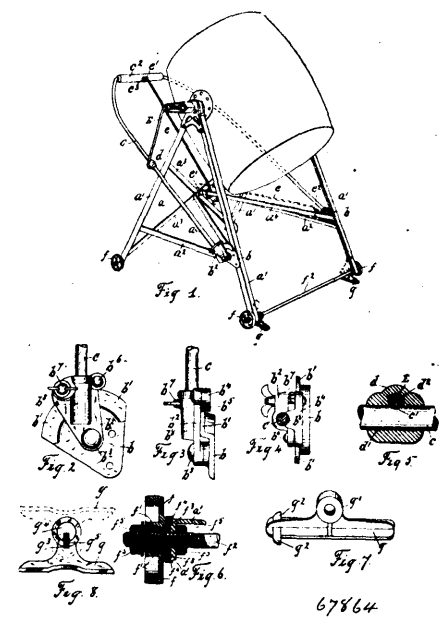


Joan A. Brill, assignee of Walter S. Adams, both of Philadelphia, Pennsylvania, U.S.A., 25th June, 1900; 6 years. (Filed 31st May, 1900.)

Claim.—1st. The combination in a car truck, of side frames having axle box pedestals and side bars connecting the pedestals axle boxes in the pedestals, a bolster, longitudinally disposed equalizers supporting the bolster, links and spring supports therefor suspended from and embracing the side bars and supporting the equalizers, substantially as described. 2nd. The combination in a car truck, of the side frames each comprising a side bar and pedestals, longitudinally disposed equalizers arranged below the side bars, a bolster supported by said equalizers, appliances connected to the ends of the equalizers and pivotally supporting them from and embrac ng the side bars, and spiral springs co-acting with said appliances by which said equalizers are suspended, substantially as described. 3rd. The combination of a car truck of side bars, a bolster, longitudinally disposed equalizers supporting the bolster, inverted U-shaped and paired links pivotally supported at their upper ends on and embracing the side bars, a spring plate supported at the lower end of each of the links, a spring on the plate, a follower on the spring, and means for connecting the followers of each pair of links with said equalizers, substantially as described. 4th. The combination in a car truck of side bars, a bolster, longitudinally disposed equalizers supporting the bolster, inverted U-shaped and paired links having open lower ends, said links being pivotally supported at their upper ends on the side bars, a spriug plate detachably supported on and at said open ends, a spring on the plate, a follower on the spring, and means for connecting the followers of each pair of links with said equalizers, substantially as described. 5th. The combination in a car truck, of side bars, a bolster, longitudinally disposed equalizers supporting the bolster, inverted U-shaped and paired links having lower open ends, said links being pivotally supported at their upper ends on the side bars, a perforated spring plate detachably supported by and at said open ends, a spring on the plate, a follower on the spring, and a plunger connecting the follower with the end of the equalizer and passing through the plate, substantially as described. 6th. The combination in a car truck, of the side frames, springs suspended from the side frames by straps which embrace said frames and are pivotally supported thereon, longitudinally disposed equalizers suspended by said springs, and a cross bolster resting on said equalizers, substantially as described. 7th. The combination in a car truck, and the side frames, of the equalizers movably and resiliently suspended from the side frames by devices which embrace the said frames and which are pivotally supported thereon, and a bolster secured to said equalizers, substantially as described. 8th. The combination in a car truck, of the truck frame, spring links depending from the truck frame, which links embrace and are pivotally supported upon the side frames of said truck frame, longitudinally disposed equalizers connecting the links, and means for connecting said equalizers with the car body, substantially as described. 9th. The combination in a car truck and its running gear, of the side frames supported outside of the wheel gauge, extensible spring links depending from the side frames and supported therefrom by means which embrace the side frames and which means are pivotally supported thereon, longitudinally disposed equalizers supported by said links, and a bolster on and transversely connecting said equalizers, substantially as described. 10th. The combination in a car truck, of the side frames having axle box pedestals. each frame having an upper longitudinal side bar, longitudinally disposed equalizers suspended below said side bars, a spring suspension for the ends of said equalizers from the side bars, and spring suspension including a strap link section embracing and which is pivotally supported on the side bars, and a bolster supported on said equalizers and tying them together, transversely, substantially as described. 11th. In a car truck, the combination with the side frame having axle box pedestal, the bolster, longitudinally disposed equalizing supports for the bolster and resilient connections between the ends of said supports and the side frames, said resilient connections including a strap link section pivotally supported on the side-frames and embracing them, substantially as described. 12th. The combination in a car truck, of the side frames comprising pedestals, axle boxes in the pedestals, springs between the axle boxes and the tops of the pedestals, a bolster, equalizers supporting a bolster, and spring supporting links which embrace the side bars and are supported therefrom at their upper ends, substantially as described. 13th. In a car truck, the combination with the side frames, each comprising two pedestals, side bars connecting the pedestals, a car body supporting bolster, equalizers supporting said bolster and located below the side bars and appliances for suspending said equalizers comprising a link having a strap link upper section embracing each of the side bars and pivotally supported thereon, substantially as described. 14th. In a car truck, the combination with the side frames, each comprising two pedestals, side bars connecting the pedestals, of a car body supporting bolster, equalizers located below said bars, and link appliances secured to the ends of said equalizers embracing the side bars and movably suspended on the top of said side bars, substantially as described. 15th. In a car truck, the combination with the side frames, each comprising two pedestals, side bars connecting the pedestals, of a car body supporting bolster, equalizers connected to the ends of said bolster and supporting the same, and elastic link appliances secured to the ends of said equalizers embracing the side bars and suspended from the top of the same, substantially as described. 16th. In a car truck, the combination with the side frames, each comprising two pedestals, the side bars connecting the pedestals, or a car body supporting bolster, equalizers upon which the ends of said bolsters rest, and links suspended from above the side bars and supporting the ends of said equalizers for the purpose of permitting lateral displacement of said springs with relation to the side frames, said links in part embracing the side bars, substantially as described. 17th. In a car truck, the combination with the side frames, each comprising two pedestals and a side bar, of a car body supporting bolster, and spring actuated appliances on which the ends of the bolster rest, said appliances embracing the side bars and which are suspended thereon above the bottom of said side bar, substantially as described. 18th. In a car truck, the combination with the side frames, each comprising two pedestals and a connecting side bar, of a car body supporting bolster, equalizers upon which the ends of said bolsters rest and suspending appliances for ends of said equalizers, one portion of which suspending appliance embraces the side bars and which are pivotably supported on and within the plane of the sides of the side bars, substantially as described. 19th. In a car truck, the combination with the side frames, of a car body supporting bolster elastically suspended from the side bars of said frames by appliances which embrace the sides of said side bars and permit said bolster to move transversely with reference to the side frames, substantially as described. 20th. In a car truck, the combination with the side frames, of a car body supporting bolster suspended from side frames by appliances which embrace the element of the side frames which support it and which permit it to move transversely with reference to said side frames, and elastic appliances for yieldingly resisting such movement, substantially as described. 21st. In a car truck, the combination with the side frames, each comprising two pedestals, side bars connecting the pedestals, of a pair of transoms arranged transversely of the truck frame and secured to the sidebars, the car body supporting bolster arranged to operate between said transoms, equalizers supporting said bolster and located below the side bars and suspending appliances connected to the ends of said equalizers and to the side bars, one element of said suspending appliances embracing the side bars and being constructed to swing transversely of the truck, substantially as described. 22nd. The combination in a car truck, of said frames comprising pedestals and connecting side bars, axle boxes in the pedestals, a bolster, equalizers disposed below the side bars and

supporting the bolster, links, the upper element of which embraces the side bar, springs on the upper link element for supporting the lower link element, the lower link element being connected to the equalizers, substantially as described. 23rd. The combination in a car truck, of side frames, each comprising upper and lower longitudinal bars and pedestals, equalizers arranged below the top side bars, a bolster supported thereby, the ends of the equalizers being supported from the side bars by spring equipped appliances, a portion of which embraces and which is pivotally mounted on the side bars, substantially as described. 24th. The combination in a car truck, of the side frames, each comprising side bars and pedestals, equalizers arranged beneath the side bars, a bolster supported by the equalizers, and appliances connected to the ends of said equalizers and supporting them from the side bars, said appliances being pivotally supported from and embracing the side bars, and spiral springs co-acting with said appliances by which the said equalizers are suspended, substantially as described 25th. The combination in a car truck, of side frames, each comprising side bars and pedestals with equalizers arranged beneath the side bars, the car body supporting bolster supported by said equalizers and adapted to carry the weight of the car body at its center, the ends of said equalizers being suspended from the side bars by spring equipped appliances, said appliances embracing the side bars and which are pivotally supported thereon, substantially as described. 26th. In a car truck, the combination with a bolster, transversely disposed equalizers supporting the bolster, and links suspending the equalizers from the truck frame, each comprising a lower section secured to the respective ends of the equalizers, and an upper section embracing its respective truck-side-bar and a compression spring interposed between the upper and lower link elements, substantially as described. 27th. The combination with the side bar, bolster and equalizers, of the link comprising the upper strap link section, a pivot block on the side bars interposed between the latter and the strap, an apertured spring seat detachably connected to the lower ends of the strap section, a bolt passing through said aperture and carrying at its upper ends a follower lying between the sides of the strap and having at its lower end means for connecting it to the equalizers, and a spring surrounding said bolt and extending between said seat and follower, substantially as described. 28th. The combination, in a car truck, of the side bars, the bolster, and equalizers supporting the bolster, of link supports for the equalizers comprising an upper strap section continuous except at its lower horizontal portion, a spring seat detachably supported upon the said lower horizontal portion, the upper portion of the strap being pivotally supported on the side bars, a bolt passing through said spring seat and carrying a follower within the strap, a spring inserted between the follower and the spring seat, and means for connecting the equalizers with the lower end of the bolt, substantially as described. 29th. The combination with the strap having inturned ends or lips, and a spring seat having recesses for receiving said ends or lips, substantially as described. 30th. The combination with the bars of the strap, the lower terminal of which are turned inwardly to form lips, and the spring seat having recesses to receive said lips, and outwardly extending lips embracing the sides of the straps, substantially as described. 31st. The combination of the side bars having a pivot block, of the strap link section embracing side bar, the upper portion of said link being supported on said pivot block, said link diverging outwardly from its point of pivotal support and downwardly and embracing the side bar, a spring embraced within said strap and supported thereby, a follower on the spring in the strap, a bolt secured to the follower and extending through the spring and strap, substantially as described. 32nd. The combination with the side bar, of a truck frame, of the link section comprising the strap having upwardly converging portions forming an angular bearing and depending side portions, an angular pivot block on the side bar to receive said angular bearing, a spring supported by said strap, a bolt supported on the said spring, and car supporting means connected with said spring, substantially as described. 33rd. The link section, comprising the strap having upwardly converging portions forming an angular bearing, the angular pivot block having upwardly extending lips bearing against the sides of the converging portions of the strap, a spring supported within the side bars of the strap, a follower on said spring, and a bolt secured to said follower, substantially as described. 34th. The combination with the side bar, of the pivot having flanges bolted to the side bar, upwardly extending lips on the pivot block, the angular pivot block below and between the lips, the link strap having upwardly converging sections forming an angular bearing resting on the bearing block, the pendant side portions of the strap, the spring suspended by and with said side portions, a follower on the spring, and a bolt on the follower, substantially as described. 35th. The combination with the spring cup 36, having the recesses 38 and rounded lugs 39, the side bar 1, the strap 15 pivotally supported on the side bar, the said strap having rounded ends 19 ending in lugs 20, the rounded ends engaging lugs 39, the lips engaging the recesses, a spring on the cup, a cap or follower on the spring, a bolster, and means for connecting the cap with said bolster, substantially as described. 36th. The combination in a car truck, of the side bar, a strap 15 pivotally supported from the side bar, the spring cup detachably supported on said strap, means for preventing displacement of said cup thereon, a bolster, and means for resiliently connecting the spring cup and bolster together, substantially as described.

No. 67,864. Churn. (*Baratte.*)

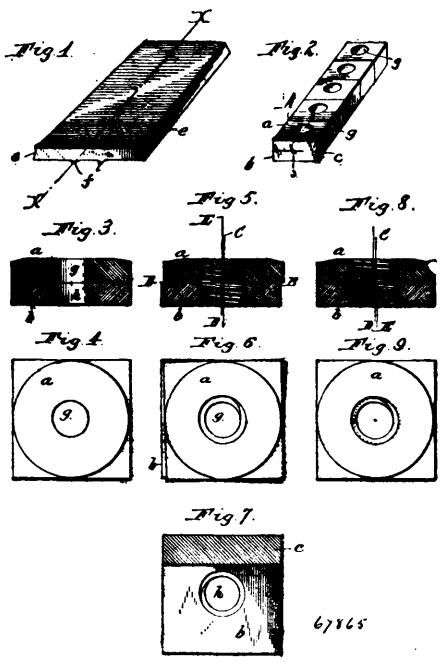


William H. Wortman, jointer inventor and assignee of John A. Hall, both of London, Ontario, Canada, 1900; 6 years. (Filed 26th May, 1900.)

Claim.—1st. A supplemental brace, secured about midway between its ends to one side of the frame, then extending diagonally in opposite directions across said frame and secured to the opposite ends thereof, substantially as and for the purpose set forth. 2nd. A supplemental brace a^4, in combination with the crossed side braces a^3, the end braces a^2, and the inclined supports a^1, said supplemental brace a^4, secured about midway between its ends to said side braces, then extending diagonally in opposite directions across said frame and its ends secured to the inclined supports a^1, substantially as and for the purpose set forth. 3rd. The pivotal plate b^2, pivotally secured to the frame a, or other suitable support, in combination with the clamping plate b^2, pivotally secured to the frame a, or other suitable support, in combination with the clamping plate b^4, having a socket partly formed therein and partly in the adjacent face of the pivotal plate b^2, the handle C, and means for clamping the latter in said socket between said plates, substantially as and for the purpose set forth. 4th. The base plate b, secured to the frame a, or other suitable support, and provided with the segmental rim flange b^1, in combination with the pivotal plate b^2, provided with the overhanging rim flange b, and having a socket b^8, partly in the adjacent face of the pivotal plate b^2, the handle C, and means for clamping the latter in said socket between said plates, substantially as and for the purpose set forth. 5th. The base b, secured to the frame a, or other suitable support, and provided with the segmental rim flange b^1, in combination with the pivotal plate b^2, pivot bolt b^3, clamping plate b^4, provided with the overhanging rim flange b^5, and having a socket b^8, partly formed therein and partly in the adjacent face of the pivotal plate b^2, the handle C, the bolt b, and thumb nut and bolt b, substantially as and for the purpose set forth. 6th. A tubular coupling d, provided with the longitudinal opening d^1, and the lateral opening d^2, in combination with the handle C, formed with an indentation or notch c^1, and the connecting rod E, formed with an angular end, substantially as and for the purpose set forth. 7th. The strand of wire e, in combination with and secured at one end to the frame a, and at the other end to the handle C, substantially as and for the purpose set forth. 8th. The strand of wire e, formed at one end with a loop e, which encircles a horizontal member of the frame a, and secures said wire strand thereto, at the same time permits it to be adjusted lengthwise thereon, and said strand formed with a hook e, at the other end, to engage with a loop, eye or other device, to secure said end of said strand to the handle, substantially as and for the purpose set forth. 9th. A sleeve or bush f^1, provided with a plate f^3, on which flanges f^4, are formed, in combination with and supported by the bolt or rod f^2, the frame a, on which said bolt or rod is supported, the wheels f, held in place and rotating perfectly free on said sleeve or bush, and means for securing said sleeve or bush and said bolt or rod to the frame, substantially as and for the purpose set forth. 19th. A shoe g, or its substantial equivalent adjustably supported on a rod, bar or other suitable support, in combination with the wheels f, and frame a, the radius of said shoe from its pivotal support being greater than the radius of the wheel f, substantially as and for the purpose set forth. 11th. A shoe g, provided with a socket g^3, and opening g^4, in combination with a rod or support g^5,

substantially as and for the purpose set forth. 12th. A shoe g, provided with a socket g^3, and opening g^4, in combination with a rod or support g^5, frame a, and wheels f, substantially as and for the purpose set forth.

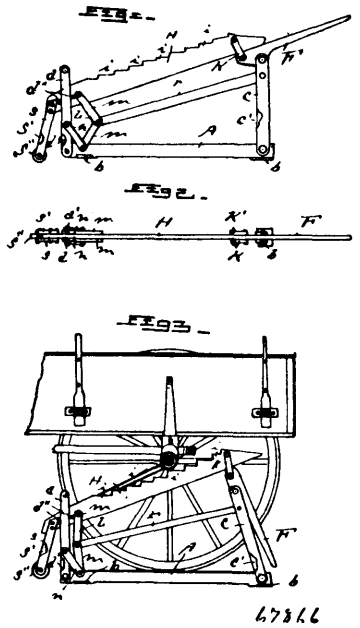
No. 67,865. Nut Lock. (*Arrete-écrou.*)



Sibelia Richardson, Utica, New York, administratrix of the estate of Julius C. Richardson, 25th June, 1900; 6 years. (Filed 11th June, 1900.)

Claim.—1st. A nut consisting of two overlying connected sections having their outer faces flush with each other, and having internal screw threads which have their axes arranged parallel and laterally out of line, substantially as set forth. 2nd. A nut consisting of two overlying connected sections which have their outer sides arranged flush with each other, each section having a perforation which is axially in line with the perforation in the other section, and each section having a screw thread which is eccentric to the perforation therein and also eccentric with reference to the screw thread in the other section, substantially as set forth.

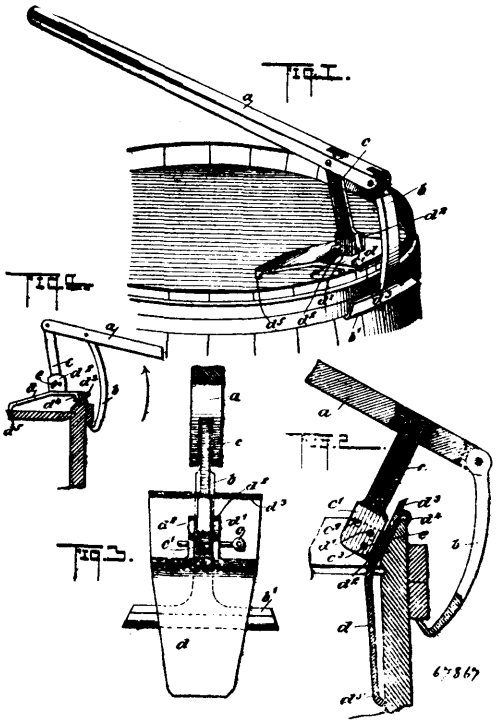
No. 67,866. Wagon Jack. (*Chêne de wagon.*)



Obed Long, Marshalltown, Iowa, U.S.A., 25th June, 1900; 6 years. (Filed 13th June, 1900.)

Claim.—A wagon jack comprising a straight bar or base, an upright pivotally connected with each end portion of said bar, a lever of the first order pivoted to the top of the front upright, a toggle jointed lever connected with the rear upright, a straight bar stopped in its top edge linked to the short arm of the lever of the first order and pivotally and slidingly connected with the rear upright, and a straight bar pivotally connected with the centre of the toggle jointed lever and the top portion of the front upright, arranged and combined to operate in the manner set forth and for the purposes stated.

No. 67,867. Barrel Opening Device.
(*Appareil à ouvrir les barils.*)



Joseph A. Beronio, Memphis, Shelby County, Tennessee, U.S.A. 25th June, 1900; 6 years. (Filed 7th June, 1900.)

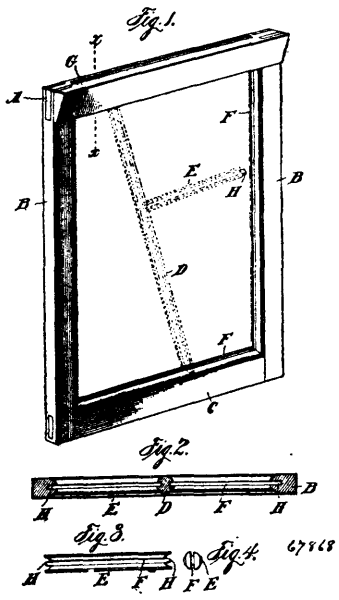
Claim.—1st the combination of a hand lever, a hook mounted on one end thereof, a link pivotally mounted on the lever adjacent to the hook, and a foot carried adjustably on the link. 2nd. A barrel opener, having a hand lever, a hook mounted thereon, a link pivotally carried on the hand lever adjacent to the hook, and a foot carried by the link, and capable of being thrown in either one of two positions, for the purpose specified. 3rd. A barrel opener, comprising a hand lever, a hook mounted at one end thereof, a link pivotally mounted on the lever adjacent to the hook, a foot pivotally mounted on the link, and means for securing the foot fast on the link in the desired position. 4th. A barrel opener, comprising a hand lever, a hook carried thereon, and a foot connected with the lever, the foot having a projecting ledge at one end and a returned flange adjacent thereto. 5th. A barrel opener, having a hand lever, means thereon for engaging the hoops of a barrel, and a foot carried by the hand lever and having a projected ledge at one end and a returned flange adjacent thereto. 6th. A barrel opener, comprising a hand lever, means carried thereby to engage the hoops, and a foot carried by the hand lever and capable of being thrown into either one or two positions, thus facilitating the use of the barrel opener in connection with a barrel with or without a head.

No. 67,868. Window Sash. (*Cadre de châssis.*)

Willie Washington Holland, Bremond, Texas, U.S.A., 25th June, 1900; 6 years. (Filed 11th June, 1900.)

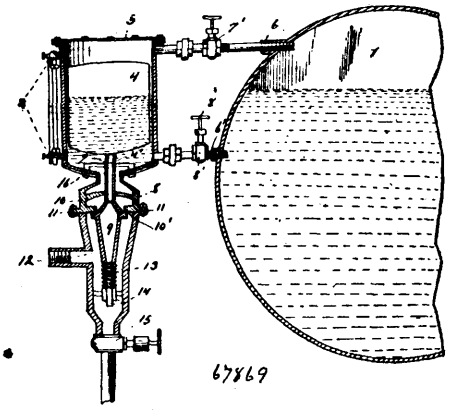
Claim.—1st. In a sash having one rail slotted to admit glass and the opposite rail and side rails grooved to register with said slot, the combination of adjustable and detachable mullions having grooves and tongues which register with said slot and grooves whereby panes of glass of varying width may be inserted and held in said sash. 2nd. In a sash having a slotted rail for the insertion of glass and other rails of said sash grooved to register with said slot, the combination of adjustable and detachable mullions having grooves and tongues which register with said slot and grooves, and adjustable and detachable stiles having tongues and grooves which register with grooves of said rails and mullions whereby panes of glass of varying sizes may be inserted and held in said sash. 3rd. In a win-

dow sashing having its top rail slotted to admit the panes of glass and the side and bottom rails grooved to register with said slot, the



combination of adjustable and detachable mullions having grooves and tongues which register with said slot and grooves, adjustable and detachable stiles having tongues which register with grooves of said rails and mullions, and a screen having a flat metal frame adapted to enter said slot and grooves and be detachably connected therewith.

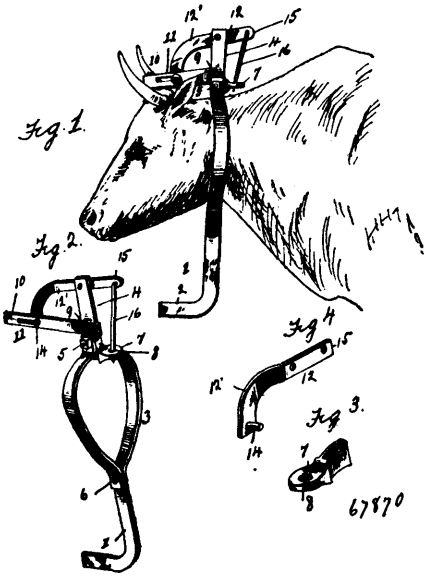
No. 67,869. Feed Water Regulator.
(*Régulateur d'eau d'alimentation.*)



Theodore E. Bishop and John Crull, both of Lima, Ohio, U.S.A., 25th June, 1900; 6 years. (Filed 13th June, 1900.)

Claim.—1st. A feed water regulator, having a gauge chamber, connected to the boiler by means of supply pipes, a float in said chamber, a stem connecting float to a valve located in a valve chamber, secured at the lower part of said gauge chamber, and a spring located in the bottom of said valve chamber for assisting in operating said valve, as set forth. 2nd. In a feed water regular, a gauge chamber having a removable top, a water gauge on the side of said chamber, a float within said chamber, said float having a stem extending from its lower part, adapted to pass through an opening in the bottom of said gauge chamber, and a valve chamber made in two sections secured to the bottom of said gauge chamber, having an inlet supply opening in its side, a discharge cock at its lower portion, means for fastening the two portions of the valve chamber together, a valve seat located in said valve chamber, and a valve removably secured to the stem of the float, and adapted to be held under said valve seat, as and for the purpose set forth. 3rd. The combination with a float chamber and its connections with a boiler, and the float in said chamber having its stem extended through an opening in the bottom of said chamber, into a valve chamber secured to the bottom of said float chamber, and there removably connected to a valve, of the valve chamber, having diaphragms at its upper and lower ends, a valve seat at its central portion, an opening to receive the water supply pipe, a discharge cock at its bottom end, and a spring secured to its lower diaphragm and adapted to bear against the under side of the valve and support the same in position against the valve seat, as and for the purpose set forth. 4th. The combination with a float chamber and a float therein, of a valve chamber made in two sections with a diaphragm at its upper and lower ends, a blow off pipe connected to its lower end, a water supply pipe connected at one of its sides, lugs on its opposite side for removably securing the upper and lower sections of said chamber together, a spring secured to the lower diaphragm, a valve seat centrally located in said chamber, and a valve located beneath said valve seat and having the said spring bearing against its under side, and connected to the float by means of a rod or pipe passing up through the top diaphragm, thence through the opening into the float chamber, all as and for the purpose set forth.

No. 67,870. Animal Poke. (*Carcan à cheval.*)



Stephen M. Reece, Smith Centre, Kansas, U.S.A., 25th June, 1900; 6 years. (Filed 13th June, 1900.)

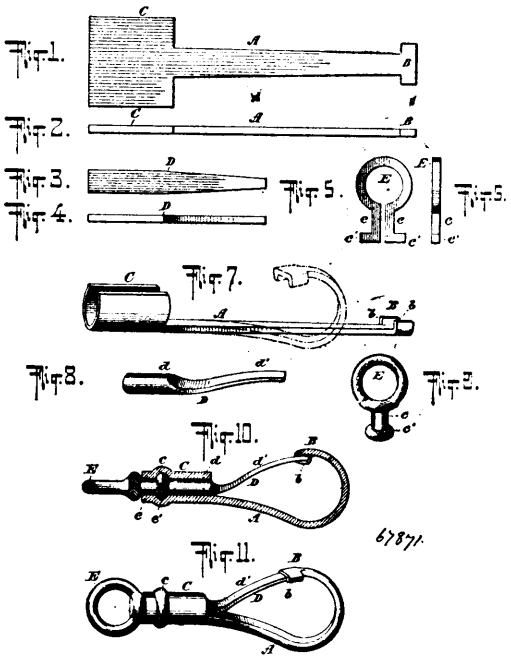
Claim.—1st. An animal poke consisting of a stang, a neck yoke and a vertical standard formed integral with the stang, an angle-shaped bar pivotally connected to said standard, a pricker or needle pivotally connected to said angle-shaped bar, and means connected to said bar and to the standard for operating the pricker or needle, substantially as described. 2nd. In an animal poke, a neck portion, a stang, a vertical standard, a slotted operating bar pivotally connected to the standard, an angle-shaped bar pivotally connected to the standard and to the slotted operating bar, and a needle or pricker carried by said angle-shaped bar, substantially as described. 3rd. In an animal poke, a stang having a part of the yoke and a vertical standard formed integral therewith, a bar pivotally connected to said standard, a needle carried by said bar, a guide carried by the yoke to receive said needle, and means connected to said standard and bar for operating the needle, substantially as described. 4th. In an animal poke, a stang, a yoke, and a vertical standard, a needle or pricker supported from said standard, and means connected to the standard and arranged above and close to the animals head whereby it is adapted to contact with the head of the animal for operating said needle, substantially as described. 5th. In an animal poke, a yoke formed in two pieces, one of which is movable, combined with a standard carried by the yoke, a needle or pricker pivotally supported from the standard, and means connected thereto and arranged above and close to the head of the animal whereby it is adapted to operate the needle or pricker by contact with the head of the animal, substantially as described. 6th. In an animal poke, the combination of the yoke and the pivotally supported needle or pricker, of means arranged above and close to the animal's head for operating said needle or pricker through contact with the head of the animal, substantially as described. 7th. In an animal poke, the combination of the yoke and the pivotally supported needle or pricker, of an operating bar connected thereto and located close to and above the animal's head, whereby it is adapted to contact with the head of the animal at its one end and operate said needle or pricker, substantially as described.

No. 67,871. Snap Hook. (*Crochet à ressort.*)

Stephen Morgan Wells, jr., Bristol, Connecticut, U.S.A., 26th June, 1900; 6 years. (Filed 14th June, 1900.)

Claim.—1st. The hereindescribed snap hook consisting of a body having at one end a shank provided with a socket and at the other

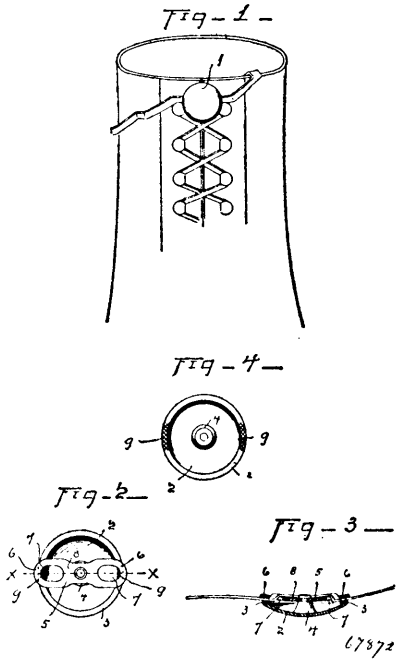
end a hook, a tongue spring provided with a butt to be embraced and held fixedly by the shank of the body at one end and engaging



the end of the aforesaid hook at the other end, and adapted to open and shut against said end, and a ring, stud, and head, said head revolving freely within the socket of the body, all substantially as shown and described. 2nd. A snap hook comprising in its construction a combined ring, stud, and head, a body part having a shank rounded over the aforesaid stud and head to form a swivel joint, said body part on the other end being formed into a hook whose end is provided with ears, and a spring rounded at one end to be inclosed within, and embraced by, the shank end of the body and the other end to be engaged with the end of the hook between the ears thereof so as to prevent sidewise motion, substantially as described.

No. 67,872. Shoe String Fastener.

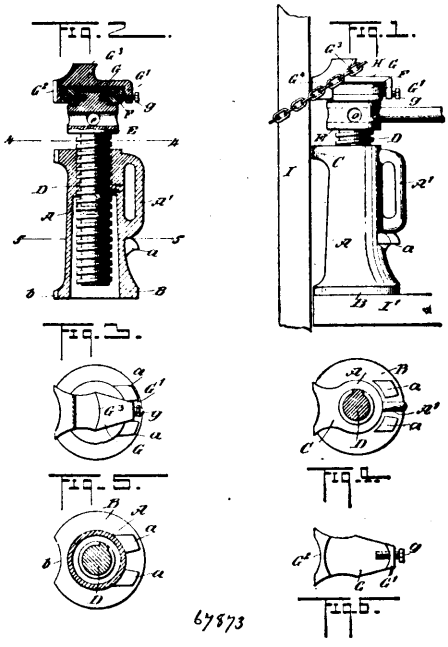
(Attache de lacets de chaussures.)



Seth Beach, Toledo, Ohio, U.S.A., 26th June, 1900; 6 years. (Filed 14th June, 1900.)

Claim.—1st. In a shoe string fastener, the combination of a button, convexed upon its face and concaved upon the reverse side to form a cavity, and provided with an inwardly rolled rim, a stem axial to the button and projecting outward from the cavity, a spring bar diametric to the button, having its ends provided with orifices and resting upon the rim of the button, with the central body portion flexed toward the stem and secured to the end thereof. 2nd. In a shoe string fastener, the combination of a button provided with a cavity upon its rear face and a rim around the cavity, a button stem central to the cavity and projecting axially to the rim to a distance within the cavity, a spring bar diametric to the rim, having its ends provided with orifices and resting upon the rim of the button, with the central body portion flexed toward the stem and secured to the end thereof, and serrations formed upon the rim at the points of contact of the spring bar, substantially as and for the purpose shown and described.

No. 67,873. Jack. (*Cric.*)



Charles W. Doane, Westlake, Lousiana, U.S.A., 26th June, 1900; 6 years. (Filed 14th June, 1900.)

Claim.—1st. A detachable head for a jack, provided with means for securing it in place, and having a spur or shoulder on its upper side adapted to receive a loop of chain, and a concaved end face on the side opposite to that face of the shoulder or spur which is adapted to receive the loop or bight of the chain, said concaved end face being adapted to engage the side of a post or beam, to which it is bound by a chain passing about said shoulder, substantially as described. 2nd. A jack having a downwardly facing shoulder or lug upon one side of the body adapted to receive a diagonally extending loop of chain, whereby the jack may be supported and bound to the side of a post or beam, substantially as described. 3rd. A jack body having flanges provided upon one side with concaved notches, whereby the jack may be securely seated against the side of either a round or square beam or post, and chain-receiving shoulders or lugs upon the opposite side of the jack body and adapted to receive a supporting and binding chain, substantially as described. 4th. A detachable head for jacks, having end flanges adapted to fit over the usual jack head, the face flange being shaped to fit against the side of a beam or post, and the tail flange having a set screw locking it to the usual head, and a lug projecting above the top of the detachable head and extending transversely thereof, substantially as described. 5th. A jack, comprising a base having top and bottom flanges provided with longitudinally aligning notches, and a lifting device connected with the base.

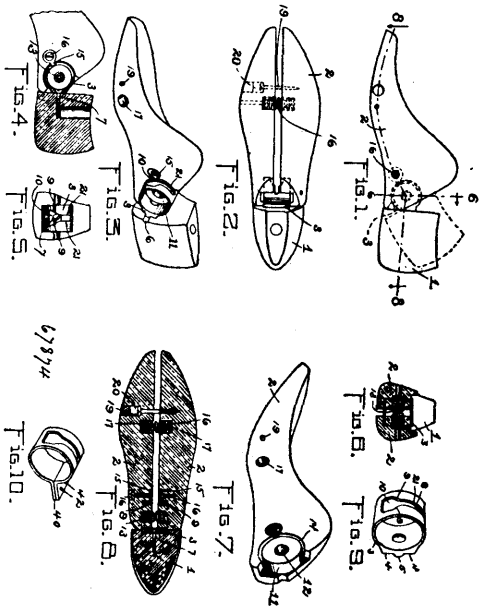
No. 67,874. Hinged Splint Followers.

(Forme pour chaussures.)

Jeremiah Finbar Collins, Brockton, Massachusetts, U.S.A., 26th June, 1900; 6 years. Filed 15th June, 1900.)

Claim.—1st. A split follower comprising a heel part, a sectional distensible fore part hinged to the heel part, and means operated by the displacement of the heel part from its operative position for positively contracting the fore part. 2nd. A split follower comprising a heel part, a sectional fore part, and fore part contracting and distending means arranged to contract the fore part when the heel part is moved from its operative position and distend the fore part when the heel part is returned to its operative position. 3rd. A split follower comprising a heel part, a divided fore part, a

hinge connecting the heel part to the divided fore part and having provisions for moving the sections of the fore part laterally to con-

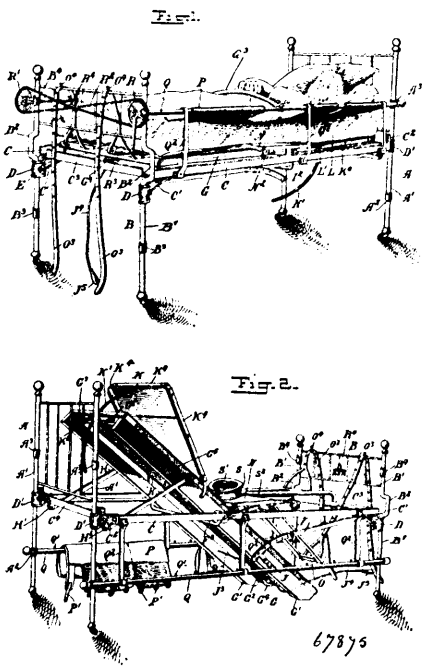


tract the forepart when the heel part is displaced from its operative position, and means for yieldingly distending the fore part. 4th. A fore part comprising a plurality of fore part sections movable laterally toward or from each other, means for separating said sections, a heel piece loosely connected to said fore part section and movable upward and forward, and means on the heel piece for positively moving the fore part sections inwardly when the heel is moved upward and forward. 5th. A split follower comprising a heel part, a sectional fore part, a fore part contracting and distending means, arranged to contract the fore part when the heel part is moved from its operative position, and distending the fore part when the heel part is returned to its operative position, said means being further arranged to prevent accidental displacement of the heel part when in operative position. 6th. A hinged split follower comprising a heel section, a sectional distensible fore part, a curved hinge member connected to said heel section provided with a cam and a finger on one of said fore part sections, arranged to be engaged by said cam for the purpose specified. 7th. A hinged split follower comprising a heel section, a sectional distensible fore part, a curved hinge member connected to the heel part and formed with a slot having a cam face arranged between a recess and a holding face and a finger upon one of said sections arranged in said slot and adapted to be engaged by said cam face to move said section and to be thereafter engaged by said holding face for the purpose specified. 8th. A heel hinge member for hinged split followers comprising a tube of metal or other suitable material, an extension formed upon one side of said tube and a cam upon the opposite side of said tube. 9th. The combination of the fore part and heel part of a boot or shoe form with a substantially ring shaped guide which is mounted in recesses in said parts, connects said parts and permits movement of one part in relation to the other to shorten the form. 10th. A multipart divided shoe form, the parts whereof are in contact substantially from the bottom of the form to an intermediate point removed from the bottom sufficiently to prevent the form from tending to collapse when in use, said form presenting two diverging lines of cut extending from said intermediate point to the top of the form, and a substantially ring shaped guide mounted in said parts, connecting them and permitting movement of one part in relation to the other part. 11th. A boot or shoe form comprising a plurality of parts in combination with a substantially ring shaped guide mounted in and connecting said parts which are formed, at the upper part of the form, with a downwardly extending recess which permits upward movement of one part in relation to the other part, and, at the lower part of the last, with the inner ends shaped to contact when the heel part and fore part are in alignment.

No. 67,875. Bed. *(Lit.)*

Elbert Erwin Munger, Spencer, Iowa, U.S.A., 26th June, 1900; 6 years. (Filed 14th June, 1900.)

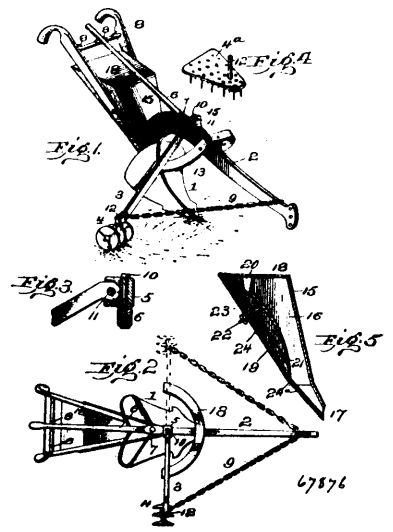
Claim.—1st. A bed having side rails a complete mattress support mounted to swing bodily on said side rails and to travel in a longitudinal direction thereon, and means whereby the mattress support may swing bodily and travel longitudinally of the said rails, substantially as shown and described. 2nd. A bed having side rails, a support for the entire mattress, and wheels journalled on said support between its ends so that the entire mattress may be inclined, said wheels resting on the rails and being mounted to travel thereon. 3rd. A bed having side rails, a matress support having side rails, a cross bar connecting the mattress support rails with each other



between their ends, axles integral with said bar, and wheels journalled on the axles and mounted to travel on the side rails of the bed, substantially as shown and described. 4th. A bed having side rails, of single iron, the horizontal members thereof extending inwardly at the bottom, and a support for the entire mattress fulcrumed on said horizontal members, the fulcrum for said support being in the form of wheels mounted to travel on said horizontal members, substantially as shown and described. 5th. A bed frame having head posts and foot posts, side rails connecting said posts, and angle iron cross pieces, the vertical member of the cross piece at the foot end of the frame terminating at a distance from the side rails, substantially as shown and described. 6th. A bed having a bed frame of angle iron, side rails and angle iron cross pieces rigidly connected together, the horizontal members of said rails and cross pieces being at the bottom and extending inwardly, the vertical member of the foot cross piece terminating at its ends a distance from the junction of the cross piece with the side rails, substantially as shown and described. 7th. A bed having side rails, and a wheeled seat mounted to travel on said rails, substantially as shown and described. 8th. A bed having side rails of angle iron, and a seat provided with wheels adapted to travel on said side rails, substantially as shown and described. 9th. A bed having side rails, a mattress support fulcrumed on said side rails, and a seat mounted to travel on said side rails and extending over the mattress support, substantially as shown and described. 10th. A bed having side rails, a mattress support fulcrumed on said rails, a seat mounted to travel on said rails and extending over the mattress support, and means for locking the seat to the mattress support, substantially as shown and described. 11th. A bed having side rails, a mattress support having transverse axles, wheels on the said axles and engaging said rails, a wheeled seat on said rails, and hook arms pivoted on said seat and adapted to engage said axles to lock the seat in position relative to the mattress support, substantially as shown and described. 12th. A bed having side rails, a mattress support having transverse axles, wheels on said axles and engaging said rails, a wheeled seat on said rails, hook arms pivoted on said seat and adapted to engage said axles to lock the seat in position relative to the mattress support, and means for disconnecting said arms from said axles, substantially as shown and described. 13th. A bed having a bed frame, a mattress support fulcrumed thereon, links pivotally connecting the head ends of said bed frame with the sides of the mattress support, and braces pivoted on the foot ends of said bed frame and adjustably connected with the sides of said mattress support, substantially as shown and described. 14th. A bed having a bed frame a mattress support fulcrumed thereon, links pivotally connecting the head ends of said bed frame with the sides of the mattress support, braces pivoted on the foot ends of said bed frame and adjustably connected with the sides of said mattress support, the connection between the foot and braces and bed frame comprising a slide on each brace and carried by the mattress support, and a spring locking pin under the control of the operator, and held removably in said slide to engage one of a series of apertures in the brace, substantially as shown and described. 15th. A bed having a mattress support, a bed frame, a brace pivoted on said bed frame, a slide

movable on said brace, a pin secured to the slide and attached to the mattress support, a locking pin slidable in said slide to engage one of a series of apertures in said brace, and a spring arm under the control of the operator, and attached to the said mattress support and engaging said locking pin, to move the latter in or out of engagement with said brace, substantially as shown and described. 16th. A bed having a mattress support, a bed frame, a brace pivoted on said bed frame, a slide movable on said brace, a pin secured to the slide and attached to the mattress support, a locking pin slidable in said slide to engage one of a series of apertures in said brace, a spring arm under the control of the operator, and attached to the said mattress support and engaging said locking pin, to move the latter in or out of engagement with said brace, and means for imparting movement to said spring arm in one direction, to move the locking pin out of engagement with said brace, substantially as shown and described. 17th. A bed frame having head posts and foot posts, side rails connecting said posts, and cross pieces of which the one at the foot end of the frame is secured directly to the side rails, at a distance from their point of attachment to the foot posts, the foot posts having outwardly bent portions at about the same height as that of the cross piece, substantially as shown and described. 18th. A bed having a head, a foot, a bed frame, a mattress support fulcrumed on said bed frame, a seat carried on said bed frame, a leg rest pivoted to said seat, and straps on the free end of said leg rest, and adapted to be secured to said foot, to hold the rest in position relatively to said seat, substantially as shown and described. 19th. A bed having a head, a foot, a bed frame, a mattress support fulcrumed on said bed frame, a seat carried on said bed frame, a leg rest pivoted to said seat, straps on the free end of said leg rest, and adapted to be secured to said foot, to hold the leg rest in position relatively to said seat, and means for locking the seat to said mattress support, substantially as shown and described. 20th. A bed having a frame pivoted with a lougitudinal track or guideway, head points, and foot posts provided with outwardly bent portions at about the height of said track, and a seat mounted to slide on said track and to pass between the outwardly bent portions of the foot posts, substantially as shown and described. 21st. The combination with a bed, of a lifting device carried on said bed, for lifting the occupant from the mattress of the bed, said device comprising parallel rotatable shafts and strips adapted to wind on them, substantially as described. 22nd. The combination with a bed, of a lifting device carried on said bed, and comprising parallel rotatable shafts arranged lengthwise of the bed, transverse connecting strips adapted to wind on said shafts, and means for rotating said shafts either separately or together, substantially as described. 23rd. A bed having a frame, arms hinged on said bed frame, shafts journalled in said arms, and adapted to rest against head and foot of the frame, transverse supporting strips connected with said shafts to wind thereon, and means for rotating said shafts to wind up or unwind said strips, the said means comprising sprocket wheels on the shafts, a sprocket chain connected with the sprocket wheels, and a crank on one of said shafts, substantially as described. 24th. A bed having a frame, arms hinged on said bed frame, shaft journalled in said arms, and adapted to rest against the head and foot of the frame, transverse supporting strips connected with said shafts to wind thereon, means for rotating said shafts to wind up or unwind said strips, the said means comprising sprocket wheels on the shafts, a sprocket chain connected with the sprocket wheels, and a crank on one of said shafts, and a removable brace for the said shafts when in an elevated position, substantially as shown and described. 25th. A bed having a frame, arms hinged on said bed frame, shafts journalled in said arms and adapted to rest against the head or foot of the frame, transverse supporting strips connected with said shafts to wind thereon, means for rotating said shafts, to wind up or unwind said strips, the same means comprising sprocket wheels on the shafts, a sprocket chain connected with the sprocket wheels, and a crank on one of the shafts, and means for locking the shafts against accidental turning, substantially as shown and described. 26th. A bed having a head, a foot, side rails with brackets at their ends, and collars on the said head and foot for engagement by the said brackets, the brackets at the lower ends of the side rails and the collars on the foot, being located below the side rails to leave the foot ends of the rails free, substantially as shown and described. 27th. A bed having a head, a foot, side rails with brackets at their ends, and collars on the said head and foot for engagement by the said brackets, the brackets at the lower ends of the side rails and the collars on the foot, being located below the side rails to leave the foot ends of the rails free, and cross bars secured to the brackets and having vertical members terminating a distance from the side rails, substantially as shown and described. 28th. A bed pan having a body, a removable cover, and a drain pipe leading from said body, substantially as shown and described. 29th. A bed, having a mattress divided longitudinally in its lower portion, and a bed pan having a body adapted to be seated between the divided parts of the mattress, the top of the body being flush with the top of the mattress, substantially as shown and described. 30th. A bed, having a mattress divided longitudinally in its lower portion, a bed pan having a body adapted to be seated between the divided parts of the mattress, the top of the body being flush with the top of the mattress, and a removable cover for said body, and adapted to extend on the top of the mattress, substantially as shown and described. 31st. A bed, having a mattress divided longitudinally in its lower portion, a bed pan having a body adapted to be seated between the divided parts of the mattress, the top of the body being flush with the top of the mattress, a removable cover for said body, and adapted to extend on the top of the mattress, and a drain pipe on said body and extending longitudinally in the longitudinal slit of the mattress, substantially as shown and described.

No. 67,876. Seeding Plough. *(Charrue.)*



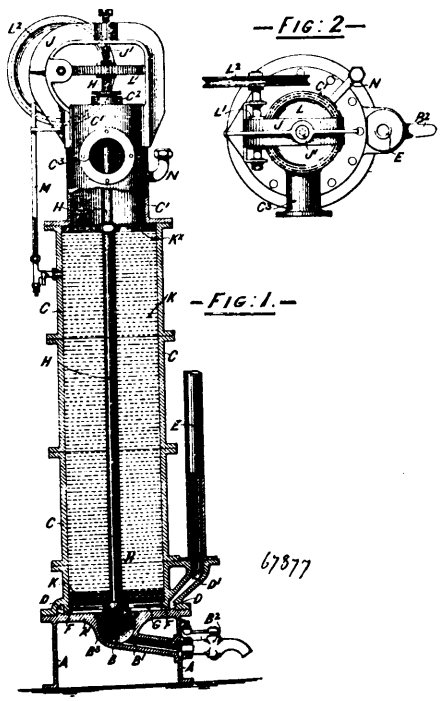
Frank A. Wells, Florence, Kansas, U.S.A., 26th June, 1900; 6 years. (Filed 15th June, 1900.)

Claim.—1st. In combination with a seeding implement, an arm extending laterally from said implement, a vertical pivot through which the inner end of the arm is connected to the beam of the implement and upon which said arm swings horizontally forward and over the beam of the implement, and a harrow or stirrer carried by said arm, for the purpose set forth. 2nd. In combination with a seeding implement, an arm projecting laterally from the beam of said implement, and carrying at its outer end a harrow or stirrer, and a connection between the inner end of said arm and the beam of the implement, embodying a horizontal pivot upon which the arm yields vertically, and a vertical pivot upon which the arm swings horizontally forward and over the beam to the opposite side of the implement, substantially as herein explained. 3rd. In combination with a seeding implement, an arm connected thereto by means which permit it to swing to either side of the implement, a harrow or stirrer carried by said arm, and a track upon which said arm slides in shifting its position, and by which it is made to clear the implement in passing over, substantially as set forth. 4th. In combination with a seeding implement, an arm carrying a harrow or stirrer, and connected with the implement through the medium of the horizontal axis 11 and the vertical axis 10 above the beam, whereby the arm yields vertically to uneveness in the ground and may reverse from side to side of the implement by swinging horizontally, substantially as and for the purposes set forth. 5th. In combination with a seeding implement, an arm extending laterally from said implement and carrying a stirrer or harrow at its outer end, a connection between the inner end of said arm and the beam of the implement, embodying a vertical pivot upon which the arm swings horizontally forward and over the beam in a plane substantially parallel to the beam, and a flexible draft connection from the outer end of the arm to the form end of the beam, reversible on said arm and beam, substantially in the manner and for the purpose set forth. 6th. In combination with a seeding implement, an arm extending laterally therefrom and carrying at its end means for affecting the soil, and a lever through the medium of which the arm is connected to the implement, and by the shifting of which the arm is adjusted in its lateral off-set, as explained. 7th. In combination with a seeding implement, the laterally projecting arm 3 carrying the soil stirrer, and the lever 6 fulcrumed at 7, providing means for connecting said arm with the implement and extending within reach from the handles and there provided with means for retaining its lateral adjustment. 8th. In combination with a seed box of a seeding implement, a partition extending between two opposite sides of the seed box and incline towards a third side to provide with said sides an auxiliary seed receptacle normally cut off from communication with the seed box, and means for moving said partition away from the third side at bottom to open communication between the two receptacles, substantially as set forth. 9th. In combination with the seed box, a vertical partition of wall in said seed box inclining to one side of the latter and dividing the said box into two compartments, and means for movably holding the lower end of said partition or wall in contact with the side of the seed box and for removing it therefrom to open communication between the two compartments, substantially as herein set forth.

10th. In combination with a seed box, the movable wall, a bolt by which said wall is held in position to close communication between the compartments, and a spring for moving the wall to open communication between the compartments when the bolt is released, substantially as set forth. 11th. In combination with a seeding implement, a seed box mounted thereon, a partition movably mounted in said seed box, cutting off a portion of said box to provide an auxiliary seed receptacle, and extending to one of the sides at its bottom to close communication between the receptacles, a bolt for securing said partition in place, and a spring between said partition and an opposite side for separating them when the bolt is loosened, as explained.

No. 67,877. Ore Amalgamator.

(*Machine à amalgamer le minerai.*)

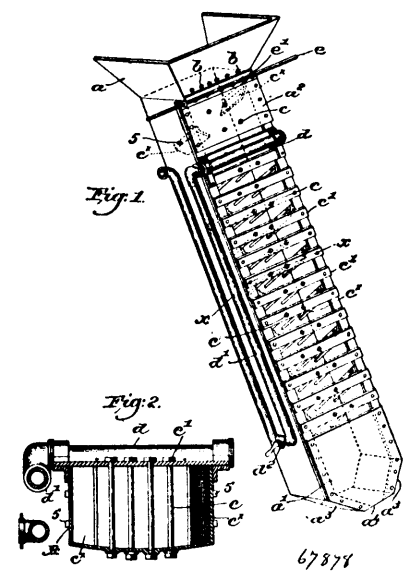


Anatole Bargigli, Paris, France, 26th June, 1900; 6 years. (Filed 5th June, 1899.)

Claim.—1st. The improved process of amalgamating gold and other ores, consisting in forcing the pulp to be treated into the base of a reservoir below a body of mercury contained therein, causing the said pulp to be divided at the base of the reservoir into vertically ascending streams, the divided streams ascending through the mercury by difference of specific gravity, then causing the ascending streams of pulp to be temporarily detained, triturated and rubbed, in a circular manner, while in the body of the mercury by a revolving triturating device, then allowing the pulp to escape upwards after the first trituration, to be caught, triturated and rubbed by the next revolving triturating device, and so on until the pulp reaches the top surface of the mercury when the amalgamation will be complete, as set forth. 2nd. In apparatus for amalgamating gold and other ores, the combination with a vertical cylindrical casing containing mercury, an annular channel around the base of the casing, radial passages from the channel to the interior of the casing at the base thereof, and means for supplying the pulp to be treated to the channel at a greater pressure than that of the column of mercury, of a horizontal fixed perforated plate above the radial passages and near the case of casing to further separate the entering pulp, a revolving central vertical shaft in the casing, and a series of superposed circular plates on the shaft, serrations on the under surfaces of the plates to triturate the ascending steams of pulp while in the mercury, and vertical perforations in the triturating plates to allow the pulp to escape upwards from plate to plate during the successive triturations, as set forth. 3rd. In apparatus for amalgamating gold and other ores, the combination of a vertical cylindrical casing containing mercury, an annular channel surrounding the base thereof supplied with pulp to be treated at a greater pressure than the mercury, a number of radial passages from the annular channel to the interior of the casing at the base thereof, a perforated distributing plate near the base of the casing to cause the pulp to enter the mercury in divided streams, a vertical shaft passing through the casing and means for revolving the shaft, a series of superposed horizontal circular plates fixed on the shaft, and having serrated under surfaces, for detaining, triturating and rubbing the divided streams of pulp to be treated in a circular manner while in the mercury, and vertical perforations in the triturating plates for allowing the pulp to escape upwards after the action thereon of successive plates, an exit pipe above the level of mercury to take off the water and residue of the pulp, and a cavity at the base of the casing to receive the amalgam, substantially as set forth. 4th. In apparatus for amalgamating gold and other ores, the combination of a vertical cylindrical casing containing mercury, an annular channel at the base thereof to receive the pulp to be treated at a pressure greater than the column of mercury, a number of radial horizontal passages from the channel to conduct the pulp to the interior of the casing at the base thereof, a horizontal fixed plate at a short distance above the base of the casing, and vertical perforations through the plate to distribute the pulp and cause it to rise through the mercury in vertical streams, a sperical cavity centrally of the base of the casing to collect the amalgam, and an inclined pipe and tap from the cavity to draw off the amalgam, a perforated cover plate for the cavity and a bearing in the cover plate, extending up through a stuffing box in top cover of the casing, and mechanism supported by the top cover to revolve the shaft, a number of superposed circular plates fixed on the shaft, each plate having concentrically ribbed surfaces, the ribs on the lower surface being serrated, and a series of segmental perforations through each plate whereby the pulp is temporarily detained and triturated by the plates in the mercury, escaping by the perforations upwards from plate to plate, a space beneath the top cover plate of the covering to collect the water and resisdne, and a pipe to conduct same away, and a guage glass on the casing to enable the level of mercury to be observed, substantially as set forth.

No. 67,878. Cement and Concrete Mixer.

(*Mélangeur de ciment et bêton.*)

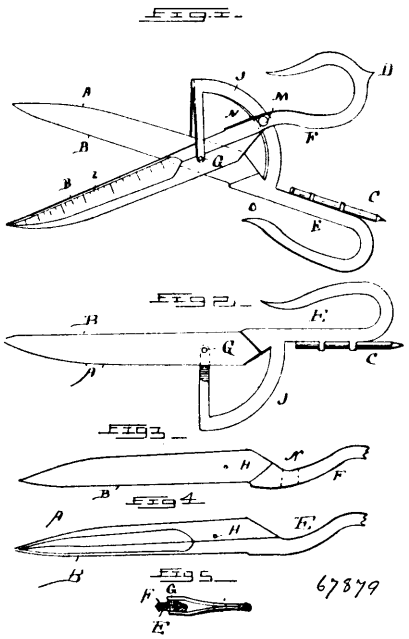


Frank Bunker Gilbreth, Boston, Massachusetts, U.S.A., 26th June, 1900; 6 years. (Filed 17th March, 1899.)

Claim.—1st. A mixer for concrete and the like consisting of an inclined, open front chute or trough, with closed receiving chambers at opposite ends thereof, and mixing means in said chute or trough and tending to direct the material away from the open side of said chute or trough. 2nd. A mixer for concrete and the like consisting of an inclined, open front chute or trough provided at one end with a suitable hopper, a chamber immediately below the hopper to prevent scattering of the substances shovelled into the hopper, a receiving chamber at the lower or delivery end of said chute or trough, and mixing means in the chute or trough and tending to direct the material away from the open side thereof. 3rd. A mixer for concrete and the like consisting of a chute or trough through which the material to be mixed may gravitate, a sieve or screen at the supply end of said chute, and mixing pins arranged in said chute below the screen, said chute or trough being arranged in an inclined position whereby said mixing pins tend constantly to direct the material within and toward the bottom surface of the chute. 4th. In a mixer for concrete and the like, a chute with mixing members introduced along the length thereof all inclined with reference to the same side of the chute, whereby the material is deflected by said mixing members toward said side of the chute. 5th. In a mixer for concrete and the like, an inclined chute having a trough-like bottom, and deflecting members arranged in said chute and inclined with reference to said trough-

like bottom to co-operate with the latter in concentrating and mixing the material passing through said chute. 6th. In a mixer for concrete and the like, a chute with mixing members introduced along the length thereof all inclined with reference to the same side of the chute, whereby the material is deflected by said mixing members towards said side of the chute, in combination with a water supply device constructed and arranged to deliver water to the material while being mixed during its passage through said chute. 7th. A gravity mixer for concrete and the like, consisting of a chute or trough, a plurality of approximately parallel mixing pins distributed in the length thereof, and a water supply device constructed and arranged to deliver water to the material being mixed in its passage through said chute. 8th. A mixer for concrete and the like, consisting of a chute or trough, a plurality of approximately parallel mixing pins distributed in the length thereof, and a water supply device arranged to deliver water upon the material being mixed intermediate the length of said chute, whereby both wet and dry mixing by said pins may take place simultaneously in the same chute. 9th. In a gravity mixer for concrete and the like, a gravity chute with mixing pins introduced along the length thereof, all constructed and arranged to present the said pins in an inclined position so as to deflect the material being mixed toward the bottom of said chute, and water supplying means to deliver water upon the material being mixed intermediate the ends of said chute whereby wet and dry mixing may take place simultaneously in the same chute. 10th. In a mixer for concrete and the like, the combination with an inclined chute having a trough-like bottom, of mixing members arranged in said chute and inclined with reference to said trough-like bottom to co-operate with the latter in concentrating and mixing the material passing through said chute, and a water supply device to supply water to the material in said chute. 11th. A gravity mixer for concrete and the like, consisting of a chute or trough constructed and arranged to provide an inclined surface down which the material may gravitate during mixing, and a plurality of combined dividing and mixing devices standing outwardly with reference to said inclined surface for dividing and mixing the layer of material flowing down said inclined surface. 12th. A gravity mixer for concrete and the like, consisting of a chute or trough constructed and arranged to provide an inclined surface down which the material may gravitate during mixing, a plurality of combined dividing and mixing devices standing outwardly with reference to said inclined surface for dividing and mixing the layer of material flowing on said surface, and water supplying means to supply water to the material upon said inclined surface, substantially as described. 13th. A gravity mixer for concrete and the like, consisting of a chute down which the material to be mixed may gravitate, combined with mixing members arranged in said chute, and tending constantly to divert the material acted upon by said members to one side of the natural path of gravitation during the passage of said material through said chute. 14th. A gravity mixer for concrete and the like, consisting of a chute down which the material to be mixed may gravitate, combined with mixing members arranged in said chute, to divert the material acted upon by said members to one side of the natural path of gravitation during the passage of said material through said chute, the water supplying means to supply water to the diverted material. 15th. A gravity mixer for concrete and the like, consisting of a chute or trough constructed and arranged to provide an inclined surface down which the material may gravitate during mixing, and a plurality of combined dividing and mixing devices arranged in inclined position with reference to said inclined surface, for dividing and mixing the layer of material flowing on said surface, and by reason of their inclination with reference thereto, direct the divided material constantly toward the said inclined surface for concentration thereon as described. 16th. A mixer for concrete and the like consisting of a chute or trough constructed and arranged to provide a concaved or trough-like inclined surface down which the material may gravitate during mixing and concentrate along the lowest point or point thereof, and a plurality of combined dividing and mixing devices arranged in inclined position with reference to said inclined surface, for dividing and mixing the layer of material flowing on said surface, and by reason of their inclination with reference thereto, direct the divided material constantly toward the said inclined surface for concentration thereon, as described. 17th. A mixer for concrete and the like consisting of a chute or trough constructed and arranged to provide a concaved or trough-like inclined surface down which the material may gravitate during mixing and concentrate along the lowest point or points thereof, and a plurality of combined dividing and mixing devices arranged in inclined position with reference to said inclined surface, for dividing and mixing the layer of material flowing on said surface, and by reason of their inclination with reference thereto, direct the divided material constantly toward the said inclined surface for concentration thereon, and water supplying means to project water upon the material being mixed so as first to act upon any particles that may bound above the layer upon the bottom and thereafter upon the particles in and constituting the said layer, for the purpose described. 18th. A gravity mixer for concrete and the like, consisting of a chute or trough down which the material to be mixed may gravitate, and mixing means arranged in said chute or trough, combined with supporting means for the said chute or trough constructed to permit the working inclination thereof to be shifted at will without changing any of the operative parts of the mixer.

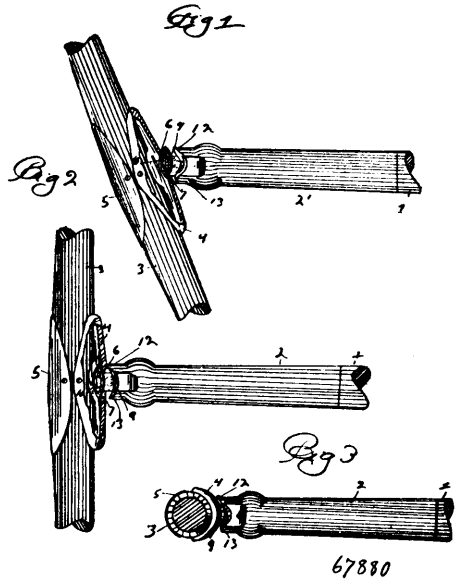
No. 67,879. Scissors and Shears. *(Ciseaux et cisailles.)*



Carl C. Renning, Condersport, assignee of Allen H. Dow, Forest House, both in Pennsylvania, U.S.A., 26th June, 1900; 6 years. (Filed 29th May, 1900.)

Claim.—Scissors, consisting of two blades, one having a pivot and the other a socket therefor, a quarter circle spring secured to one blade and pressing the two blades together for the purpose of retaining the said blades in operative relation, a set screw upon one blade adapted to engage the spring and hold said blades in adjusted position, open finger and thumb receptacles, a pivot upon one of the above parts, and devices for holding a pencil upon the other, a double cutting edge formed upon one of the blades, and a measuring scale upon the other, substantially as described.

No. 67,880. Pole and Neck Yoke Coupling.
(Joint pour volée d'avant.)

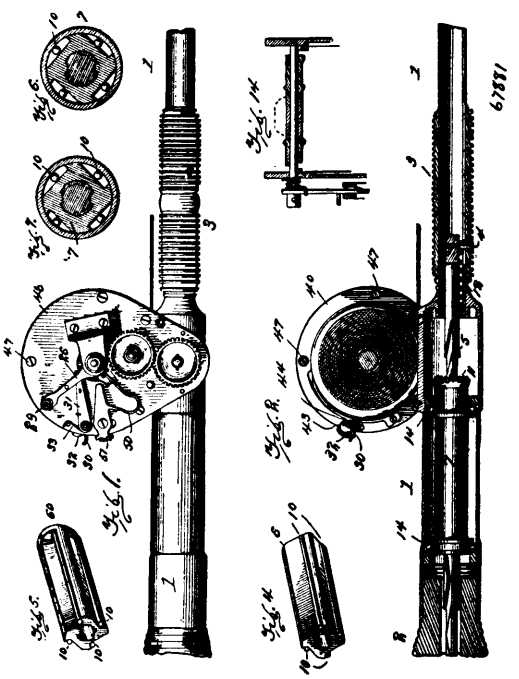


Nels Hockerson, Charles Strand and Edward Carson, all of Marine Mills, Minnesota, U.S.A., 26th June, 1900; 6 years. (Filed 19th April, 1900.)

Claim.—1st. In a neck yoke and pole coupling, the combination with a socket on the neck yoke, having an irregular perforation or passage, of the coupling head on the end of a pole of such dimensions that it may be passed through the perforation in said socket

and interlocked therewith by rotation, and the projecting stop portions 12 and 13 on the pole, the former projecting further than the latter and serving to prevent the disengagement of the interlocked parts in certain positions, substantially as described. 2nd. In a neck yoke, the combination with a coupling head on the end of the pole, of the socket on the neck yoke, having a perforation elongated in one direction to permit the passage of said coupling head, and the stop projections 12 and 13 on the end of said pole, the former projecting farther than the latter and operating, substantially as described. 3rd. A neck yoke and pole coupling, comprising a socket on the neck yoke, and a coupling head detachably interlocking with said socket and having a stem portion pivoted to the pole for lateral oscillations, substantially as described. 4th. The combination with the pole provided at its end with the projecting stops 12 and 13 and the pivoted coupling head 9, 10, of the neck yoke provided with the socket 4 having the irregular perforation 6, 7, the said parts operating, substantially as described.

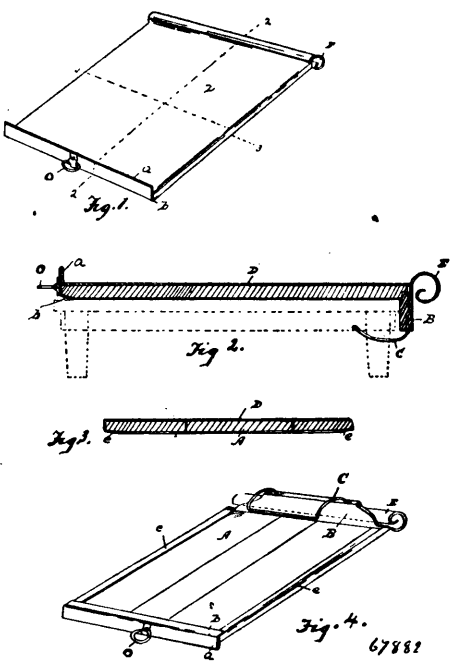
No. 67,881. Fishing Reel. *(Dévidoir de pêche.)*



William Trabue, Ben Howe and Robert W. Bingham, all of Louisville, Kentucky, U.S.A., 26th June, 1900; 6 years. (Filed 20th November, 1899.)

Claim.—1st. In a fishing reel, the combination of a spool and its train of driving gears, of a reciprocating piece on the rod, a spirally grooved slide piece connected thereto, a nut engaging said slide piece, and connecting gears from said nut to the reel train, whereby the reciprocation of the slide piece rotates the reel, substantially as described. 2nd. In a fishing reel, the combination of the spool and its train of driving gears, with a reciprocating double grooved spiral piece carried by the rod, a plurality of nuts with which the opposite spirals engage, a sleeve surrounding said nuts and connected to the reel gear, and clutch mechanism by which the nuts may be alternately connected to the sleeve, substantially as described. 3rd. In a fishing reel, the combination of a spool and its train of driving gears, of a handle reciprocating lengthwise on the rod, a spirally grooved cylinder reciprocated by said handle, two nuts engaging reverse grooves in said cylinder, and clutch mechanism connected to the nuts and alternately engaging one of the spool moving gears, whereby a movement of the handle in either direction causes the forward movement of the spool, substantially as described. 4th. In a fishing reel, the combination of the slotted rod, a handle reciprocating thereon, operating gears connected to said handle and to the spool, and an elastic buffer against which the handle is stopped, to prevent noise, substantially as described. 5th. In a fishing reel, the rod, the reciprocating handle thereon, the double grooved cylinder connected to said handle, the two nuts on said cylinder and inclosing the same, and the rolls inclosed between the sleeve and nuts and acting alternately as described, combined with the winding gear and its train, substantially as described. 6th. In a fishing reel, the combination of the spool, its driving train, and a reciprocating handle operatively engaging the train to move the reel forward by a long or short stroke in either direction, and a clutch mechanism whereby the train may be thrown out of gear, substantially as described. 7th. In a fishing reel, the hollow rod, a reciprocating handle on the same forward of the reel, gear mechanism connected to said handle, substantially as described, whereby the spool may be rotated by the reciprocation of said handle, a hand grip on the rod behind the reel, and a lever within reach of the hand on the butt piece and serving to connect or disconnect the spool driving gear, all combined substantially as described. 8th. In a reel, the combination with a reciprocating handle and driving gears operating a spool by the reciprocation of the said handle, a clutch in the train of gears by which the same may be uncoupled, a thumb lever by which said clutch may be uncoupled, and mechanism controlled by the thumb on the thumb lever, by which the gears may be held uncoupled, substantially as described. 9th. In a reel, the driving gears, the spool, and a clutch by which the driving gears are operatively connected to the spool, a rock shaft supported by the frame, a lever connected to said rock shaft and acting to disengage said clutch, as described, and a slip sleeve on the rock shaft engaging the frame in position to hold the clutch uncoupled, all combined substantially as described. 10th. In a reel of the character described, the driving gears and a clutch for engaging or disengaging said gears, a rock shaft and connections extending to the clutch by which the same may be disengaged, the drag, and connections from the rock shaft by which the drag may be applied as the rock shaft operates to disengage the driving gears, all combined, substantially as described. 11th. In a reel of the character described, the driving gear and a clutch by which the same may be connected or disconnected, a rock shaft and connections therefrom by which said clutch may be disconnected, and means for locking said clutch in open position, the drag, and means connected to the rock shaft for applying the drag, all combined. 12th. In a fishing reel, the spool, a curved spring drag in position to engage one rim of said spool, and the thumb piece extending outside the casing so that the drag may be operated by hand, and a cam lever in position to engage the drag, substantially as described. 13th. In a fishing reel, the driving gears and a clutch in the train, a rock shaft and lever extending therefrom by which the clutch may be disengaged, the drag and means for applying it by hand and connections on the rock shaft by which the drag is automatically applied when the clutch is uncoupled, all combined. 14th. In a fishing reel, the winding spool, a train of driving mechanism, and a reciprocating handle operating said train in one direction by a forward or rearward movement of any length in either direction, all substantially as described.

No. 67,892. Kneading Board. *(Casserole à pétrir.)*

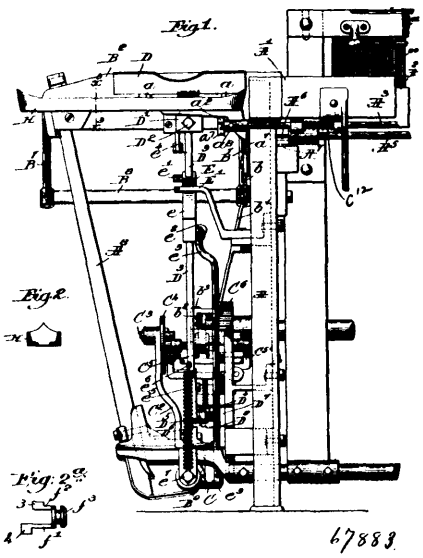


Amos Albert Cushman and Lorenzo D. Patten, both of Mansfield, Ohio, U.S.A., 26th June, 1900; 6 years. (Filed 8th November, 1899.)

Claim.—1st. A kneading board provided with a top covering of metal in a continuous sheet, said metal having an integral roll formed at the forward end of the board, and provided with an integral vertical flange at the rear thereof. 2nd. In a kneading board, the combination of the wooden base, the continuous sheet of metal mounted upon said base, said metal sheet being formed with a guard roll at the forward end which extends above the plane of the board and provided with a vertical flange at the rear end of the board, a head piece depending from the under face of the board at its forward end, and a fixed curved spring extending from said head

piece. 3rd. In a kneading board, the combination of a base, a metal covering mounted on said base formed of a continuous piece of sheet metal, said metal covering having at its forward end an integral roll which projects beyond said board and above the plane of the metal surface, a vertical flange at the rear of the board, formed by bending the metal sheet upon itself, the margin of the metal sheet after forming said flange extending downward across the end of the base of the board and lapping onto the under face thereof.

No. 67,883. Loom. (*Métier.*)

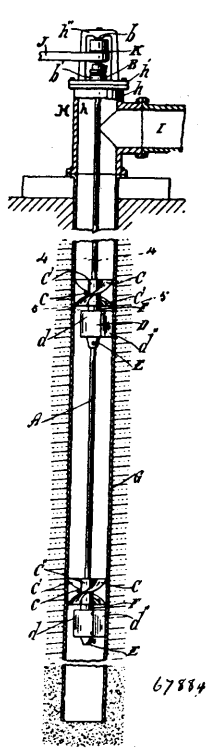


The Crompton & Knowles Loom Works, assignee of Randolph Crompton and Horace Wyman, all of Worcester, Massachusetts, U.S.A., 26th June, 1900; 6 years. (Filed 14th March, 1899.)

Claim.—1st. In a loom, a lay having a reed, and a binder mounted on the lay substantially in the line of the dents of the reed, combined with a running shuttle box carried by and movable on said lay from its operative into its inoperative position and *vice versâ*, said shuttle box being open at its rear side next said binder, the vertical wall of said shuttle box being located parallel to the faces of the dents of the reed and in front of the same to constitute an aligning surface for the shuttle acted on by said binder, and means to actuate said running shuttle box to put it into its inoperative position and enable the escape of its shuttle from the rear side of said box over said binder. 2nd. In a loom, a lay having at its end a horizontal aligning surface coincident with the level of the race of the lay to align the shuttle with said raceway, said surface sustaining the underside of the shuttle carried by the lay and being slotted for the reception of a picker stick, and a wall mounted on said lay at the rear side of said slot, combined with a running shuttle box open at its rear side and located at the opposite side of said slot, and means to move said shuttle box to enable the shuttle to escape therefrom across said wall, substantially as described. 3rd. A lay having at its end a horizontal slotted aligning surface coincident with the level of the raceway of the lay, a running shuttle box open at its rear side, a vertical wall mounted on the top of said lay opposite the open side of said running shuttle box, a picker stick movable back and forth in said slot between said wall and the open side of said running shuttle box, a picker stick movable back and forth in said slot between said wall and the open side of said running shuttle box, and means to lift said running shuttle box in said lay when the shuttle is to be changed, said shuttle box as its open side is lifted above said wall enabling the shuttle to leave the open rear side of said running shuttle box and be discharged from the lay, substantially as described. 4th. In a loom, a lay having a picker stick slot at its end, a vertical wall at the rear side of said slot, and a running shuttle box presenting a vertical front wall, combined with an auxiliary shuttle presenter, and a separate rest or support for an auxiliary shuttle, said presenter acting against the side of said spare shuttle opposed to the vertical wall of the lay, means to move the vertical wall of said running shuttle box from its operative into its operative position and the said auxiliary shuttle presenter from its inoperative into its operative position, both the said running shuttle box and said shuttle presenter co-operating with and pressing its shuttle against one and the same vertical wall of the lay when the shuttle is being thrown across the lay, substantially as described. 5th. In a loom, the following instrumentalities, viz:—a lay having a pivoted binder, a running shuttle box open at its side next said binder and co-operating therewith when said shuttle box is in its operative position at the level of the race of the lay, means to move said running shuttle box into its inoperative position to take with it the shuttle to be discharged from the open side of said shuttle box, combined with an auxiliary shuttle presenter composed of a wall and a lever carrying it, said shuttle presenter being normally held stationary in its inoperative position, and means to move said shuttle presenter into its operative position at the level of the race of the lay and put the shuttle carried by it against the binder to be thrown from between said shuttle presenter and said binder across the lay, and means to lock said shuttle presenter to the lay, while the auxiliary shuttle is being thrown by the picker onto the lay, substantially as described. 6th. In a loom, a lay having a slot for a picker stick, a binder pivoted on said lay to move toward and from said slot and act on the shuttle, a running shuttle box composed of a wall provided at its upper and lower edges with short horizontal lips extended toward the rear side of the lay and said binder, said lips overlapping a portion of the upper and lower sides of the shuttle said wall keeping said shuttle against said binder, combined with means to move said shuttle box transversely with relation to said binder to effect the discharge of a shuttle, substantially as described. 7th. In a loom, the folllowing instrumentalities, viz:—a lay, a running shuttle box carried thereby and open at its rear side, means to move said shuttle box into its inoperative position when the shuttle is to discharged therefrom, a lever having an auxiliary shuttle presenter attached to it, said shuttle presenter being normally held in its inoperative position near the breast beam, independent devices operated by the means employed to put said running shuttle box into its inoperative position, said independent means co-operating with and turning said lever carrying said shuttle presenter about its pivot to place the said auxiliary shuttle in the position previously occupied by the running shuttle box at the level of the race of the lay while the spare shuttle supported by said lay is thrown therefrom across the lay, substantially as described 8th. A lay, a rest for an auxiliary or spare shuttle, a hooked lever to engage and retain said shuttle in stationary position on said rest, combined with an auxiliary shuttle presenter to remove said shuttle from said rest onto said lay, and means to operate said hooked lever and enable said shuttle to pass off from said rest onto the lay, substantially as described. 9th. A lay, a rest for an auxiliary or spare shuttle, a hooded lever to engage said shuttle, and an auxiliary shuttle presenter adapted to remove said shuttle from said rest onto said lay, combined with a filling fork stop motion shaft and means under its control to meet and turn said hooked lever, substantially as described. 10th. In a loom, a lay having a table or horizontal aligning surface slotted for a picker stick, and having a recess, and a binder carried by said lay at one side of and adapted to move toward and from said slot, combined with a running shuttle box open at its rear side and located at the opposite side of said picker slot, said running shuttle box having a lip at its upper edge to overlap a part only of the upper edge of the shuttle, and a second lip to act on the underside of said shuttle to lift it from the lay, said second lip standing in said recess, and means to move said shuttle box transversely with relation to said binder, substantially as described. 11th. The lay, a lever, and an auxiliary shuttle presenter carried thereby, a shoe having an inclined or cam surface, and a guide for said shoe, combined with means to move said shoe to effect the movement of said lever upon its pivot, substantially as described. 12th. The lay, its attached holding projection, an auxiliary shuttle presenter mounted upon a lever, a device movable independently of said lever and having a wedge or cam surface and a projection, combined with means to move said device to turn said lever, said device engaging the projection of said lay to lock the said lever to said lay, substantially as described. 13th. In a loom, the following instrumentalities, viz:—a lay, a running shuttle box carried thereby and open at its rear side and occupying normally its stationary operating position, a lever, and an auxiliary shuttle presenter actuated therewith and occupying normally a stationary inoperative position in line with the level of the race of the lay, means to move said running shuttle box, and independent means set in motion by the movement of said running shuttle box to co-operate with and move the lever carrying said auxiliary shuttle presenter toward and to meet the forwardly moving lay, substantially as described. 14th. A rest for an auxiliary or spare shuttle, a lever, an auxiliary shuttle presenter actuated thereby, and a device co-operating with said lever and provided with an inclined or cam surface, combined with means to guide said device, and move it to thereby effect the turning of said lever upon its fulcrum, substantially as described. 15th. In a loom, a lay having a horizontal aligning surface notched at its top, a stationary rest extended from the front of the loom toward the lay and adapted to co-operate with the notches in the top of the lay as the latter reaches the end of its forward stroke toward the breast beam, combined with an auxiliary shuttle presenter occupying its inoperative position above said rest at one side of the auxiliary shuttle thereon when the loom is running regularly, means on the failure of the filling in the running shuttle box to move said shuttle presenter and cause it to move the auxiliary shuttle over said rest onto the lay, a movable shoe, and means to move it to cause said auxiliary shuttle presenter to be moved toward and be locked to the lay, and thereafter move with the lay while the said auxiliary shuttle is being thrown from the shuttle presenter, substantially as described. 16th. In a loom, a lay having a picker slot made vertically therein, combined with a running shuttle box composed of a wall occupying a position at one side of said slot, said wall having at its upper edge a horizontally extended lip to more or

less overlap only the top of the shuttle, and having at its lower edge a suitable ear which is extended horizontally therefrom across the said picker slot and rods connected to said box and extended through guides in said lay, and means to move said rods and box vertically, substantially as described. 17th. In a loom, the following instrumentalities, viz. : a lay having a vertical slot or passage for a picker stick, and presenting at the front side of said slot a shuttle supporting table having a notch at either end, and a wall erected on said lay at the rear side of said slot, a running shuttle box presenting a wall at the front side of said slot, the latter wall having a lip at its top edge to overlap more or less of the top of the shuttle, and having at its lower edge a lip and two ears to enter said notches, said lip being located wholly at one side of said slot, means to move said running shuttle box on said lay to cause the lip at its under edge to lift the shuttle from the lay and put it into a position above the wall erected on said lay, and a picker stick working in said slot between said ears, substantially as described. 18th. In a loom, the following instrumentalities, viz. : a lay having a horizontal aligning surface coincident with the level of the race of the lay and provided with a vertical slot or passage for a picker stick, a wall erected on said lay at one side of said slot, a running shuttle box presenting a wall at the opposite side of said slot, the latter wall having a lip at its top edge to overlap more or less of the top of said shuttle, and having at its lower end a lip to enter said notch, said lip being located at one side of said slot, and means to move said running shuttle box on said lay to cause said lower lip to lift the shuttle from the horizontal aligning surface of the lay, and put it in position above the wall erected on said lay, and a picker stick working in said slot, substantially as described. 19th. In a loom, a lay having a horizontal aligning surface coincident with the level of the race of the lay and on which said shuttle rests when thrown therefrom, said horizontal aligning surface constituting the bottom of a shuttle box, a running shuttle box having a substantially vertical wall, and a lip at its upper edge to partially overlap the top of the shuttle, and a lip at its lower edge located at one side of said running shuttle box, said shuttle box being open at its inner side for the discharge of the shuttle, and a wall rising from said lay at the opposite side of said slot against which one side of the shuttle is borne, and a binder in one of said walls, combined with means to move said running shuttle into its inoperative position and place its open side above said wall, whereby the shuttle carried thereby is free to fall out of said box over said wall, substantially as described. 20th. In a loom, the following instrumentalities, viz. : a lay, a running shuttle box carried thereby and occupying normally its inoperative position, a lever, an auxiliary shuttle presenter actuated thereby and occupying normally its inoperative position, a device free to slide longitudinally with relation to the lever carrying the said auxiliary shuttle presenter, and means to move said device and said running shuttle box, the movement of the device in unison with the running shuttle box causing the auxiliary shuttle presenter to meet the forwardly moving lay, substantially as described. 21st. In a loom, the following instrumentalities, viz., a ay having a horizontal slotted aligning surface coincident with its raceway, a reed carried by said lay, a running shuttle box open at its rear side for the passage therefrom of a shuttle to be discharged from the loom, the wall of said shuttle box nearest the breast beam occupying a position parallel to the line occupied by the faces of the dents of the reed, to constitute a fixed aligning surface, a binder pivoted on said lay at the rear side of said picker slot, and acting on the shuttle opposite it to align it against said aligning surface, means to throw the shuttle, and means to move said running shuttle box to elevate its open rear side above said binder, in order that the shuttle may escape therefrom over said binder, substantially as described. 22nd. A lay having a horizontal aligning surface provided with a vertical slot for the reception of a picker stick, a vertical picker stick movable in said slot, a running shuttle box having a slot in its underside for the reception of said picker stick, and means to lift said shuttle box, substantially as described. 23rd. The lay having a vertical aligning surface or wall to align the shuttle with the reed, and a horizontal aligning surface coincident with the race of the lay to sustain the shuttle as it is being thrown, an auxiliary shuttle presenter made as a lever, a device to move said lever to place and hold temporarily a spare shuttle against said vertical aligning surface of the lay during a backward movement of the lay, and a picker to strike and throw said spare shuttle across the lay from between said vertical aligning surface or wall and said spare shuttle feeder. 24th. In a loom, the following instrumentalities, viz., a lay having a horizontal shuttle aligning surface coincident with the level of the race of the lay to constitute the bottom of a shuttle box to sustain the shuttle being thrown, a vertical rear wall carried by the lay to receive against it the rear side of the shuttle sustained by said horizontal aligning surface, a vertical front wall, a lever having an attached auxiliary shuttle presenter, a rest or support for an auxiliary shuttle, means under the control of a filling detector to move said vertical front wall from its operative position opposite said rear wall into its inoperative position to afford a free horizontal space leading to said rear wall, and actuating means for said auxiliary shuttle presenter to cause it to place said auxiliary shuttle directly upon said horizontal aligning surface and against the rear wall of the lay while the spare shuttle is thrown from said aligning surface across the lay and through the shed, substantially as described. 25th. In a loom, a vibratable lay presenting a vertical rear wall, and a horizontal aligning surface to guide a running shuttle, an auxiliary shuttle presenter located at one side of an auxiliary shuttle sustained on said rest and normally standing in its inoperative stationary position at the loom side, combined with means when said running shuttle is to be changed to actuate said auxiliary shuttle presenter and cause it to move the auxiliary shuttle from said rest upon the said horizontal aligning surface and against said rear wall in place of the running shuttle, and means to insure the movement of said auxiliary shuttle presenter in unison with the lay while the auxiliary shuttle supported by said horizontal aligning surface is being thrown from between the wall of said shuttle presenter and the wall of the lay, substantially as described. 26th. In a loom, a lay having at its end a horizontal aligning surface to support the underside of a running shuttle and constitute the bottom of a shuttle box as said shuttle is being thrown across the lay and also to receive directly upon it a spare shuttle being put onto the lay, said lay having a wall at its rear side to align the running shuttle with the reed preparatory to throwing said shuttle, and to also align the spare shuttle for its first shot, a vertical wall near the front side of said horizontal aligning surface and occupying normally its operative position opposite the wall at the rear side of the lay, a support for a spare shuttle, an auxiliary shuttle presenter normally held in its inoperative position near the breast beam, means when a shuttle is to be changed to remove the wall near the front side of the lay from its normal position opposite the wall at the rear side of the lay, and to actuate said auxiliary shuttle presenter to remove a spare shuttle from said spare shuttle support and put it on the said horizontal aligning surface against the wall at the rear side of the lay, devices to retain the auxiliary shuttle presenter and the lay together and while the spare shuttle between said presenter and the wall of the lay is thrown from said horizontal aligning surface across the lay, and means thereafter to return said auxiliary shuttle presenter to its normal stationary position and put the wall at the front side of the lay again in its operative position to co-operate with the spare shuttle as it returns to the end of the lay from which it started to become the running shuttle, substantially as described.

No. 67,884. Pump. (*Pompe.*)

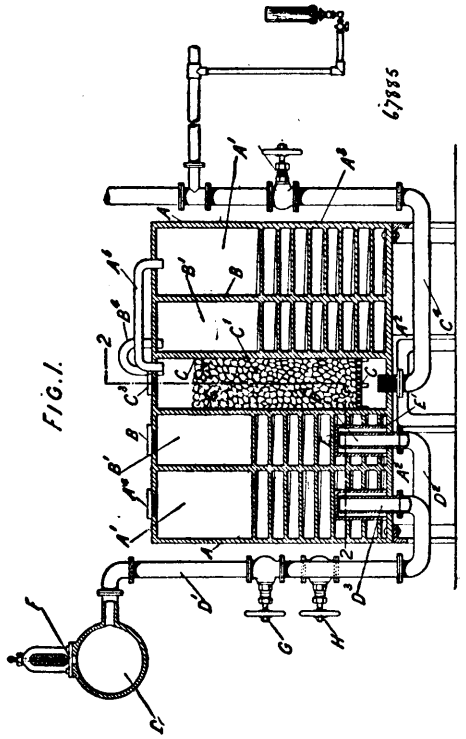


James H. Stalker, Pasadena, assignee of Preston King Wood, Los Angeles, all of California, U.S.A., 26th June, 1900; 6 years. (Filed 7th October, 1898.)

Claim.—1st. A pump comprising two or more sets of rotary inclined blades mounted on a shaft in a casing, and guides on said shaft, a set of guides being provided for and arranged close to and just below each set of superposed blades and arranged at a considerable distance above the set of blades next below so as to allow the liquid thrown by the lower blades to ascend in a spiral path from said lower blades to the guides, and whereby said guides are caused to reflect the whirling liquid onto the upper set in a direction opposite to that in which the blades rotate. 2nd. The combination of a casing, a shaft to rotate in the casing and provided with two or more sets of rotary blades, and resilient

guides with boxing for the shaft and curved in the direction in which the blades rotate, and when free, inscribing a circle somewhat larger than the inside of the casing or pipe into which they are to fit so that they must be sprung inward to be inserted into the casing and the friction of the blades against the casing will prevent the blades and their boxing from turning. 3rd. The combination of the casing, the rotary shaft therein, a boxing on the shaft with curved resilient liquid guiding blades extending therefrom and engaging the inside of the casing to form guides for the liquid in the casing, and inclined rotary blades carried by the rotary shaft. 4th. The combination of the casing, the rotary shaft therein, two or more sets of rotary blades within the casing and carried by the shaft, and the guide blades mounted on a box which journals the shaft and arranged stationary just below the blades of the upper set of runners and extending from said boxing tangentially from said box to the casing to direct the whirling water outward to the casing and to deflect it outo said blades in a direction opposite to that in which the blades rotate. 5th. The combination of a casing, a shaft to rotate in the casing and provided with two or more sets of rotary blades, and resilient water guides with boxing for the shaft attached thereto, said guides extending along the casing, and when free, inscribing a circle somewhat larger than the inside of the casing or pipe in which they are to fit so that they must be sprung inward to be inserted into the casing and the friction of the blades against the casing will prevent the blades and their boxing from turning.

No. 67,885. Gas Distribution. (*Distribution du gaz.*)



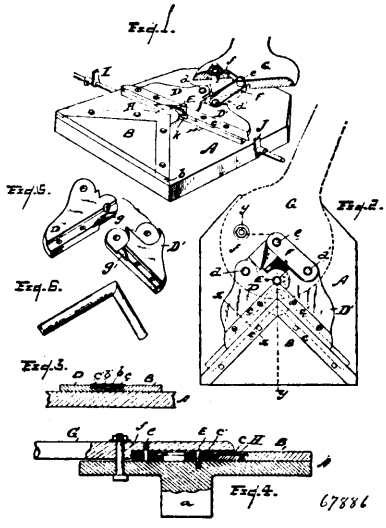
Albert Edward Hodder and John Bingley Garland Lester, both of 49 Queen Victoria Street, London, England, 26th June, 1900; 6 years. (Filed 15th August, 1899.)

Claim.—1st. In the manufacture of gas the combination with an air supply under pressure controlled by a relief valve or otherwise of a generator comprising two or more annular chambers one within another fitted with spiral vanes, a different hydrocarbon in each chamber, separate conduits for supplying air to each hydrocarbon provided with valves with or without a central mixing chamber containing a purifying or enriching agent, substantially as and for the purpose described. 2nd. In the manufacture of gas a generator having two or more annular chambers, one within another fitted with spiral vanes, a different hydrocarbon in each chamber, separate conduits for supplying air to each hydrocarbon provided with valves and a central mixing chamber containing a purifying or enriching agent arranged and operating, substantially as and for the purpose described.

No. 67,886. Corner Forming Press.
(*Presse à former les encoigneures.*)

Charles R. Meller, assignee of Frederick Wuelfing, both of Detroit, Michigan, U.S.A., 26th June, 1900; 6 years. (Filed 25th September, 1899.)

Claim.—1st. In a corner bending and forming press, the combination with a bed plate, of a fixed corner jaw formed with a continuance groove in its faces in the plane of the jaw, two movable jaws articulated together upon a fulcrum pin or bed plate and having



faces adapted to close against the faces of the fixed corner jaw, grooves in said jaws complementary to the grooves in the corner jaw, means for closing and opening said movable jaws, and a fixed bridging plate or die in the corner between the fixed and movable jaws and forming one of the sides of the grooves therein continuously between the jaws. 2nd. In a corner bending and forming press, the combination with a bed plate, of a fixed corner jaw, two movable jaws articulated together upon a fulcrum pin on the bed plate and adapted to close with their faces against the faces of the corner jaw and to be extended in line with each other, complementary grooves formed in the faces of the fixed moveable jaws adapted to form a corner matrix for a bar of plate convex cross section when the jaws are closed together, and a fixed bridging plate projecting from a corner of the fixed jaw into the movable jaw and forming the flat side of the grooves continuously in the corner or the jaw. 3rd. In a corner bending and forming press, the combination with a bed plate, of a fixed right angle corner jaw, two movable jaws articulated together upon a fulcrum pin on the bed plate and adapted to close with their faces against the faces of the corner jaw, and to be extended in line with each other, means for closing and extending said jaws, complementary grooves formed in the faces of the fixed and movable jaws, one side of said grooves being flat and in the plane of the jaws, and the other side being concave and formed by separate check pieces and a fixed bridge plate having its surface on a level with the flat sides of the groove and extending from the fixed jaws into the movable jaws. 4th. In a corner bending and forming press, the combination with a bed plate, of a fixed right angle corner jaw B, the movable jaws D D^1, the fulcrum pin E upon which said jaws are articulated, the complementary grooves b b^1, formed continuously in the faces of the fixed and movable jaws, one side of said grooves being flat and in the plane of the jaws and the other side being concave, the separate check pieces forming the concave side, the separate check pieces forming the concave side of the grooves, the bridge plate H in the angle between the jaws on a level with a flat side of the grooves, the toggle lever pivotally secured at opposite ends to the movable jaws, and the power lever for actuating the movable jaws.

No. 67,887. Artificial Fuel. (*Combustible artificiel*).

John Dolphie Oligny, St-Henri, Québec, Michel, Auger, Toronto, Ontario, Joseph L. Lafontaine, Roxton Falls, Shefford, Québec, tous du Canada, 26 juin 1900; 6 ans. (Déposé 10 mars 1900.)

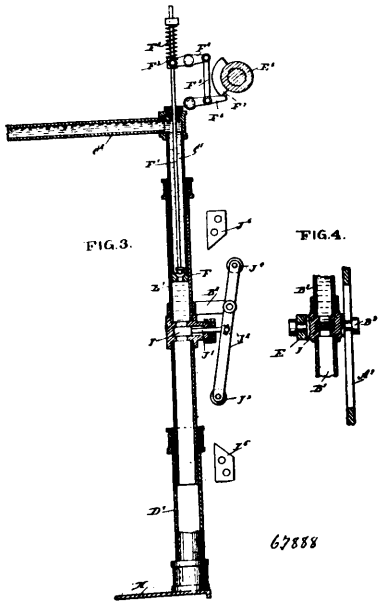
Résumé.—1°. La composition ci-haut mentionnée d'un mélange de crude petroleum, de sel, de calcium impur, d'huile de sasafras, de chaux pulverisée, de resin ciment, de tourbe ou de bran-scie dans les proportions et pour les fins décrites. 2° La composition ci-haut décrite, avec dix-huit cent trente six livres de tourbe (peat) ou de bran-scie, bien mélangée avec la tourbe ou le bran-scie et pressés de la grosseur convenable au chauffage artificiel auquel elle est destinée, devant dans les dites proportions, former deux mille livres de chauffage artificiel.

No. 67,888. Hydraulic Motors. (*Moteur hydraulique.*)

Bernhard Carl Friedrich Wall, Buffalo, New York, U.S.A., 27th June. 1900; 6 years. (Filed 10th April 1900.)

Claim.—1st. A hydraulic motor, comprising a pressure supply pipe, an actuating device adapted to be actuated by the fluid from said pipe, a driving shaft connected with the plunger of the actuating device, a valve gear for automatically opening and closing the valves

of the actuating device, an air compressor driven from the said shaft, and a compressed air and water storage reservoir adapted to con-



tain water and filled with compressed air from the said air compressor, the water in the reservoir being connected with the said supply pipe, substantially as shown and described. 2nd. A hydraulic motor, comprising a pressure supply pipe, an actuating device adapted to be actuated by the fluid from said pipe, a driving shaft connected with the plunger of the actuating device, a valve gear for automatically opening and closing the valves of the actuating device, an air compressor driven from the said shaft, a compressed air and water storage reservoir adapted to contain water and filled with compressed air from the said compressor, the water in the reservoir being connected with the said supply pipe, a tank adapted to receive the discharge water from the said actuating device, and an injector for connecting the tank with the said reservoir, substantially as described. 3rd. A motor, comprising cylinders, hollow plungers working in the cylinders, a walking beam connecting the plungers, supply pipes upon which the plungers reciprocate, valves in the supply pipes and operated from the walking beam, valves in the plungers and serving as abutments, and means for operating the last named valves near the ends of the strokes of the plungers, substantially as described. 4th. A motor, comprising cylinders, hollow plungers working in the cylinders, a walking beam connecting the cylinders, supply pipes upon which the plungers reciprocate, valves in the supply pipes, a driving shaft operated from the walking beam, means for actuating the valves from the said shafts, valves in the plungers and serving as abutments, and means for operating the last named valves near the ends of the strokes of the plungers, substantially as shown and described. 5th. A motor, provided with an actuating device, comprising a cylinder, a hollow plunger fitted to slide in the said cylinder, an inlet pipe upon which the plunger slides a valve in said pipe, means for operating the said valve, a valve in the plunger and forming an abutment for the fluid, and an external valve gear controlled by the movement of the plunger, for opening and closing the said valve, substantially as described. 6th. A motor, provided with an actuating device comprising a cylinder, a hollow plunger fitted to slide in said cylinder, a guide and inlet pipe for the said plunger, a valve in said plunger to form an abutment for the fluid pressure to act against, an external valve gear controlled by the movement of the plunger, for opening and closing the said valve, and an inlet valve in the stationary guide pipe, for controlling the fluid pressure to the plunger and the said abutment valve, substantially as shown and described. 7th. In a motor, the combination with cylinders, and a branched fluid supply pipe having an inlet valve in each member thereof, of a hollow plunger reciprocating in each cylinder and on each member of the supply pipe, a connection between the plungers whereby when one is raised the other is lowered, a valve in each plunger, said valves serving as abutments, and means for alternately opening and closing the said valves near the ends of the strokes of the plungers, substantially as shown and described. 8th. In a motor, the combination with cylinders, and a branched supply pipe, of a hollow plunger reciprocating in each cylinder and on each member of the supply pipe, a connection between the plungers, whereby when one is raised the other will be lowered, an inlet valve in each member of said pipe and operated from the connection between the plungers, valves in the plungers below the inlet valves and forming abutments, and means for alternately operating the valves of the plungers by the reciprocation of the said plungers near the ends of the strokes of the same, substantially as described. 9th. In a motor, the combination with cylinders and a branched supply pipe, of a hollow plunger reciprocating in the cylinders and on each member of the supply pipe, a walking beam connected at its ends with the plungers, shaft connections between the shafts and ends of the walking beam to operate the former from the latter, spring pressed inlet valves in each member of the supply pipe, means for raising the valves to open them against the action of their springs from the said shafts, a valve in each plunger below the inlet valves, and means for alternately operating the valves of the plungers by the reciprocation of the said plunger, substantially as described. 10th. In a motor, the combination with a cylinder, and a supply pipe, of hollow plunger reciprocating in the cylinder and upon the supply pipe, a valve in the plunger and serving as an abutment, means for operating the valve as the plungers reciprocates, a shaft operated from the plunger, a spring pressed valve in the supply pipe above the valve of the plunger, a lever pivoted to the stem of the valve, a pivoted arm, a link connecting the lever and arm, and means for operating the arm from the drive shaft to raise the valve against the action of its spring, substantially as described.

No. 67,889. Bicycle Rest. *(Support de bicycle.)*

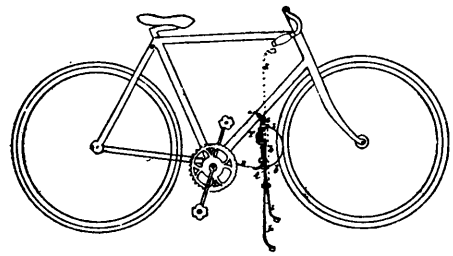


Fig 1

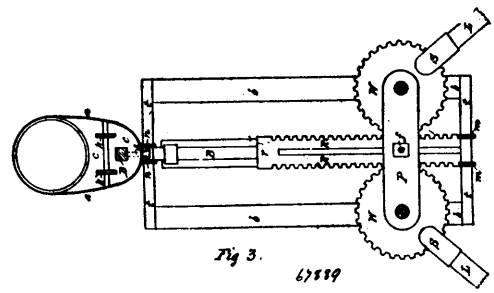


Fig 3.
67889

Eben Miller, Fredericton, New Brunswick, Canada, 27th June, 1900; 6 years. (Filed 2nd April, 1900.)

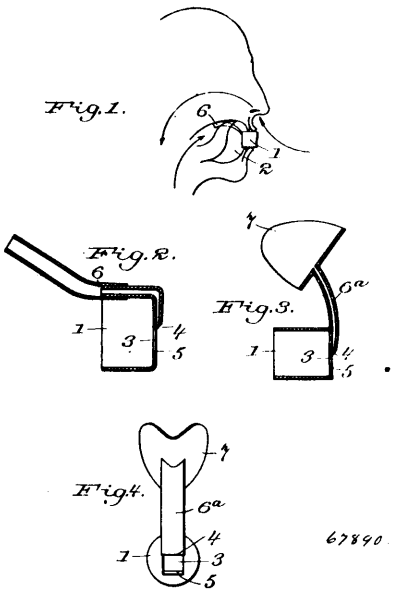
Claim.—1st. In a bicycle rest the combination of the beam B, consisting of a metallic bar of suitable size and shape, with the adjusting bands *a a*, the clips *c c* with the keys KK, the action of the vertical toothed racks RR and toothed wheels WW in combination with the section and application of the spring brake bands *b b*, and elastic brake in connection therewith to the bicycle wheel, for steadying and holding the wheel, and the section and combination of the spring bands in connection with the revolving hollow tubes *t t*, substantially as set forth. 2nd. In a bicycle rest the combination of the socket S to the toothed wheels W, the application of the legs L to the said sockets, and the combinations of the rocks and wheels for raising or lowering the said legs, substantially as as set forth. 3rd. In a bicycle rest the application of the locking pin T, with the lock U, for locking and unlocking the action of the toothed racks, substantially as set forth.

No. 67,890. Whistle. *(Sifflet.)*

Garrett John Couchois, New York City, New York, U.S.A., 27th June, 1900; 6 years. (Filed 27th November, 1899.)

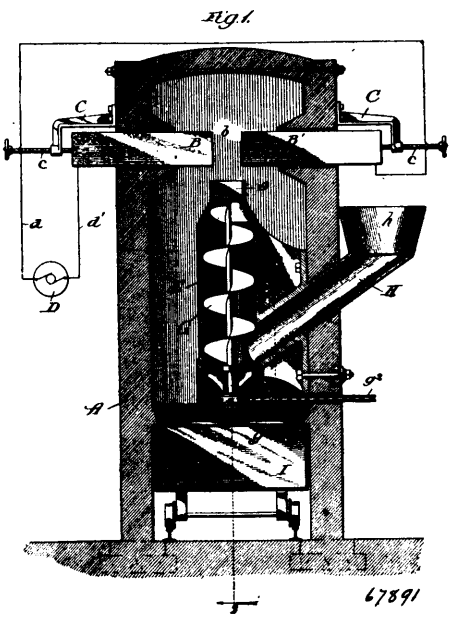
Claim.—1st. A whistle, comprising an air chamber adapted to form a continuation of the mouth cavity and a sound producing device communicating with the chamber and relatively arranged to act upon the enclosed air and provided with a tube through which an independent supply of air is maintained by the operator, as specified. 2nd. A whistle provided with an air chamber and a mouth piece through which communication is established with the mouth cavity of the operator, a sound producing device relatively

arranged to co-operate with the enclosed column of air in the chamber and mouth cavity and means for conducting an independent supply



of air maintained by the operator, to the sound producing device as specified.

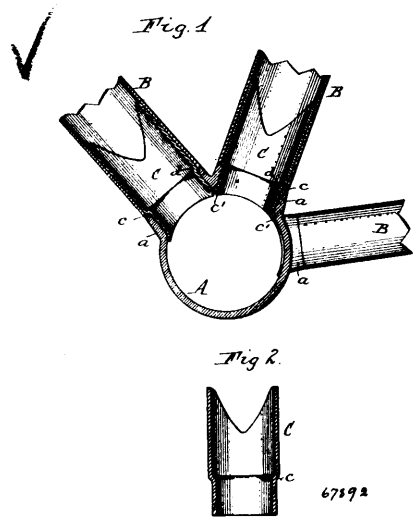
No. 67,891. Apparatus for Producing Calcium Carbide.
(*Appareil pour la production de carbure de calcium.*)



John Zimmerman and Isedore Sol Prenner, both of Chicago, Illinois, U.S.A., 27th June, 1900; 6 years. (Filed 20th March, 1899.)

Claim.—1st. In an apparatus for producing calcium carbide, the combination of a furnace, electrodes arranged therein so as to provide an electric arc, and mechanism for compressing a mixture of carbon and lime and feeding it into the arc, substantially as described. 2nd. In an apparatus for producing calcium carbide, the combination of a furnace, two electrodes extending through the side walls of the furnace so as to provide an electric arc therein, and mechanism for compressing a mixture of carbon and lime and feeding it into the arc from below, substantially as described. 3rd. In an apparatus for producing calcium carbide, the combination of a furnace, two electodes extending into the same and connected with a source of electric energy so as to provide an electric arc, and a feeding and compressing chamber provided with a discharge opening adjacent to and below and in line with the arcing space and of lesser diameter than the diameter of the chamber, and means for forcing a mixture of carbon and lime through the chamber and out of its discharge opening into the arc, substantially as described. 4th. In an apparatus for producing calcium carbide, the combination of a furnace, two electrodes extending through the walls of the furnace and connected with a source of electric energy to provide an electric arc, a feeding chamber provided with a discharge opening arranged adjacent to and below and in line with the arcing space and of less diameter than the diameter of the feeding chamber to compress the mixture as it is discharged, and a rotatable helical screw in the feeding chamber to feed the mixture of carbon and lime and force it into the arc, substantially as described. 5th. In an apparatus for producing calcium carbide, the combination of a furnace, two electrodes extending through the side walls of the furnace, so as to produce an electric arc, and endwise adjustable for the arcing space, a feeding chamber provided with a discharge opening of lesser diameter than the chamber to compress the mixture as it is charged, and a feed screw in the feeding chamber for feeding the mixture into the arc, substantially as described. 6th. In an apparatus for producing calcium carbide, the combination of a furnace, two electrodes extending through the side walls of the furnace and connected with a source of electric energy to provide an arc, a feeding chamber arranged directly under the arc and provided with a discharge opening of lesser diameter than the main portion of the chamber to compress the mixture as it is discharged, and a rotatable helical screw in the chamber of the same arranged to feed the mixture of carbon and lime and force it out through the discharge opening and into the arc, substantially as described. 7th. In an apparatus for producing calcium carbide, the combination of a furnace, two electrodes extending through the side walls of the furnace and connected with a source of electric energy to provide an electric arc, a feeding chamber arranged directly under the arc and provided with a discharge opening of lesser diameter than the main portion of the chamber to compress the mixture as it is discharged, a rotatable helical screw in the chamber of the same arranged to feed the mixture of carbon and lime and force it out through the discharge opening and into the arc, and a feed opening provided with an inclined channel or hopper to furnish the mixture constantly to the feeding chamber, substantially as described. 8th. In an apparatus for producing calcium carbide, the combination of a furnace, two electrodes extending through the side walls of the furnace and connected with a source of electric energy so as to produce an electric arc, screw mechanism for adjusting the electrodes and thereby regulating the size of the arc, a compressing feeding chamber arranged under the arc and provided with a discharge opening rectangular in shape and of smaller diameter than the diameter of the feeding chamber to compress the mixture as it is discharged, a helical screw arranged in the feeding chamber for feeding the material and forcing it into the arc, and a hopper connected with the feeding chamber for furnishing a continuous supply of carbide producing materials to the feeding chamber, substantially as described.

No. 67,892. Velocipede Frame. (*Cadre de vélocipède.*)

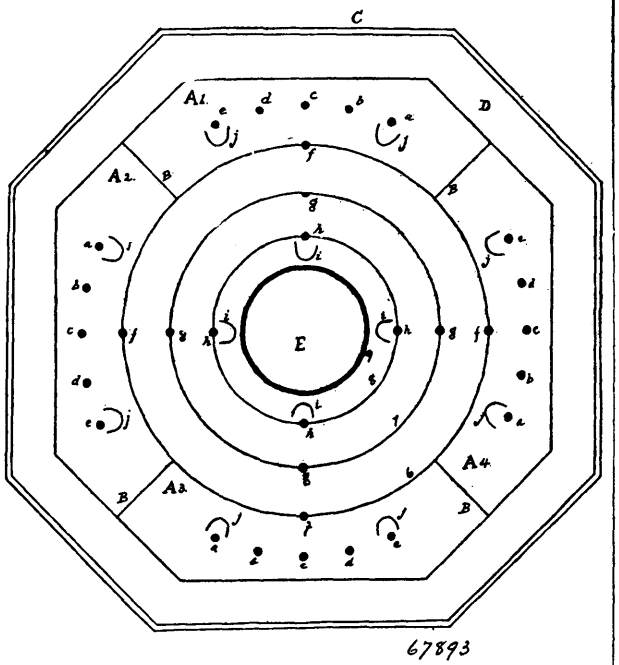


William Hugh Crosby, Buffalo, New York, U.S.A., 27th June, 1900; 6 years. (Filed 30th April, 1900.)

Claim.—1st. In a velocipede frame, the combination with two tubular members arranged at an angle to each other, one of said members being provided with a projecting nipple, of a thimble fitting into said nipple and having its inner end upset against the inner side of the last mentioned member and having an external shoulder which bears against the outer end of said nipple and is narrower than the thickness of the nipple, the other end of said frame member fitting over the projecting portion of said thimble and abutting at its inner end against the end of said nipple, sub-

stantially as set forth. 2nd. In a velocipede frame, the combination with a tubular member provided with a projecting collar or hollow nipple having a flat outer end, of a reinforcing thimble having a reduced inner portion fitting into said nipple and forming with the large outer portion of the thimble a flat shoulder which bears against the flat outer end of said nipple, the inner end of the thimble being upset against the inner side of said member, and a second tubular member fitting over the large projecting portion of said thimble and having a flat end which abuts against the flat outer end of said nipple, substantially as set forth.

No. 67,893. Game. (*Jeu.*)



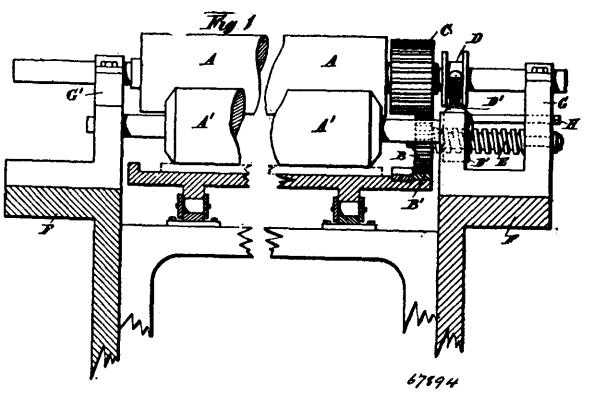
John Winthrop Doane, Truro, Nova Scotia, Canada, 27th June, 1900; 6 years. (Filed 26th June, 1899.)

Claim.—1st. In a game board having a depression around the outer portion of the same and a raised rim enclosing the entire board, a series of arches in each quarter section of the board perpendicularly fixed in the board adjacent to defined positions or bases painted or otherwise fixed on the surface of the board, on that side of the bases next the centre of the board, as and for the purpose specified. 2nd. In a game board having a depression around the outer portion of the same and a raised rim enclosing the entire board, an arch in each quarter section of the board perpendicularly fixed in the board between the centre of the board and a series of positions or bases painted or otherwise fixed on the surface of the board in a straight line C toward the centre of the board in progressive steps, as and for the purpose specified. 3rd. In the herein described game board, the impediment to cross playing from one quarter section of the board to the next adjoining quarter section, consisting of a groove cut in the board between the quarter sections of the same (as indicated by letter B) from the inner edge of the depression D inwardly in a straight line towards the centre of the board, adapted to trip a ball rolling over the surface of the board.

No. 67,894. Cylinder Printing Machine.
(*Machine cylindrique à imprimer.*)

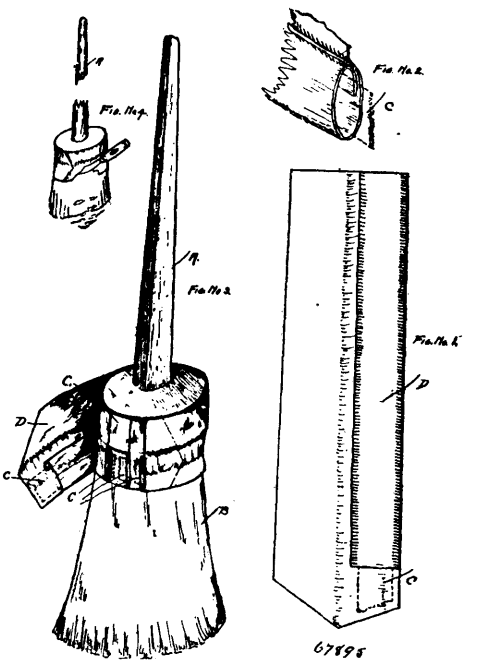
James Hunter, Clydeside Road, Byker, Newcastle-on-Tyne, Northumberland, and William Hunter, 23 Inkerman Street, Tees, Durham, England, 27th June, 1900; 6 years. (Filed 21st November, 1899.)

Claim.—1st. In a cylinder printing machine rider, A, broad faced toothed wheel C on shaft of rider gear wheel B on screw threaded shaft E, travelling worm block D^1 thereon, with arms in groove of disc D, acting as and in the manner and for the purpose specified. 2nd. In a cylinder printing machine the rack motioned pinion B on threaded shaft E carrying traversing block D^1 for



reciprocating of rider A in combination with rotary action by the gears B C, as specified.

No. 67,895. Paint Brush Bridle. (*Bride de pinceau.*)



David Moore, Chatham, Ontario, Canada, 27th June, 1900; 6 years. (Filed 13th October, 1899.)

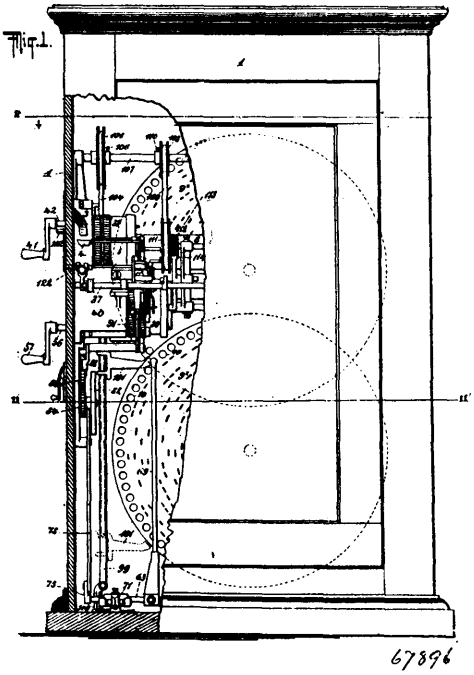
Claim.—1st. The adhesive band D, substantially as and for the purpose herein set forth. 2nd. The inserted metal band C^1, substantially as and for the purpose hereinbefore set forth. 3rd. The combination of the adhesive band or bridle D, the inserted metal strip C^1 with the branch A, B, C, substantially as and for the purposes hereinbefore set forth.

No. 67,896. Musical Instrument. (*Instrument de musique.*

Gustav Adolf Brachhausen, Rahway, New Jersey, U.S.A., 27th June, 1900; 6 years. (Filed 14th March, 1899.)

Claim.—1st. The combination of a musical instrument, separate note sheets for operating the same, means for conveying the note sheets to and from operative position, and a movable guide with which the note sheets are adapted to contact in their movement to and from the operative position for maintaining the sheets out of contact with the musical instrument while the said sheets are being fed to and from operative position. 2nd. The combination of a musical instrument, separate note sheets for operating the same, means for conveying the note sheets to and from operative position and a guide which partakes of the feed movement of the note sheet to and from operative position for maintaining the sheets out of contact with the musical instrument while said sheets are being fed to and from operative position. 3rd. The combination of a musical instrument, separate note sheets for operating the same, means for conveying the note sheets to and from operative position, means for

clamping a note sheet in the operative position, and a guide or shield with which the note sheets are adapted to contact in their

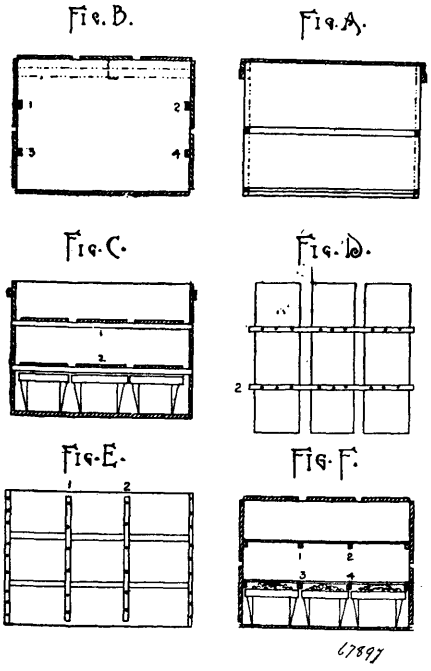


movement to and from the operative position, said guide or shield partaking of the lateral movement of a note sheet when it is being clamped in the operative position by the clamping means, whereby the note sheets are maintained out of contact with the musical instrument while said sheets are being fed to and from operative position. 4th. The combination of a musical instrument, separate note sheets for operating the same, means for conveying the note sheets to and from operative position, means for clamping a note sheet in the operative position and a spring pressed guide or shield which normally projects beyond the face of the musical instrument and with which the note sheets are adapted to contact in their movement to and from the operative position, said guide or shield partaking of the lateral movement of a note sheet when it is being clamped in the operative position by the clamping means, whereby the note sheets are maintained out of contact with the musical instrument while said sheets are being fed to and from operative position. 5th. The combination of a musical instrument, separate note sheets for operating the same, means for conveying the note sheets to and from operative position, means for maintaining the sheets out of contact with the musical instrument while said sheets are being fed to and from operative position, and mechanism for automatically moving said last named means independently of the movement of the note sheets. 6th. The combination of a musical instrument, separate note sheets for operating the same, means for conveying the note sheets to and from operative position, means for clamping a note sheet in the operative position, a movable guide or shield which normally maintains the note sheet out of contact with the musical instrument, but which is moved to allow such contact when the note sheet clamping means are operated to clamp the sheet in the operative position and mechanism for automatically moving said shield or guide independently of the movement of the note sheets. 7th. The combination of a musical instrument, separate note sheets for operating the same, means for conveying the note sheets to and from operative position, a movable automatically operated pivot for the note sheets and a movable guide or shield which normally maintains the note sheet out of contact with the musical instrument, but which is automatically moved to allow such contact when the pivot is projected into the operative position. 8th. The combination of a musical instrument, separate note sheets for operating the same, means for conveying the note sheets to and from operative position, means for clamping the note sheet in the operative position, a movable automatically operated pivot for the note sheets and a movable guide or shield which normally maintains a note sheet out of contact with the musical instrument, but which is automatically moved to allow such contact when the pivot is projected into the operative position and the note sheet clamping means are operated to clamp the note sheet in the operative position. 9th. In a music box, the combination of a reciprocating note sheet carriage, gear wheels for moving said carriage, means for operating said gear wheels and intermediate mechanism between said gear wheels and the carriage, whereby the carriage will be reciprocated in opposite directions by a rotation of the gear wheels. 10th. In a music box, the combination of a reciprocating note sheet carriage, gear wheels for moving said carriage, means for automatically operating said gear wheels and intermediate mechanism between said gear wheels and the carriage, whereby the carriage will be reciprocated in opposite directions by a rotation of the gear wheels. 11th. In a music box, the combination of a reciprocating note sheet carriage, gear wheels for moving said carriage, hand operated means for operating said gear wheels and intermediate mechanism between said gear wheels and the carriage, whereby the carriage will be reciprocated in opposite directions by a rotation of the gear wheels. 12th. In a music box, the combination of a reciprocating note sheet carriage, gear wheels for moving said carriage, a hand operated pointer connected to one of said gear wheels and intermediate mechanism between said gear wheels and the carriage whereby the carriage will be reciprocated in opposite directions by a rotation of the gear wheels. 13th. In a music box, the combination of a reciprocating note sheet carriage, gear wheels for moving said carriage, a hand operated pointer connected to one of said gear wheels, a scale with which said pointer co-operates, means for automatically operating said gear wheels and intermediate mechanism between said gear wheels and the carriage whereby the carriage will be reciprocated in opposite directions by a rotation of the gear wheels. 14th. In a music box, the combination of a note sheet carriage adapted to support a plurality of note sheets, gear wheels for moving said carriage, means for continuously revolving said gear wheels in one direction, an endless cam operated by said gear wheels and an operating lever operatively connected to said carriage and adapted to be operated by said endless cam. 15th. In a music box, the combination of a note sheet carriage adapted to support a plurality of note sheets, gear wheels for moving said carriage, means for automatically and continuously revolving said gear wheels in one direction, an endless cam operated by said gear wheels and an operating lever operatively connected to said carriage and adapted to be operated by said endless cam. 16th. In a music box, the combination of a note sheet carriage adapted to support a plurality of note sheets, gear wheels for moving said carriage, hand operated means for continuously revolving said gear wheels in one direction, an endles cam operated by said gear wheels and an operating lever operatively connected to said carriage and adapted to be operated by said endless cam. 17th. In a music box, the combination of a note sheet carriage adapted to support a plurality of note sheets, gear wheels for moving said carriage, a hand operated pointer connected to said gear wheels to continuously revolve the same in one direction, a scale with which said pointer co-operates, an endless cam operated by said gear wheels and an operating lever operatively connected to said carriage and adapted to be operated by said endless cam. 18th. The combination of a note sheet carriage, a gear wheel for moving said carriage, means for revolving said gear continuously in one direction, said gear wheel having as many teeth as there are spaces moved by the carriage during a single revolution of the gear. 19th. The combination of a note sheet carriage, a gear wheel for moving said carriage, means for revolving said gear continuously in one direction, intermediate mechanism between said gear wheel and the carriage, which mechanism is operatively connected to said parts, said gear wheel having as many teeth as there are spaces moved by the carriage during a single revolution of the gear. 20th. The combination of a reciprocating note sheet carriage, a gear wheel adapted to reciprocate said carriage in opposite directions by a rotation of said gear in one direction, means for moving said gear, said gear wheel having as many teeth as there are spaces moved by the carriage during a single revolution of the gear. 21st. The combination of a reciprocating note sheet carriage, a gear wheel adapted to reciprocate said carriage in opposite directions by a rotation of said gear in one direction, a hand operated pointer for rotating said gear, a scale with which said pointer co-operates, said gear wheel having as many teeth as there are spaces moved by the carriage during a single revolution of the gear. 22nd. The combination of a note sheet carriage, a gear wheel for moving said carriage, means for automatically and intermittently revolving said gear continuously in one direction, said gear wheel having as many teeth as there are spaces moved by the carriage during a single revolution of the gear. 23rd. The combination of a reciprocating note sheet carriage, a gear wheel adapted to reciprocate said carriage in opposite directions by a rotation of said gear in one direction, means for automatically and intermittently moving said gear, a hand operated pointer for rotating said gear, a scale with which said pointer co-operates, said gear wheel having as many teeth as there are spaces moved by the carriage during a single revolution of the gear. 24th. In a music box, the combination of a reciprocating note sheet carriage adapted to support a plurality of note sheets, a gear wheel adapted to be continuously revolved in one direction to move said carriage, the said gear wheel having as many teeth as there are spaces moved by the carriage during a single revolution of said gear, means for revolving said gear, an endless cam operated by said gear wheel, and an operating lever operatively connected to said carriage and adapted to be operated by the endless cam. 25th. In a music box, the combination of a reciprocating note sheet carriage adapted to support a plurality of note sheets, a gear wheel adapted to be continuously revolved in one direction to move said carriage, said gear wheel having as many teeth as there are spaces moved by the carriage during a single revolution of said gear, means for automatically and intermittently moving said gear, an endless cam operated by said gear wheel and an operating lever operatively connected to said carriage and adapted to be operated by the endless cam. 26th. In a music box, the combination of a reciprocating note sheet carriage

adapted to support a plurality of note sheets, a gear wheel adapted to be continuously revolved in one direction to move said carriage, said gear wheel having as many teeth as there are spaces moved by the carriage during a single revolution of said gear, a hand operated pointer connected to said gear, a scale co-operating with said pointer, an endless cam operated by said gear wheel and an operating lever operatively connected to said carriage and adapted to be operated by the endless cam. 27th. In a music box, the combination of a reciprocating note sheet carriage adapted to support a plurality of note sheets, a gear wheel adapted to be continuously revolved in one direction to move said carriage, said gear wheel having as many teeth as there are spaces moved by the carriage during a single revolution of said gear, means for automatically and intermittently moving said gear, a hand operated pointer connected to said gear, a scale co-operating with said pointer, an endless cam operated by said gear wheel and an operating lever operatively connected to said carriage and adapted to be operated by the endless cam. 28th. In a music box, the combination of a reciprocating note sheet carriage adapted to support a plurality of note sheets and adapted to be reciprocated in opposite directions, intermeshing gear wheels adapted to be revolved in one direction to move said carriage, one of said gear wheels being a setting gear and having as many teeth as there are spaces moved by the carriage during a single revolution of said setting gear, means for automatically and intermittently revolving said setting gear, a revoluble hand operated pointer connected to said setting gear, a scale co operating with said pointer, an endless cam connected to one of said gear wheels, and an operating lever operatively connected to said carriage and adapted to be operated by the endless cam. 29th. In a music box, the combination of a note sheet carriage, adapted to support a plurality of note sheets, a gear wheel adapted to be continuously revolved in one direction to move said carriage, and a vibrating pawl for intermittently rotating said gear wheel, the teeth on said gear wheel being spaced apart so as to form peripheral bearing surfaces between them to allow the pawl to move a portion of its feed stroke independently of the gear wheel. 30th. In a music box, the combination of a note sheet carriage adapted to support a plurality of note sheets, a gear wheel adapted to be continuously revolved in one direction to move said carriage, a vibrating pawl for rotating said gear wheel and means for automatically vibrating said pawl, there being a space between the bases of adjacent teeth on said gear wheel so that the pawl is capable of moving a portion of its feed stroke independently of the gear wheel. 31st. In a music box, the combination of a note sheet carriage adapted to support a plurality of note sheets, a gear wheel adapted to be continuously revolved in one direction to move said carriage, a pointer connected to said gear wheel, a scale co-operating with said pointer, a vibrating pawl for intermittently rotating said gear wheel and means for automatically vibrating said pawl, the teeth on said gear wheel being spaced apart at their bases, so that the pawl is capable of moving a portion of its feed stroke independently of the gear wheel. 32nd. The combination of a note sheet carriage, a setting gear wheel for moving said carriage, a vibrating pawl for intermittently rotating said setting gear wheel, the teeth on said setting gear wheel being spaced apart so that the pawl is capable of moving a portion of its stroke independently of the gear wheel and a second gear wheel meshing with said setting gear, two teeth on the said second-named gear being adapted to engage between every two teeth on the setting gear. 33rd. The combination of a note sheet carriage, a gear wheel adapted to be continuously revolved in one direction to move said carriage, and a vibrating pawl for intermittently rotating said gear wheel, the said gear wheel having as many teeth as there are spaces moved by the carriage during a single revolution of said gear, and the said teeth being spaced apart so that the pawl is capable of moving a portion of its feed stroke independently of the gear wheel. 34th. The combination of a note sheet carriage, a gear wheel adapted to be continuously revolved in one direction to move said carriage, a vibrating pawl for intermittently rotating said gear wheel, and means for automatically vibrating said pawl, the said gear wheel having as many teeth as there are spaces moved by the carriage during a single revolution of said gear, and said teeth being spaced apart so that the pawl is capable of moving a portion of its feed stroke independently of the gear wheel. 35th. The combination of a note sheet carriage, a gear wheel adapted to be continuously revolved in one direction to move said carriage, a vibrating pawl for intermittently rotating said gear wheel, the said gear wheel having as many teeth as there are spaces move by the carriage during a single revolution of said gear, and said teeth being spaced apart so that the pawl is capable of moving a portion of its feed stroke independently of the gear wheel, and hand operated means for operating said gear wheel independently of the vibrating pawl. 36th. The combination of a note sheet carriage, a gear wheel adapted to be continuously revolved in one direction to move said carriage, a vibrating pawl for intermittently rotating said gear wheel, the said gear wheel having as many teeth as there are spaces moved by the carriage during a single revolution of said gear, and the said teeth being spaced apart so that the pawl is capable of moving a portion of its feed stroke independently of the gear wheel, a hand operated pointer connected to and adapted to operate said gear wheel independently of the vibrating pawl, and a scale co-operating with said pointer. 37th. In a music box, the combination of a note sheet carriage, a gear wheel adapted to be continuously revolved in one direction to move said carriage, a vibrating pawl for intermittently rotating said gear wheel, the said gear wheel having as many teeth as there are spaces moved by the carriage during a single revolution of said gear, and the said teeth being spaced apart so that the pawl is capable of moving a portion of its feed stroke independently of the gear wheel, an endless cam operated by said gear wheel, and an operating lever operatively connected to the carriage and adapted to be operated by the endless cam. 38th. The combination of a note sheet carriage, intermeshing gear wheels adapted to be continuously revolved in one direction to move said carriage, a feeding pawl co-operating with one of said gears, and a locking nose adapted to be positively moved into engagement with another of said intermeshing gears when the pawl has reached the end of its feed movement. 39th. The combination of a note sheet carriage, intermeshing gear wheels for moving said carriage, a feeding pawl carried by a vibrating arm and adapted to co-operate with one of said gears, and a fixed locking nose carried by said vibrating arm and adapted to be vibrated into engagement with another of said gears when the pawl has reached the end of its feed movement. 40th. The combination of a note sheet carriage, intermeshing gear wheels for moving said carriage, a feeding pawl carried by a vibrating arm and adapted to co-operate with one of said gears, which is a setting gear, hand operated means for moving said setting gear independently of the movement imparted thereto by the pawl, and a locking nose carried by said vibrating arm and adapted to be vibrated into engagement with another of said gears when the pawl has reached the end of its feed movement. 41st. The combination of a note sheet carriage, intermediate gear wheels for moving said carriage, a feeding pawl carried by a vibrating arm and adapted to co-operate with one of said gears which is a setting gear, a hand operated pointer for moving said setting gear independently of the movement imparted thereto by the pawl, a scale co operating with said pointer, means for automatically vibrating said arm, and a fixed locking nose carried by said vibrating arm and adapted to be vibrated into engagement with another of said gears when the pawl has reached the end of its feed movement. 42nd. The combination of a note sheet carriage, intermeshing gear wheels for moving said carriage, a vibrating feeding pawl co-operating with one of said gears which is a setting gear that has its teeth spaced apart so that the pawl is capable of moving a portion of its feed stroke independently of the setting gear, and a locking nose that is adapted to be vibrated into engagement with another of said gears when the pawl has reached the end of its feed movement. 43rd. The combination of a note sheet carriage, intermeshing gear wheels for moving said carriage, a vibrating feed pawl co-operating with one of said gears, which is a setting gear that has its teeth spaced apart so that the pawl is capable of moving a portion of it feed stroke independently of the setting gear, hand operated means for moving said setting gear independently of the movement imparted thereto by the pawl, and a locking nose that is adapted to be vibrated into engagement with one of said gears when the pawl has reached the end of its feed movement. 44th. The combination of a note sheet carriage, intermeshing gear wheels for moving said carriage, a vibrating feeding pawl co-operating with one of said gears, which is a setting gear that has its teeth spaced apart so that the pawl is capable of moving a portion of its feed stroke independently of the setting gear, a hand operated pointer for moving said setting gear independently of the movement imparted thereto by the pawl, a scale co-operating with said pointer and a locking nose that is adapted to be positively moved into engagement with one of said gears when the pawl has reached the end of its feed movement. 45th. The combination of a note sheet carriage, intermeshing gear wheels for moving said carriage, a vibrating feeding pawl carried by a vibrating arm and adapted to co-operate with one of said gears, which is a setting gear that has its teeth spaced apart so that the pawl is capable of moving a portion of its strokes independently of the setting gear, a hand operated pointer for moving said setting gear independently of the movement imparted thereto by the pawl, a scale co-operating with said pointer, means for automatically vibrating said arm and a fixed locking nose carried by said vibrating arm and adapted to be vibrated into engagement with one of said gears when the pawl has reached the end of its feed movement. 46th. The combination of a note sheet carriage, intermeshing gear wheels for moving said carriage, an endless cam operated by said gear wheels, an operating lever operatively connected to said carriage and adapted to be operated by the endless cam, a vibrating feeding pawl co-operating with one of said gears, which is a setting gear that has its teeth spaced apart so that the pawl is capable of moving a portion of its stroke independently of the setting gear, and a locking nose that is adapted to be vibrated into engagement with one of said gears when the pawl has reached the end of its feed movement. 47th. The combination of a note sheet carriage, intermeshing gear wheels for moving said carriage, an endless cam operated by said gear wheels, an operating lever operatively connected to said carriage and adapted to be operated by the endless cam, a vibrating feeding pawl co-operating with one of said gears, which is a setting gear that has its teeth spaced apart, so that the pawl is capable of moving a portion of its strokes independently of the setting gear, hand operated means for moving said setting gear independently of the movement imparted thereto by the pawl, and a locking nose that is adapted to be vibrated into engagement with one of said gears when the pawl has reached the end of its movement. 48th. The combination of a note sheet carriage, intermeshing gear wheels

for moving said carriage, a vibrating feeding pawl co-operating with one of said gears, which is a setting gear that has as many teeth as there are spaces moved by the carriage during a single revolution of said gear, the said teeth being spaced apart so that the pawl is capable of moving a portion of its feed stroke independently of the setting gear, and a locking nose that is adapted to be positively moved into engagement with one of said gears when the pawl has reached the end of its feed movement. 49th. The combination of a note sheet carriage, intermeshing gear wheels for moving said carriage, a vibrating feeding pawl co-operating with one of said gears, which is a setting gear that has as many teeth as there are spaces moved by the carriage during a single revolution of said gear, the said teeth being spaced apart so that the pawl is capable of moving a portion of its feed stroke independently of the setting gear, hand operated means for moving said setting gear independently of the movement imparted thereto by the pawl, and a rigid locking nose that is adapted to be vibrated into engagement with one of said gears when the pawl has reached the end of its feed movement. 50th. The combination of a note sheet carriage, intermeshing gear wheel for moving said carriage, a vibrating feeding pawl co-operating with one of said gears, which is a setting gear that has as many teeth as there are spaces moved by the carriage during a single revolution of said gear, the said teeth being spaced apart so that the pawl is capable of moving a portion of its feed stroke independently of the setting gear, a hand operated pointer for moving said setting gear independently of the movement imparted thereto by the pawl, a scale co-operating with said pointer, and a locking nose that is adapted to be vibrated into engagement with one of said gears when the pawl has reached the end of its feed movement. 51st. The combination of a note sheet carriage, comprising side bars carrying rollers, cross bars adjustably and removably connected to said side bars, spacing rods which are carried by rods that are removably connected to and adjustably supported upon said cross bars, tracks upon which said carriage is supported, means for preventing the carriage from being displaced from the tracks and means for moving the carriage. 52nd. In a musical instrument, the combination of a main motor, an axuiliary motor, intermediate controlling mechanism between the said main and auxiliary motors, which intermediate mechanism is operated by the movement of the motors themselves to throw either of said motors into operation when the other is thrown out of operation, and means for rendering the parts of the intermediate mechanism ineffective to release the auxiliary motor. 53rd. In a musical instrument, the combination of a main motor, an auxiliary motor, intermediate controlling mechanism between the said main and axuiliary motors, which intermediate mechanism is operated by the movement of the motors themselves to throw either of said motors into operation when the other is thrown out of operation, and hand operated means for rendering the parts of the intermediate mechanism ineffective to release the auxiliary motor. 54th. In a musical instrument, the combination of a main motor, an auxiliary motor, intermediate controlling mechanism between the said main and auxiliary motors, which intermediate mechanism is operated by the movement of the motors themselves to throw either of said motors into operation when the other is thrown out of operation, controlling means for rendering the parts of the intermediate mechanism ineffective to release the auxiliary motor, a hand operating arm operatively connected to said controlling means and a scale co-operating with said operating arm. 55th. In a musical instrument, the combination of a main motor, an auxiliary motor, intermediate controlling mechanism between the said main and auxiliary motors, which intermediate mechanism is operated by the movement of the motors themselves to throw either of said motors into operation when the other is thrown out of operation, controlling means for rendering the parts of the intermediate mechanism ineffective to release the auxiliary motor, and means for releasing the auxiliary drum to give an initial movement thereto when the controlling means are operated. 56th. In a musical instrument, the combination of a main motor, an auxiliary motor, intermediate controlling mechanism between the said main and auxiliary motors, which intermediate mechanism is operated by the movement of the motors themselves to throw either of said motors into operation when the other is thrown out of operation, controlling means for rendering the parts of the intermediate mechanism ineffective to release the auxiliary motor, and means connected to the said controlling means for simultaneously releasing the auxiliary drum to give an initial movement thereto when the controlling means are operated to render the intermediate mechanism ineffective. 57th. In a musical instrument, the combination of a main motor, an auxiliary motor, intermediate controlling mechanism between the said main and auxiliary motors, which intermediate mechanism is operated by the movement of the motors themselves to throw either of said motors into operation when the other is thrown out of operation, a hand operated rock shaft and a catch adapted to be operated by said rock shaft to engage the controlling levers of said intermediate mechanism and to prevent them from being operated to release the auxiliary drum. 58th. In a musical instrument, the combination of a main driving motor, an auxiliary driving motor, intermediate controlling mechanism between the said main and auxiliary driving motors, which intermediate mechanism is operated by the movement of the motors themselves to throw either of said motors into operation when the other is thrown out of operation, a hand operated rock shaft, a catch adapted to be operated by said rock shaft to engage the controlling levers of said intermediate mechanism and to prevent them from being operated to release the auxiliary drum, a starting lever which is adapted to operate independently of the intermediate mechanism, and means for operating said starting lever when the rock shaft is moved, to give an initial movement to the auxiliary drum. 59th. The combination of a main motor, an auxiliary motor, intermediate mechanism between said main and auxiliary motors, which intermediate mechanism comprises a controlling lever having an arm which is adapted to project into the path of a pin or abutment on the main motor and a second arm which is adapted to project into the path of a pin or abutment on the auxiliary motor, a stop lever for the main motor, a stop lever for the auxiliary motor, and means connected to the controlling lever for throwing one of the stop levers into operation and the other out of operation when the controlling lever is shifted. 60th. The combination of a main motor, an auxiliary motor, intermediate mechanism between said main and auxiliary motors, which intermediate mechanism comprises a controlling lever having an arm which is adapted to project into the path of a pin or abutment on the main motor, and a second arm which is adapted to project into the path of a pin or abutment on the auxiliary motor, a stop lever for the main motor, a stop lever for the auxiliary motor, means connected to the controlling lever for throwing one of the stop levers into operation and the other out of operation when the controlling lever is shifted, and hand controlled means for preventing the stop levers from being moved when the controlling lever is shifted. 61st. The combination of a main motor, an auxiliary motor, intermediate mechanism between said main and auxiliary motors, which intermediate mechanism comprises a controlling lever having an arm which is adapted to project into the path of a pin or abutment on the main motor, and a second arm which is adapted to project into the path of a pin or abutment on the auxiliary motor, a stop lever for the main motor, a stop lever for the auxiliary motor, means connected to the controlling lever for throwing one of the stop levers into operation and the other out of operation when either arm of the controlling lever is operated upon to cause the said lever to be shifted, hand controlled means for preventing the stop levers from being moved when the controlling lever is shifted, and means for permitting the controlling lever to be shifted without transmitting movement to said stop levers. 62nd. The combination of a sound producing device, separate note sheets for operating the same, means for conveying the note sheets to and from operative position, and means under control of the operator for maintaining a note sheet in the operative position during one or more continuous revolutions of the note sheet, as described. 63rd. The combination of a sound producing device, separate note sheets for operating the same, means for conveying the note sheets to and from operative position, and hand operated means for causing a note sheet to make one or more continuous revolutions as desired. 64th. The combination of a sound producing device, separate note sheets for operating the same, means for conveying the note sheets to and from operative position, and hand operated means for controlling the movement of a note sheet from operative position, whereby the sheet may be caused to make one or more revolutions before being conveyed from the operative position. 65th. The combination of a sound producing device, separate note sheets for operating the same, means for conveying the note sheets to and from operative position, mechanism for operating the note sheets, hand operated starting mechanism for causing the conveying means and the note sheet operating mechanism to be set in operation to convey the note sheet to the operative position and to automatically throw the conveying means out of operation until such time as the hand operated mechanism is again moved. 66th. The combination of a sound producing device, separate note sheets for operating the same, means for conveying the note sheets to and from operative position, mechanism for operating the note sheets and hand operated starting mechanism for causing the conveying means and note sheet operating mechanism to be set in operation to convey the note sheet to the operative position and to automatically throw the conveying means out of operation until such time as the hand operated mechanism is moved back to the initial position when the note sheet operating mechanism is automatically stopped and the note sheet conveying means are automatically released. 67th. In a musical instrument, the combination of a main motor, an auxiliary motor, intermediate controlling mechanism between the said main and auxiliary motors, which intermediate mechanism is operated by the movement of the motors themselves to throw either of said motors into operation when the other is thrown out of operation, and hand operated means for controlling the action of the intermediate controlling mechanism so far as it relates to automatically releasing the auxiliary motor to convey the note sheet from the operative position.

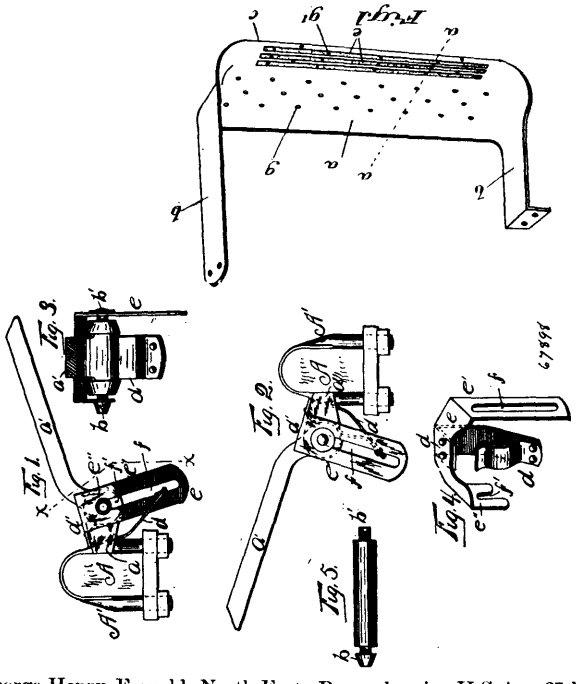
No. 67,897. Fruit Crate. *(Boîte à fruits.)*



William Talbot Glover, Burlington, Ontario, Canada, 27th June, 1900; 6 years. (Filed 3rd October, 1899)

Claim.—The combination made up by the adjustment, as above indicated, of the side bars or cleats, the dividers, and the bars or cleats on the under side of the dividers, and with respect to the top course or layer, the bars or cleats on the under side of the cover.

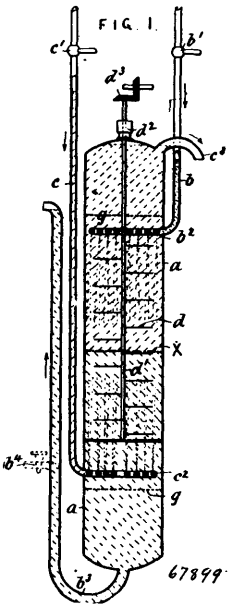
No. 67,898. Thill Coupling. *(Armon de limonière.)*



George Henry Fernald, North East, Pennsylvania, U.S.A., 27th June, 1900; 6 years. (Filed 30th April, 1900.)

Claim.—1st. A quick shift anti-rattler thill coupling comprising a V-shaped spring having a bracket secured at substantially right angles thereto, said bracket having downwardly extending arms, one provided with a closed slotway and the other provided with an open slotway. 2nd. A quick shift anti-rattler thill coupling comprising a V-shaped spring having a bracket secured thereto at substantially right angles, and having downwardly extending arms, one of which is longer than the other, and one provided with a closed slotway, and the other an open slotway. 3rd. In a quick shift thill coupling, a bracket having downwardly extending arms, one of which has a closed slotway, and a bolt mounted in said closed slotway. 4th. A quick shift thill coupling comprising a bracket having downwardly extending arms, one of which is provided with a closed slotway and the other with an open slotway, and a bolt having annular recesses in each end, with the said slotways adapted to engage with the recesses in said bolt.

No. 67,899. Apparatus for Separating from Liquids Chemical Products. *(Appareil pour separer des des liquides les produits chimiques.)*

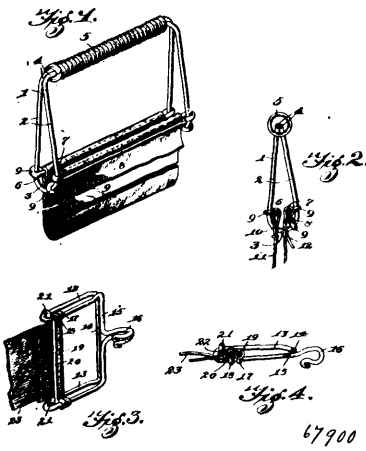


Louis Charles Reese, London, England, 27th June, 1900; 6 years. (Filed 30th May, 1899.)

Claim.—1st. An upright chamber adapted at its upper end with an outler pipe for the lighter liquid, at its lower end with an outlet pipe for the heavier liquid, and between these points (at which the treated liquid and the treating liquid together with such matters as it has disassociated from the treated liquid leave the chamber,) with inlet pipes for the liquid to be treated and for the treating liquid ending within the chamber in distributors for finely dispersing the liquids, the inlet pipe of the heavier liquid being higher than that of the lighter liquid, whereby the chamber is divided into three zones, namely, a central zone between the inlet pipes and in which each liquid passes through the other and is in turn passed through by the other, and two outer zones in which the liquids again separate from each other after such treatment, namely, an upper zone between the inlet of the heavier liquid and the outlet of the lighter liquid and in which minute parts of the heavier liquid separate from the outflowing lighter liquid, and a lower zone between the inlet of the lighter liquid and the outlet of the heavier liquid and in which minute parts of the lighter liquid separate from the outflowing heavier liquid, as set forth. 2nd. In combination, an upright chamber adapted at its upper end with an outlet pipe for the lighter liquid, at its lower end with an outlet pipe for the heavier liquid, and between these points with an upper inlet pipe for the heavier liquid and a lower inlet pipe for the lighter liquid, such inlet pipe extending within the chamber in distributors for finely dispersing the liquids, and divided by such pipes into a central zone between the inlet pipes and in which each liquid passes through the other and is in turn passed through by the other, and two outer zones respectively between the inlet pipe of the one liquid and the outlet pipe of the other liquid and in which the liquids separate after the treatment, and an agitating device arranged within the central zone for still more effectively intermixing the liquids, as set forth. 3rd. In combination, an upright chamber adapted at its upper end with an outlet pipe for the lighter liquid, at its lower end with an outlet pipe for the heavier liquid, and between these points with an upper inlet pipe for the lighter liquid, such inlet pipes ending within the chamber in distributors for finely dispersing the liquids, and divided by such pipes into a central zone between the inlet pipes and in which each liquid passes through the other and is in turn passed through by the other, and two outer zones respectively between the inlet pipe of the one liquid and the outlet pipe of the other liquid and in which the liquids separate after the treatment, and perforated diaphragms arranged within the outer zones for facilitating the separation of the liquids, as set forth. 4th. In combination, an upright chamber adapted at its upper end with an outlet pipe for the lighter liquid, at its lower end with an

outlet pipe for the heaver liquid, and between these points with an upper inlet pipe for the heavier liquid and a lower inlet pipe for the lighter liquid such inlet pipes ending within the chamber in distributors for finely dispersing the liquids, and divided by such pipes into a central zone between the inlet pipes and in which each liquid passes through the other and is in turn passed through by the other, and two outer zones respectively between the inlet pipe of the one liquid and the outlet pipe of the other liquid and in which the liquids separate after the treatment, an agitating device arranged within the central zone, and separating diaphragms arranged within the outer zones, as set forth. 5th. An upright chamber adapted at its upper end with an outlet pipe for the lighter liquid, at its lower end with an outlet pipe for the heavier liquid, and between these points at which the treated liquid and the treating liquid together with such matters as it has disassociated from the treated liquid leave the chamber, with inlet pipes for the liquid to be treated and for the treating liquid ending within the chamber in distributors for finely dispersing the liquids, the inlet pipe of the heavier liquid being higher than that of the lighter liquid, whereby the chamber is divided into three zones, namely, a central zone between the inlet pipes, and two outer separating zones, namely, an upper zone between the inlet of the heavier liquid and the outlet of the lighter liquid for the separation from the outflowing lighter liquid of minute parts of the heavier liquid, and a lower zone between the inlet of the lighter liquid and the outlet of the heavier liquid for the separation from the outflowing heavier liquid of minute parts of the lighter liquid, the outlet pipe of the heavier liquid having its overflow level so arranged as to cause the column of liquid within it above the level of the chamber bottom to equilibrate the column of the heavier and lighter liquids within the chamber between the chamber bottom and the overflow level of the lighter liquid, so that the liquid to be treated and the treating liquid will be maintained in the chamber in superposed relation in respect to the plane in which they meet within the central zone, and each of such liquids, as supplied, will be caused, within such zone, to pass, in a minutely divided condition, through the body of the other in an opposite direction to the travel of the latter, and to be, in turn, when re-collected in bulk, in like manner, passed through by the other liquid in a minutely divided condition, and the liquid outflowing at each end, will be caused, within the outer zone at such end and before escaping from the chamber, to separate from the other liquid, as set forth. 6th. An upright chamber adapted at its upper end with an outlet pipe for the lighter liquid, at its lower end with an outlet pipe for the heavier liquid, and between these points with an upper inlet pipe for the heavier liquid and a lower inlet pipe for the lighter liquid such inlet pipes ending within the chamber in distributors for finely dispersing the liquids, and divided by such pipes into a central treating zone between the inlet pipes and two outer seperating zones, respectively between the inlet pipe of the one liquid and the outlet pipe of the other liquid, the outlet pipe of the heavier liquid being adapted with means of determining the quantity of the heavier liquid leaving the chamber in agreement with that entering the same, so that the respective liquids will be maintained In the chamber in superposed relation in respect to the plane in which they meet within the central zone, and each thereof as supplied, will be caused, within such zone, to pass, in a minutely divided condition, through the body of the other, and to be, in turn, when re-collected in bulk, in like manner, passed through by the other liquid in a minutely divided condition, and the liquid outflowing at each end, will be caused, within the outer zone at such end and before escaping from the chamber, to separate from the other liquid, as set forth. 7th. The combination, of a series of upright chambers each adapted at its upper end with an outlet pipe for the lighter liquid, at its lower end with an outlet pipe for the heavier liquid, and between these points with an upper inlet pipe for the heavier liquid and a lower inlet pipe for the lighter liquid such inlet pipes ending within the chamber in distributors for finely dispersing the liquids, and divided by such pipes into a central treating zone between the inlet pipes, and two outer separating zones, respectively between the inlet pipe of the one liquid and the outlet pipe of the other liquid, the outlet pipe of the heavier liquid having its overflow level so arranged as to cause the column of liquid within it above the level of the chamber bottom to equilibrate the column of the heavier and lighter liquids within the chamber between the chamber bottom and the overflow level of the lighter liquid, so that the respective liquids will be maintained in the chamber in superposed relation in respect to the plane in which they meet within the central zone, and each thereof, as supplied, will be caused, within such zone, to pass, in a minutely divided condition, through the body of the other, and to be, in turn, when re-collected in bulk, in like manner, passed through by the other liquid in a minutely divided condition, and the liquid outflowing at each end, will be caused, within the outer zone at such end and before escaping from the chamber, to separate from the other liquid, and each of the pipes connecting the chambers having at its topmost point a branch pipe open to the air whereby the relative elevations of the respective chambers are determined according to the respective gravities of the liquids to be used in the apparatus and each chamber is adapted to act as an independent chamber, as set forth. 8th. In the extraction or separation from liquid of chemical products or matters dissolved or finely divided in suspension therein by liquid of different specific gravity than and non-miscible to a homogeneous liquid with the liquid to be treated and suitable to the obtainment of the desired result, the improved method of treatment consisting in automatically maintaining the liquid to be treated and the treating liquid, in a chamber wherein they are treated in superposed relation in respect to a plane, in which they meet, situate in the zone of the chamber intermediate of the inlets of the respective liquids, and in passing each of such liquids, within such zone, in a minutely divided condition, through the body of the other in an opposite direction to the travel of the latter, and causing it, in turn, when re-collected in bulk, to be, in like manner, passed through, within such zone, by the other liquid in a minutely divided condition, and in separating the liquid outflowing at each end of the chamber from the other liquid within the chamber within a zone at the end of the chamber situate between the inlet of said other liquid and the outlet of the outflowing liquid, as set forth.

No. 67,900. Buckle. *(Boucle.)*



George A. DeLong and Ellen M. DeLong, both of Carterville, Illinois, U.S.A., 27th June, 1900; 6 years. (Filed 9th June, 1900.)

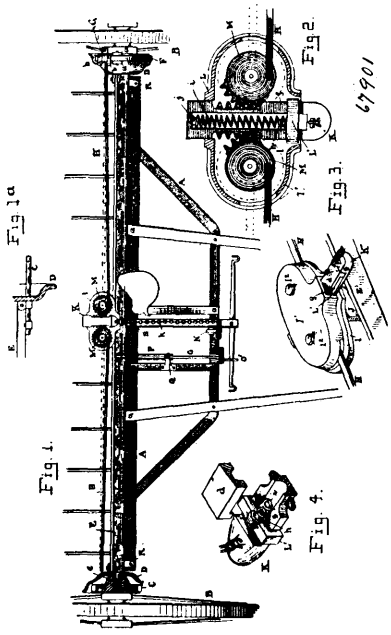
Claim.—1st. In an attaching device or buckle, comprising a support and a plurality of loosely mounted bars having sliding movement thereon for clamping the extremity of a belt, band or analogous device. 2nd. In an attaching device or buckle, having opposite side loops, with a plurality of loosely mounted bars having sliding movement thereon, to adjustably receive the extremity of a belt, band or analogous device. 3rd. An attaching device or buckle, comprising a support having an articulating member, and a plurality of loosely mounted bars having sliding movement on the said support for engagement with a band, strap or belt. 4th. An attaching device for a buckle, having a support and a plurality of loosely mounted bars having sliding movement on the said support, one of which is adapted to receive the extremity of a band or similar device therearound, and an adjacent one clamping against the said attached extremity. 5th. An attaching device or buckle, having a support provided with loops, and a plurality of loosely mounted bars having their terminals engaging opposite portions of the said loops in part, and a remaining bar between the others.

No. 67,901. Hay Rake. *(Rateau à foin.)*

The Acme Harvester Company, assignee of Henry Green, all of Pekin, Illinois, U.S.A., 27th June, 1900; 6 years. (Filed 2nd June, 1900.)

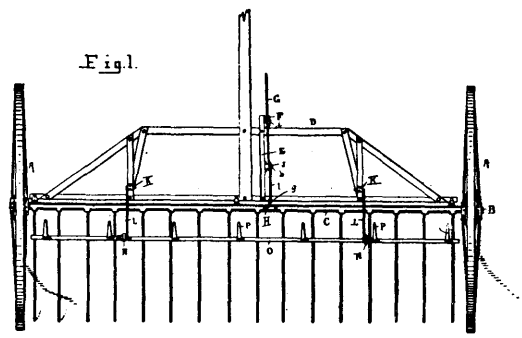
Claim.—1st. In a hay rake the usual carrying wheels therefor, ratchet wheels secured to such carrying wheels, a pawl pivoted above each ratchet, a rod parallel to the pivot of the pawl and means whereby said rod is made to bear down upon the pawl when moved in the direction of its length, substantially as and for the purposes set forth and described. 2nd. In a hay rake of the character described, carrying wheels therefor, a ratchet wheel secured to each wheel, a pivotal pawl adapted to engage the ratchet, a rod or bar above the pawl arranged to descend upon the same, and a link carrying said rod in ies swinging movements, substantially as set forth. 3rd. In a hay rake of the character described, the rake frame, the rake head, shields secured on said rake head, a ratchet wheel within each shield, a pawl pivotally attached to each shield for engaging the ratchet wheel, a pivotal hanger at right angles to the pawl, a bar or rod also at right angles to the pawl, pivoted at one end to the hanger, and passing between said hanger, and pawl, and means for moving the rod in the direction of its length to operate the pawl, substantially as described. 4th. In a hay rake of the character described, a ratchet wheel secured to the carrying wheel, a pivotal pawl engaging the ratchet wheel, a hanger pivotally supported above and at right angles to the pawl behind its point of support, a rod also at right angles to the pawl pivotally hung at one end from said hanger and means at the opposite end for moving it in the direction of its length, for the purposes set forth

and described. 5th. In a hay rake of the character described, the rake frame, the rake head having pivotal connection therewith, a



shaft at each end of the rake head, a carrying wheel mounted on each shaft, a ratchet wheel secured to each wheel, shields, or supports secured to the rake head, pawls pivoted on the shields for engaging the ratchets, links or hangers pivoted on the shields at right angles to the pawls, rods also at right angles to the pawls, attached to the hanger, and means for imparting movement to said rods whereby the ends thereof connected to the hanger are raised or depressed to release or raise the pawls, for the purposes set forth. 6th. In a hay rake of the character described, the rake frame, the rake head having pivotal connection therewith, a shaft at each end of the rake head, a carrying wheel mounted on each shaft, a ratchet wheel secured to each wheel, shields, or supports secured to the rake head, pawls pivoted on the shields for engaging the ratchets, pivoted hangers on the shields at right angles to the pawls, rods also at right angles to the pawls attached to the hangers and passing between said hangers and pawls, means for imparting movement to said rods whereby the ends thereof connected to the said hangers are raised or depressed, consisting of a platform or support secured to the rake head, a rack bar thereon, a pinion at each side of such bar, each having the free end of one of the rods, or bars attached thereto and means for giving the rack bar longitudinal movement, for the purposes set forth. 7th. In a hay rake of the character described, the rake frame, the rake head having pivotal connection therewith, a shaft at each end of the rake head, a carrying wheel mounted on each shaft, a ratchet wheel secured to each wheel, shields or supports secured to the rake head, pawls pivoted on the shields for engaging the ratchets, pivoted hangers on the shields at right angles to the pawls, and rods attached to the hangers at right angles to the pawls and passing between said hangers and pawls and means for imparting movement to said rods whereby the ends thereof connected to the said hangers are raised or depressed consisting of a platform, or support secured to the rake head, a rack bar thereon, a pinion at each side of such bar each having the free end of one of the rods attached thereto, a lever pivoted upon the rake frame for operating the rick bar, a chain connecting the bar and lever, substantially as and for the purposes set forth and described. 8th. In a hay rake of the character described, carrying wheels therefor, a ratchet wheel secured to each, pawls adapted to engage the ratchets by gravity and move therewith only during the delivery of hay, rods raising the pawls from the ratchets, such rods having no connection therewith but arranged for vertical descent upon the rear extension of the pawls, links in the vicinity of the pawls for carrying the rods in their vertical movements and means for imparting movement to the rods in the direction of their length whereby they are lowered upon the pawls to descend upon the ratchets, as set forth. 9th. In a hay rake having the usual carrying wheels and ratchets the rake head having suitable shafts for each wheel, shields secured to the head in the region of the shafts, pawls pivoted on the shields at right angles to the rake head, for engaging the ratchets pivotal hangers behind the pivotal supports of the pawls and rods also behind such pivotal supports and pivoted to the hangers, such rods adapted to descend upon the paws by an endwise movement thereof, substantially as and for the purposes described. 10th. For a hay rake, the rake frame A, the rake head E, pivoted thereto, a stub shaft *e*, secured at each end thereof, carrying wheels B, on the shafts, a ratchet wheel C, on each wheel B, shields D, secured to the rake head, pawls F, pivoted near their middle to such shields, hangers G, pivotally hung behind and above the pivots of the pawls, rods H, loosely connected at one end to the hangers, a support I, secured to the rake frame, pinions M, pivoted thereon and having the rods H, attached thereto, a rack bar K, sliding between such pinions for moving them, a chain and lever for imparting longitudinal movement to such rack bar and a stop S, on the frame for engaging the rack bar, substantially as herein described and shown and for the purposes set forth. 11th. In the hay rake of the character described, employing pawls and ratchet wheels for elevating the rake teeth and delivering hay, rods located at right angles to the pawls and adapted to shift in the direction of their lengths, links adapted to support one end of each rod above the rearward extension of its respective pawl, said rods adapted to swing on said links whereby said shifting movement will impart a vertical movement to the ends of the rods so hung to engage the pawls, for raising them from the ratchet wheels, and also to permit them to fall by gravity into engagement with such ratchet, substantially as set forth.

No. 67,902. Hay Rake. (*Rateau à foin.*)

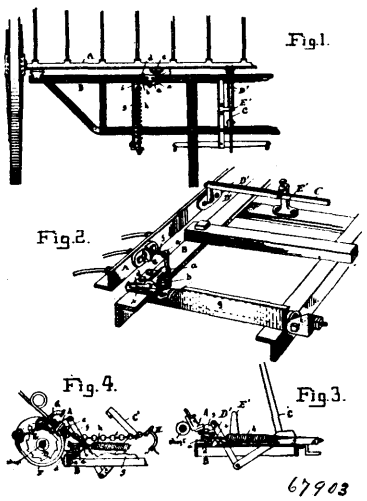


The Acme Harvester Company, assignee of Henry Green, all of Pekin, Illinois, U.S.A.. 27th June, 1900; 6 years: (Filed 2nd June, 1900.)

Claim.—1st.. In a rake, the combination with the frame, the rake head pivoted thereto and carrying the usual curved teeth, and a lever for swinging the said head on its pivot, a plurality of brackets rising from the frame and each having near its upper end two eyes one above the other, two rods independently pivoted at their front ends in said eyes and diverging toward their rear ends, cleaner fingers projecting through said rake teeth, and pivoted connections between the rear ends of said rods and such cleaner fingers whereby the rear faces of the latter always stand at an obtuse angle to the teeth at the points whereby they cross them, as and for the purposes set forth. 2nd. In a rake, the combination of the frame D, the rake head C pivoted thereto and carrying the usual teeth, and a lever G for swinging said head on its pivot, of a plurality of brackets K rising from the frame and each having near its upper end two eyes K^{1}, K^{11} one above the other, two rods, L M, independently pivoted at their front ends in said eyes and diverging toward their rear ends, a cleaner bar O extending across the teeth and having projections N rising from it and cleaner fingers P depending from it between the teeth, rollers P^{1} on said bar engaging certain of the teeth, and pivotal connections between the rear ends of the uppermost of the rods and said projection and the rear ends of the lowermost of the rods and said bar whereby the rear faces of the fingers always stand at an obtuse angle to the teeth at the points where they cross them, as and for the purposes set forth. 3rd. In a rake, the rake head, rake teeth, the rake frame supporting the said rake head, a lever on the frame for operating the teeth, a stripper or cleaner bar lying across the rake teeth, fingers on the cleaner bar projecting between the rake teeth into the basket formed by the teeth, supports on the rake frame, links or rods pivoted to said supports in close relation to one another, diverging therefrom and having pivotal connection with the said cleaner bar at the separated extremities, substantially as and for the purpose set forth and described. 4th. In a rake, the rake head, rake teeth, the rake frame supporting the said rake head, a lever on the frame, a link or connection pivoted to the lever and rake head, a rigid stop secured to the rake frame adapted to receive the upward thrust of the lever and link at their points of connection as set forth, in combination with a stripper bar lying across the rake teeth, fingers on the said bar projecting between the teeth, supports on the frame, links or rods pivoted to said support on close relation to one another, diverging thereform and having pivotal connection with said cleaner bar at the separated extremities, substantially as set forth and for the purposes described. 5th. In a rake, the rake frame, the rake head, teeth therefor, a stripper bar lying across the teeth, fingers on the bar, supports on standards on the frame arising to a point near the rising limit of the rake teeth, links or rods

pivotally attached to the supports and the stripper bar, said links or rods being farther apart at the stripper bar end then at the other, whereby the fingers and the rake teeth together are made to form an angle equal to or greater than a right angle in whatever position the rake teeth may occupy, for the purposes described.

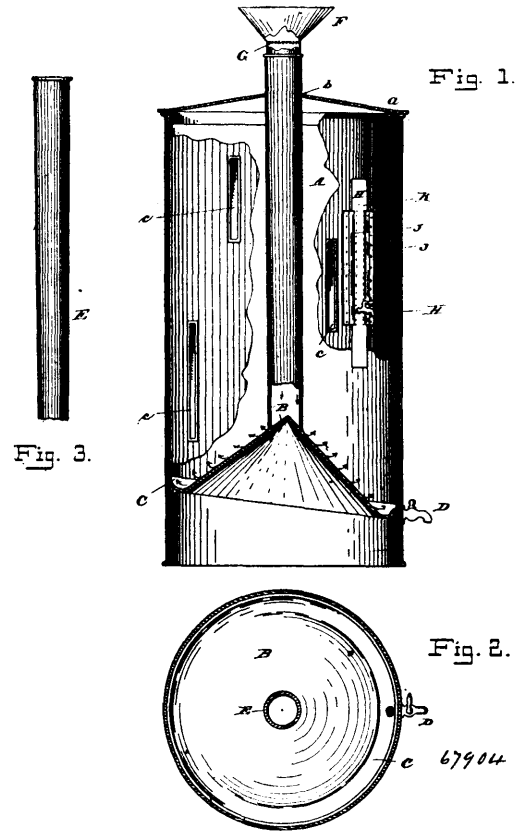
No. 67,903. Hay Rake. (*Rateau à foin.*)



Acme Harvester Company, assignee of Henry Green, all of Pekin, Illinois, U.S.A., 27th June, 1900; 6 years. (Filed 2nd June, 1900.)

Claim.—1st. In a spring balance mechanism for hay rakes, the combination with the rake frame, of the rake head pivoted thereon, a shaft journalled on the frame parallel with the rake head, a crank portion at each end of said shaft, such cranks being substantially at right angles to each other, for the purposes set forth, a pivotal connection between the rake head and one of the said cranks, a spring loosely secured at one end to the rake frame and at the other to the remaining crank portion, substantially as shown, whereby the rake head is locked when the teeth are in a raking position, the spring carrying the weight of the teeth when the latter are raised, substantially as set forth. 2nd. In a spring balance mechanism for hay rakes, the combination of the rake frame having the rake head pivoted thereto, a bearing secured on said frame, a shaft carried in said bearing, a crank on each end of the shaft, one of such cranks occupying a substantially vertical position when the rake teeth are down, the other a substantially horizontal position, a lug secured to the rake head, a connecting rod having pivotal connection at one end with the said lug, the other with the said vertical crank, an adjustable spring carried at one end on the rake frame, the other attached to the said horizontal crank, the pivotal connection between said spring and crank being below the shaft when the rake teeth are down, whereby the latter are held in the raking position, as set forth, such spring adapted to sustain the weight of the teeth when the latter are raised. 3rd. In a spring balance mechanism for hay rakes, the combination of the rake frame having the rake head pivoted thereto, a bearing secured on said frame, a shaft carried in said bearing, a crank on each end of the shaft, one of said cranks occupying a substantially vertical position when the rake teeth are down, the other a substantially horizontal postion, a lug secured to the rake head, a connecting rod having pivotal connection at one end with the said lug, the other with the said vertical crank, a brace g on the frame at right angles to the cranked shaft, a spring held at one end by such brace, the other end attached to the said horizontal crank, the pivotal connection between said spring and crank being below the shaft when the rake teeth are down, whereby the latter are held in the raking position, as set forth, such spring adapted to sustain the weight of the teeth when the latter are raised. 4th. In a hay rake. the rake frame having the usual rake head pivoted thereto, a lever pivoted on the frame, suitable pivotal connection between the lever and rake head, and a stop on the frame for limiting the movement of said lever, in combination with a bearing also on the frame, a shaft therein parallel with the rake head, a crank on each end of the shaft rigid therewith and substantially at right angles to each other, a lug on the rake head, an arm pivoted at one end to the lug and at the other to one of the cranks, a spring held at one end of the frame, the other end attached to the opposite crank, the connection of the spring and crank being thrown behind the shaft and below it, stretching the spring when the rake teeth are in the raking position, such spring being also under tension when the teeth are ruised, whereby their weight is supported, substantially as set forth.

No. 67,904. Cream Separator. (*Séparateur pour la crême.*)



The Acme Harvester Company, Pekin, assignee of Edward M. Heylman, Fulton, both in Illinois, U.S.A., 27th June, 1900; 6 years. (Filed 2nd June, 1900.)

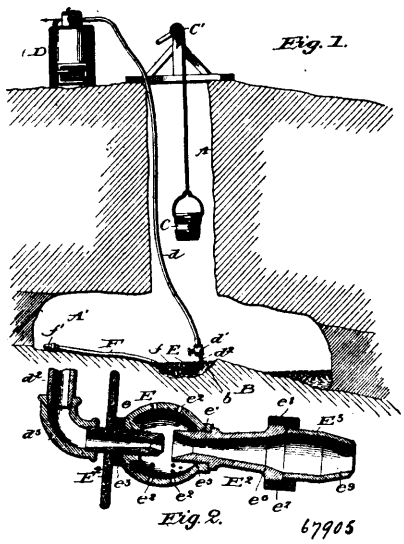
Claim.—1st. A cream separator having a receptacle provided with a conical bottom, the point of such cone being uppermost within said receptacle and substantially central, the base thereof provided with an annular trough, substantially as shown, such trough inclined inward whereby a lowest point is obtained, a faucet at such lowest point for carrying away the contents of the receptacle, in combination with a removable conduit adapted to rest upon the upper portion of the cone and provided with serrations at its end where it rests on such cone, all for the purposes set forth and described. 2nd. In a cream separator, the combination of a receptacle, a receptacle, a coned b ttom therefor whose apex is uppermost and substantially central, an annular trough formed at the base of said cone, such trough inclined to form a lowest point for drawing off purposes, a faucet at said lowest point, a removable conduit having serrations in its lower edges, said lower edge resting on the cone near its apex whereby water introduced into such conduit will flow down the cone equally at all points, a funnel having a strainer therein for the top of the conduit and a cover or lid for the receptacle, the same being provided with an aperture for insertion of said conduit, all for the purposes described.

No. 67,905. Apparatus for Mining in Frozen Grounds.
(*Appareil pour miner dans la terre gelée.*)

Henry C. Elliott, New York City, New York, assignee of Charles M. Bair, Montana, U.S.A., assignee of Louis E. Miller, Dawson, Northwest Territory, Canada, 27th June, 1900; 6 years. (Filed 19th June, 1899.)

Claim.—1st. The herein described process of mining in frozen ground which consists in forming a pool of water in the shaft or mine, conveying steam into the shaft or mine and bringing it in contact with the water from said pool to heat the water and force it into contact with the frozen soil, to disintegrate it, conducting the water back to said pool and removing the disintegrated soil, whereby a circulation of the water is established within the shaft or mine and the continuous raising of the water to the surface of the ground is obviated, substantially as described. 2nd. The herein described process of mining in frozen ground which consists in forming a sump or depression in the shaft or mine to contain a pool of water, conveying steam to the bottom of the shaft or mine, mingling the steam with the water from the pool to heat it, forcing said heated water into contact with the frozen soil, to disintegrate the soil, conveying the water back into the sump or depression, and removing

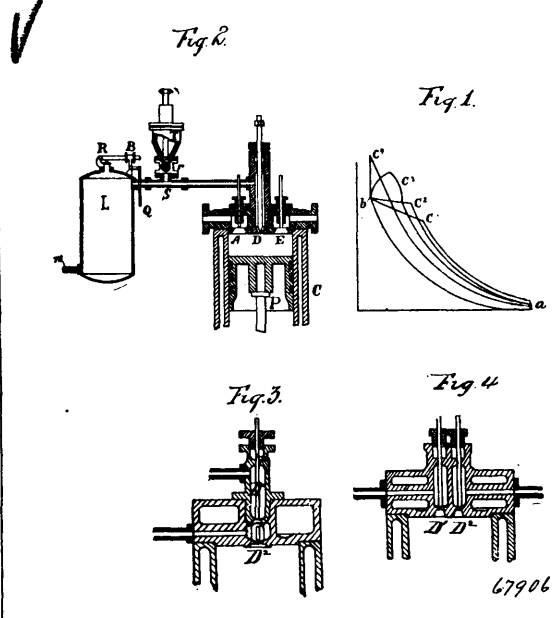
the disintegrated soil from the shaft or mine, whereby a circulation of the water is established within the shaft or mine, and the con-



tinuous raising of the water to the surface of the ground is obviated, substantially as described. 3rd. The herein described process of mining in frozen ground, which consists in forming a sump or depression in the shaft or mine to contain a pool of water conveying steam to the bottom of the shaft or mine, drawing the water from the pool and forcing it into contact with the frozen soil to disintegrate it, admitting steam into the water immediately before it is discharged against the frozen soil, conducting the water back to the sump or depression, and removing the disintegrated soil, whereby a circulation of the water is established within the shaft or mine and the continuous raising of the water to the surface of the ground is obviated, substantially as described. 4th. In an apparatus for mining in frozen ground, the combination with a receptable for holding a pool of water at the bottom of the mine, an ejector located at the bottom of the mine, means for supplying the water in said receptacle to said ejector, means for conveying steam to said ejector and introducing it into the water to heat the water and expel it in a stream forcibly against the frozen material and means for conveying the water back to said receptacle whereby a circulation of the water is established within the mine and raising of the water continuously to the surface of the ground is obviated, substantially as described. 5th. In an apparatus for mining in frozen ground, the combination with a receptacle at the bottom of the mine for holding a pool of water, of a steam ejector located at the bottom of the mine, a steam generator located above the surface of the ground, means for conveying steam from said generator to the ejector, means for forcing a column of water from said receptacle through the ejector in contact with the steam, means for regulating the admission of steam to said ejector to control the temperature and velocity of the water and means for conveying the water back to said receptacle, whereby a circulation of the water is established within the mine and the raising of the water continuously to the surface of the ground is obviated, substantially as described. 6th. In an apparatus for mining in frozen ground, the combination with a receptacle located at the bottom of the mine for containing a pool of water, an ejector located at the bottom of the mine, a pump connected with said receptacle and with said ejector, a steam pipe connected with said ejector for imparting heat and velocity to the water adjacent to the point of its discharge and means for conducting the water back to said receptacle, whereby a circulation of the water within the mine is established and the raising of the water continuously to the surface of the ground is obviated, substantially as described. 7th. In an apparatus for mining in frozen ground, the combination with a steam vacuum pump located at the bottom of the mine for partially heating and forcing a stream of water, a water supply located at the bottom of the mine connected with said steam pump, a steam supply for said pump, a nozzle connected with said pump and provided with a steam jet tube within the same and a connection between the steam supply and said steam jet tube for imparting heat and velocity to the stream of water at a point adjacent to its discharge from the nozzle, substantially as described. 8th. In an apparatus for mining in frozen ground, the combination with a steam vacuum pump located at the bottom of the mine for partially heating and forcing a stream of water, a water supply located at the bottom of the mine connected with said steam pump, a steam supply for said pump, a nozzle connected with said pump and provided with a steam jet tube within the same, a steam pipe leading from the steam supply to the said jet tube and a controlling valve for controlling the supply of steam to said jet tube to regulate the temperature and velocity of the stream discharged by the nozzle, substantially as described. 9th. An ejector for thawing frozen ground comprising among its members, a hollow main body provided with apertures for the admission of water, a discharge nozzle rigidly secured to said main body, a steam inlet pipe secured to said main body in line with the discharge nozzle, and a supporting device connected with said main body for holding the main body above the bottom of the pool in which the ejector operates, and giving the nozzle a downward inclination, substantially as described. 10th. An ejector for thawing frozen ground comprising among its members, a hollow main body provided with apertures for the admission of water, a discharge nozzle rigidly connected to said main body, a longitudinally adjustable steam inlet tube secured to said main body in line with the discharge nozzle and a supporting device secured to said main body for holding it above the bottom of the pool in which the ejector operates, and giving a downward inclination to said nozzle, substantially as described. 11th. An ejector for thawing frozen ground, comprising among its members, a hollow main body provided with apertures for the admission of water, a discharge tube provided with a detachable nozzle, a longitudinally adjustable steam inlet pipe in line with said discharge tube and a rotary supporting disc secured to said main body on the side opposite said nozzle, substantially as described. 12th. An ejector for thawing frozen ground, comprisng among its members, a hollow main body having its walls provided with water inlet apertures, a discharge tube secured to said main body and extending into the same, said tube having its longitudinal passage contracted at a point near its inner end and flaring in both directions from said contracted portion, and a longitudinally adjustable steam tube extending into said hollow body in line with the discharge tube having its longitudinal passage contracted at a point near the inner end of the tube and flaring outwardly toward the ends of the tube from such contracted portion, a nozzle detachably secured to said discharge tube and a supporting device for said main body, substantially as described. 13th. An ejector for thawing frozen ground, oomprising among its members, a hollow, substantially spherical body having its walls provided with water inlet apertures, a discharge tube rigidly secured to said main body, a nozzle detachably but rigidly secured to said discharge tube, a longitudinally adjustable steam inlet tube having a threaded portion extending into said main body, and a revoluble supporting disc or wheel mounted on said steam inlet tube and adapted to hold the main body above the bottom of the pool in which the ejector operates and to give said nozzle a downward inclination, substantially as described.

No. 67,906. Internal Combustion Engine.

(Machine à combustion interne.)



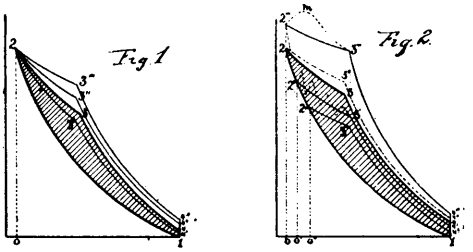
Rudolf Diesel, Munich, Bavaria, Germany, 28th June, 1900; 6 years. (Field 7th September, 1898.)

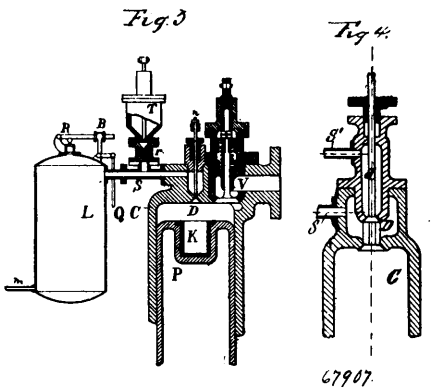
Claim.—1st. The method of regulating combustion in internal combustion engines, which consists in compressing a mixture of a combustible and air or oxygen, igniting the mixture, and regulating the combustion by the admission of a secondary combustible, regulated as to quantity, time and duration of admission, substantially as described. 2nd. The method of regulating combustion in internal combustion engines, which consists in producing a mixture of air or oxygen and a combustible compressed to a temperature lower than the igniting point of the combustible, and introducing into the mixture a secondary combustible, the igniting point of which is equal to or below the temperature due to the compression,

substantially as described. 3rd. The method of regulating combustion in internal combustion engines, which consists in producing a mixture of air or oxygen and a combustible compressed to a temperature lower than the igniting point of the combustible, introducing into the mixture a secondary combustible, the igniting point of which is equal to or below the temperature due to the compression, and regulating the quantity and duration of admission of such secondary combustible, substantially as described.

No. 67,907. Slow Combustion Motor.

(Moteur à combustion.)



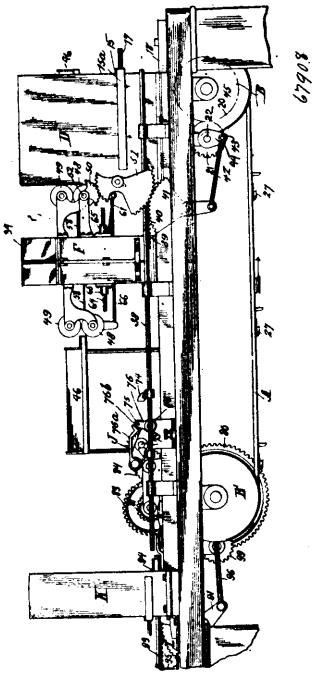


Rudolf Diesel, Munich, Bavaria, Germany, 28th June, 1900; 6 years. (Filed 7th September, 1898.)

Claim.—1st. In an internal combustion engine, the combination of a cylinder and piston constructed and arranged to compress air to a degree producing a temperature above the igniting point of the fuel, a supply for compressed air or gas, a fuel supply, a distributing valve for fuel, a passage from the air supply to the cylinder in communication with the fuel distributing valve, an inlet to the cylinder in communication with the air supply and with the fuel valve, and a cut-off, substantially as described. 2nd. In an internal combustion engine, the combination of a cylinder and piston constructed and arranged to compress air to a degree producing a temperature above the igniting point of the fuel, a distributing valve for the fuel, a cut-off for varying the time and duration of the supply of fuel, and a burner placed in the combustion space and constructed for slow and perfect combustion of the gradually introduced stream of fuel, substantially as described. 3rd. In an internal combustion engine, the combination of a cylinder and piston constructed and arranged to compress air to a degree producing a temperature above the igniting point of the fuel, a supply for compressed air or gas, a hopper, a distributing valve for pulverulent fuel, a passage from the air supply to the cylinder in communication with the fuel distributing valve, an inlet valve to the cylinder in communication with the air supply and with the valve for pulverulent fuel, and a cut-off for the fuel supply, substantially as shown and described. 4th. In an internal slow combustion engine, the combination of a cylinder and piston constructed and arranged to compress air to a degree producing a temperature above the igniting point of the fuel, a supply for compressed air, a hopper and distributing valve for pulverulent fuel, a supply pipe for liquid fuel, a valve or valves leading to the cylinder and communicating with the pulverulent fuel distributing valve and the liquid fuel supply pipe, and a cut-off for the fuel supply, substantially as specified. 5th. In an internal combustion engine, the combination of a supply for compressed air, a feed for pulverulent fuel placed in communication with the air supply and with the cylinder, and an auxiliary feed for liquid fuel communicating with the cylinder, substantially as specified. 6th. In an internal combustion engine, the combination of a cylinder and piston, a supply for compressed air, a distributing valve communicating with the air supply and with a fuel supply for gradually introducing a unitary, or mixed fuel, into the combustion space, a valve placed between the air supply and the cylinder, and a reversing gear in co-operation with said valve for starting the motor with the compressed air from the air supply, substantially as described. 7th. In an internal combustion engine, the combination with a cylinder and a piston constructed to compress air to a degree producing a temperature above the igniting point of the fuel, of a fuel feed, and a valve mechanism adapted to open the fuel feed somewhat in advance of the end of the compression stroke of the piston and to keep it open during part of the working stroke, substantially as and for the purpose specified. 8th. In an internal combustion engine, the combination of a cylinder and piston constructed to compress air or a mixture of air and neutral gas, a reservoir in communication with the combustion space of the cylinder, a valve controlling this communication and opening to admit compressed air from the cylinder to the reservoir, and a fuel feed in communication with said reservoir for the introduction of fuel to the combustion space under pressure of the compressed air or gas in the reservoir, substantially as described. 9th. In an internal combustion engine, the combination of a cylinder and piston constructed and arranged to compress air to a degree producing a temperature above the igniting point of the fuel, a distributing valve for fuel, and a cut-off for varying the time and duration of the supply of fuel by said valve, substantially as described.

No. 67,908. Box Filling and Covering Machine.

(Machine à remplir et couvrir les boîtes.)



William Henry Butler, New York City, New York, U.S.A., 28th June, 1900; 6 years. (Filed 28th November, 1899.)

Claim.—1st. A machine for filling boxes with cigarettes or similar articles characterized by mechanism for feeding cigarettes into a box, and devices for automatically feeding cigarette tips or holders into the box, substantially as set forth. 2nd. A machine for filling boxes with cigarettes or similar articles characterized by mechanism for forming boxes out of box blanks, and for filling such boxes with cigarettes, and devices for automatically feeding cigarette tips or holders into the box, substantially as set forth. 3rd. A machine for filling boxes with cigarettes or similar articles characterized by feeding devices for feeding forward a row of nested cigarette tips or holders, mechanism for driving said feeding devices, grippers for seizing and carrying the proper number of cigarette tips or holders for insertion into the box, mechanism for actuating the grippers, a clamp for seizing and holding the remaining cigarette tips or holders in the row, and mechanism for operating and releasing the clamp, whereby the remaining cigarette tips or holders in the row will be prevented from being carried forward by the grippers, substantially as set forth. 4th. A machine for filling boxes with cigarettes or similar articles characterized by mechanism for feeding cigarettes into a box, supports upon opposite sides of the box for holding rows of cigarette tips or holders, one row having the mouth pieces of the tips or holders pointing in one direction and the other row having the mouth pieces of the tips or holders pointing in the other direction, feeding devices for feeding forward alternately from opposite sides a predetermined number of cigarette tips or holders, whereby rows of cigarette tips will be fed into the box with the mouth pieces of the tips in adjacent rows pointing in different directions, substantially as set forth. 5th. A machine for filling boxes with cigarettes

or similar articles characterized by a magazine for holding cigarettes and cigarette tips or holders, feeding devices for feeding forward a row of nested cigarette tips or holders, mechanism for driving said feeding devices, grippers for seizing and carrying a proper number of cigarette tips or holders for insertion into the magazine, a clamp for seizing and holding the remaining cigarette tips or holders in the row, and mechanism for operating and releasing the clamp whereby the proper number of cigarette tips or holders will be inserted into the magazine, and a plunger for forcing cigarettes and cigarette tips or holders from the magazine into the box, substantially as set forth. 6th. A machine for covering boxes with flattened shells for forming outer covers for the boxes characterized by a wedge-shaped device for entering the interior of the flattened shell and for opening and squaring the same, and means for inserting a box into the shell. 7th. A machine for covering boxes with flattened shells for forming outer covers for boxes, characterized by a magazine for flattened shells, a wedge-shaped device for entering and squaring the shells, means for forcing a shell from the magazine into contact with the wedge-shaped device, devices for exerting a pressure on the sides of the flattened shell to cause it to partially open to permit the wedge-shaped device to enter the interior of the shell, whereby the flattened shell will be opened and squared, and means for inserting a box into the open shell, substantially as set forth. 8th. A machine for covering boxes with flattened shells for forming outer covers for the boxes characterized by a magazine for flattened shells, a wedge-shaped device for entering and squaring the shells, means for forcing a shell from the magazine into contact with the wedge-shaped device, whereby the shell will be opened and squared, means for inserting a box into the open shell, and a stop for holding the shell during such insertion, substantially as set forth. 9th. A machine for making boxes characterized by a trough with sides gradually becoming more inclined to raise the side flaps of the blank, folders for raising the front flap of the blank and turning it backward and down upon the bottom of the box to form the top of the box, a widening of the trough at the place where the top is raised to permit the side flaps of the top to spread and pass down outside of the side flaps of the bottom of the box, and upright plates through such widened portion of the through in line with the narrow part of the thorugh to prevent the spreading of the side flaps of bottom, substantially as set forth. 10th. A machine for making boxes characterized by cams for pressing down upon the top of the box after the folders have been raised, means for moving them into position over the trough, and means operated by the box in its pass- age, for moving the cams away from over the trough, substantially as set forth. 11th. A machine for making boxes characterized by folders for the front flap of the box, means actuated by the endless belt for first raising the folders to their full height, to raise the front flap and then partially lowering the folders to cause them to bend the front flap back to form the top of the box, then for raising them slightly again to clear the rear flap and then for lowering them to their original position, substantially as set forth. 12th. A machine for making boxes characterized by a pivoted swinging folder for the rear flap, means actuated by the driving mechanism of the machine, for swinging and turning the folder to cause it to strike and press the rear flap forward and down upon the box, substantially as set forth.

No. 67,909. Compressing Machine.

(*Machine de compression.*)

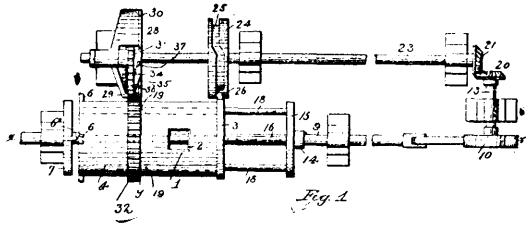


Fig. 1

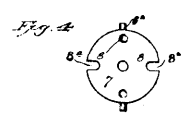


Fig. 4

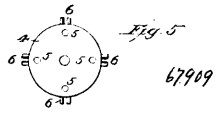


Fig. 5

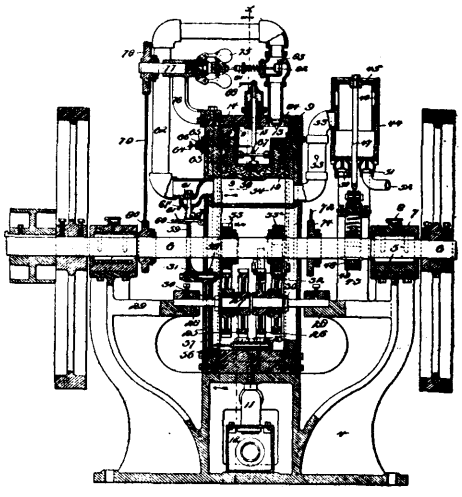
67909

Charles Warren Smith, Rock Island, Illinois, U.S.A., 28th June, 1900; 6 years. (Filed 1st December, 1899.)

Claim.—1st. In a compressing machine, the combination with the longitudinally movable cylinder, the longitudinally movable and rotatable dye having a series of openings extending therethrough and the stationary die formed with alternately arranged recesses and peripheral slots, of the alternately arranged compressing and expelling plungers of different lengths and means for reciprocating the same, substantially as described. 2nd. In a compressing machine, the combination with the longitudinally movable cylinder, the longitudinally movable and rotatable dye having a series of openings extending therethrough and provided with lugs at the outer ends, and the stationary die formed with alternately arranged concave recesses and peripheral slots, and with lugs adapted to engage with the lugs of said movable die, of the alternately arranged compressing and expelling plungers of different lengths formed with concave recesses in their free or inner ends, the reciprocating shaft with which said plungers are connected, and means for reciprocating said cylinder and movable die, and means for rotating said movable die, substantially as described. 3rd. In a compressing machine, the combination with the longitudinally movable cylinder, the stud connected therewith, the roller, the longitudinally movable and rotatable die having a series of openings extending therethrough and provided with lugs at the outer end, the stationary die formed with alternately arranged recesses and pheripheral slots and provided with lugs engaging with the lugs of the movable die, of the alternately arranged compressing and expelling plungers of different lengths, the reciprocating shaft connected therewith, the rotatable wheel formed with a peripheral cam groove with which said roller engages, and means for rotating said wheel and reciprocating said shaft, and means for rotating said movable die, substantially as described. 4th. In a compressing machine, the combination with the longitudinally movable cylinder, the stud secured thereto, the roller on said stud, the longitudinally movable and rotatable die having a series of openings extending therethrough, the lugs at the outer end of said die, the stationary die formed with alternately arranged concave recesses and peripheral slots, and the lugs engaging with the lugs of said movable die, of the alternately arranged plungers of different lengths formed with concave recesses in their inner ends, the reciprocating shaft with which said plungers are connected, the eccentric connected with said shaft, the driving shaft, the bevel gear secured to said shaft, the bevel gear meshing therewith, the longitudinal shaft, the wheel secured thereto having a pheripheral cam groove with which said roller engages, and means for rotating the movable die, substantially as described. 5th. In a compressing machine, the combination with the longitudinally movable cylinder and means for reciprocating the same, the longitudinally movable and rotatable die having a series of openings extending therethrough, the cog ring secured to the inner end of said die, the lugs at the outer ends thereof, and the stationary die formed with recesses and peripheral slots, and with lugs adapted to engage with the lugs on said movable die, of the alternately arranged compressing and expelling plungers of different lengths, the reciprocating shaft connected therewith, the longitudinal rotatable shaft, the loose cog wheel thereon meshing with said cog ring, the projections or lugs on said cog wheel, the crank or arm secured to said rotatable shaft, the pawl pivoted thereto adapted to engage with said projections or lugs and means for throwing said pawl into and out of engagement with said projections or lugs, substantially as described. 6th. In a compressing machine, the combination with the longitudinally movable cylinder and means for reciprocating the same, the longitudinally movable and rotatable die connected therewith having a series of openings extending therethrough, the cog ring at the inner end of said die, the lugs at the outer end thereof, and the stationary die formed with recesses and peripheral slots and with lugs adapted to engage with the lugs of said movable die, of the alternately arranged compressing and expelling plungers, the reciprocating shaft connected therewith, the rotatable longitudinal shaft, the loose cog wheel thereon meshing with said cog ring, the projections or lugs on said wheel, the crank or arm secured to said rotatable shaft, the pivoted spring actuated pawl one end of which is adapted to engage with said projections or lugs and provided with a projection at the other end and the broken guide ring, substantially as described. 7th. In a compressing machine, the combination with the longitudinally movable cylinder, the stud and roller connected therewith, the longitudinally movable die having a series of openings extending therethrough, the cog ring at the inner end thereof, the lugs at the outer end, the stationary die formed with recesses and peripheral slots, and the lugs adapted to engage with the lugs on said movable die, of the alternately arranged compressing and expelling plungers of different lengths, the reciprocating shaft connected therewith, the rotatable longitudinal shaft, the wheel thereon formed with a peripheral cam groove, the loose cog wheel engaging with said cog ring at the inner end of the movable die and fixed crank on said rotatable shaft, the projections or lugs on said cog wheel, the spring actuated pawl pivoted to said crank, one end of which is adapted to engage with said projections, the projection at the other end thereof, and the broken guide ring, substantially as described. 8th. In a compressing machine, the combination with the longitudinally movable cylinder, the stud and roller connected therewith, the longitudinally movable and rotatable die having a series of openings extending therethrough, the cog ring at the inner end thereof, the lugs at the outer end, the stationary die formed with alternately arranged concave recesses and peripheral slots, and the lugs adapted to engage with the lugs of the movable die, of the alternately arranged compressing and expelling plungers of different lengths formed with concave recesses in the inner ends, the wheel or disc at the outer end thereof, the reciprocating shaft connected therewith, the eccentric strap and eccentric, the transverse driving shaft, the bevel gear secured thereto, the longitudinal rotatable shaft to which said last mentioned gear is secured, the wheel fixed thereto formed with a pheripheral cam groove, the loose cog wheel engaging with said cog ring at the inner end of the movable die and fixed crank on said rotatable longitudinal shaft, the projections or lugs on said cog

wheel, the spring actuated pawl one end of which is adapted to engage with said projections or lugs and having a projection at the other end, and the broken guide ring, substantially as described.

No. 67,910. Gas Engine. *(Machine à gaz.)*



67910

James Howard Frew, New Castle, Massachusetts, U.S.A., 28th June, 1900; 6 years. (Filed 7th April, 1900.)

Claim.—1st. In a gas engine, the combination with a cylinder, of two plungers reciprocating therein, segmental links connecting said plungers, ratchet wheels turning in opposite directions and engaging said segmental links, a driving shaft, and connections between the ratchet wheels and the driving shaft whereby motion in one direction is transmitted to the driving shaft, substantially as shown and described. 2nd. In a gas engine, the combination of an inner and an outer casing forming working cylinders, plungers reciprocating in said cylinders, segmental shaped links connecting said plungers, an explosion chamber, valves controlling the direction of the force of the explosion, ratchet wheels operating in opposite directions and engaging said segmental links, a driving shaft, pinions 31 and 33 connecting one of said ratchet wheels to the driving shaft, pinions 32 and 33a connecting the other of said ratchet wheels to the driving shaft and an intermediate gear 34 whereby continuous motion in one direction is imparted to the driving shaft, substantially as herein shown and described. 3rd. In a gas engine, the combination of working cylinders, plungers operating in said cylinders, a valve controlling slide, an explosion chamber, valves controlling the admission of the exploded charge to the working cylinders, and being opened by said slide, said plungers being alternately operated against the ends of the slide, substantially as herein shown and described. 4th. In a gas engine, the combination of the working cylinders, a storage chamber, anexplosion chamber, valves controlling the admission of gas to the working cylinders, a valve operating slide, plungers operating in the working cyiinders and alternately operating against the ends of the said slide, segmental links connecting said plungers, and connections between said links and the driving shaft for communicating motion te the same, substantially as described. 5th. The combination in a gas engine, of a storage chamber, an explosion chamber communicating therewith, an electrode projecting into said explosion chamber, working cylinders, plungers operating therein, valves located between said explosion chamber and said working cylinders, a valve operating slide, exhaust ports formed in the working cylinders, an electrode mounted on said valve operating slide, said plungers operating alternately against the ends of said slide whereby the electrodes are brought into contact and separated to produce a spark, substantially as shown and described. 6th. The combination in a gas engine, of the working cylinders, plungers operating in said cylinders, segmental links connecting said plungers, pawls secured to said links, ratchet wheels engaged by said pawls, a drive shaft, connections between said ratchet wheels and drive shaft, valves controlling the admission of exploded charge to the working cylinders, a valve operating slide, an electrode pivotally mounted on said slide, an explosion chambers, an electrode projecting into the said chamber, the aforesaid plungers alternately operating against the ends of the valve-operating slide whereby the electrodes are brought into contact and separated to produce a spark, substantially as shown and described. 7th. A gas engine having two water jacketed casings forming working cylinders, plungers operating in said cylinders, segmental links connecting said plungers, an explosion chamber, a storage chamber, a valve controlling slide, the aforesaid plungers alternately operating against the ends of the valve operating slide to automatically open the valves to allow the passage of the exploded charge from the explosion chamber to the working cylinders, and means within said explosion chamber whereby the mixture is ignited, substantially as shown and described. 8th. In a gas engine, the combination of two working cylinders, plungers operating in said cylinders, segmental links connecting said plungers, spring actuated pawls secured to said links, ratchet wheels engaging said pawls, connections between the drive shaft and ratchet wheels, said ratchet wheels revolving in opposite directions and communicating continuous motion to the drive shaft in one direction, substantially as described. 9th. In a gas engine, the combination of the working cylinders, a storage chamber, an explosion chamber, valves controlling the admission of the explosive mixture to the explosion chamber, valves controlling the admission of gas to the working cylinders, a valve operating slide, plungers operating in the working cylinders and alternately operating against the ends of the said slide, links connecting said plungers, a drive shaft, and connections between said links and the drive shaft for communicating motion to said shaft, substantially as shown and described. 10th. A gas engine having two water jacketed casings forming working cylinders, plungers operating in said cylinders, segmental links connecting said plungers, a water jacketed explosion chamber, a storage chamber, a valve controlling slide, the aforesaid plungers alternately operating against the ends of the valve operating slide to automatically open the valves to allow the passage of the exploded charge from the explosion chamber to the working cylinders, and means within said explosion chamber whereby the mixture is ignited, substantially as described and shown. 11th. A gas engine having two water jacketed casings forming working cylinders, plungers operating in said cylinders, segmental links connecting said plungers, an explosion chamber, a storage chamber, a drive shaft, a pump connected to the drive shaft and storage chamber, a valve controlling slide, the aforesaid plungers operating alternately against the ends of the valve controlling slide to automatically open the valves to allow the passage of the exploded charge from the explosion chamber to the working cylinders, and means within said chamber whereby the mixture is ignited, substantially as shown and described.

No, 67,911. Bicycle Support. *(Support de bicycle.)*

Fig 1.

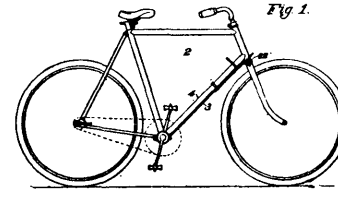
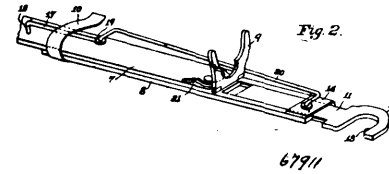


Fig 2.



67911

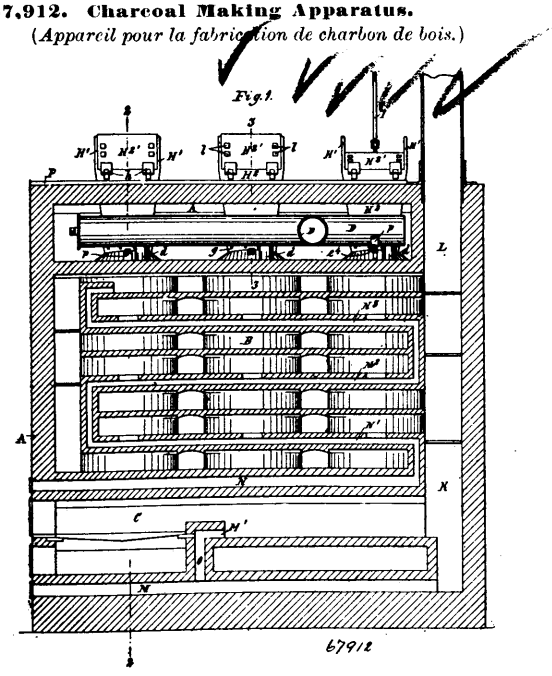
John Franklin Williams, Sandusky, Ohio, U.S.A., 28th June, 1900; 6 years. (Filed 1st May, 1900.)

Claim.—1st. In a folding bicycle support, the combination with a longitudinal body member, attachable at one end to the bicycle frame, of a movable arm member attached to the other end of the body, capable of movement in alignment with, or at an angle to the body member, means for stopping the travel of the arm member after the required angular position is attained, a wheel supporting member, and a securing device upon one or more of the several members for holding the parts to the frame. 2nd. In a holding bicycle support, the combination with a longitudinal body member, attachable at one end to the bicycle frame, of a movable arm member attached to the other end of the body, capable of movement in alignment with or at an angle to the body member, means for folding the arm member in alignment with the body, a locking device adapted to retain the arm in the required angular position, a wheel supporting member, and a securing device upon one or more of the several members for clamping the parts to the frame. 3rd. In a folding bicycle support, the combination with a longitudinal body member, attachable at one end to the bicycle frame, of a movable arm member attached to the other end of the body, capable of movement in alignment with or at an angle to the body member, means for stopping the travel of the arm member after the required angular position is attained, an upright wheel supporting member hinged to the body, and a spring clamp attached to the upright, substantially as described. 4th. In a folding bicycle support, the combination with a longitudinal body member, attachable at one end to the bicycle frame, of a movable arm member attached to the other end of the body, capable of movement in alignment with, or at an angle to the body member, means for stopping the travel of the body member

after the required angular position is attained, an extensible clamping device carried by the arm member at one end thereof, and an upright wheel supporting member attached to the body, substantially as described. 5th. In a folding bicycle support, the combination with a longitudinal body member, attachable at one end to the bicycle frame, of a movable arm member attached to the other end of the body member, capable of movement in alignment with, or at an angle to the body member, means for stopping the travel of the arm member after its desired angular position is attained, a slide arranged in one of the ends of the arm member, a hook carried by the slide, a spring catch upon the hook, and a wheel supporting member attached to the longitudinal body, substantially as described.

No. 67,912. Charcoal Making Apparatus.

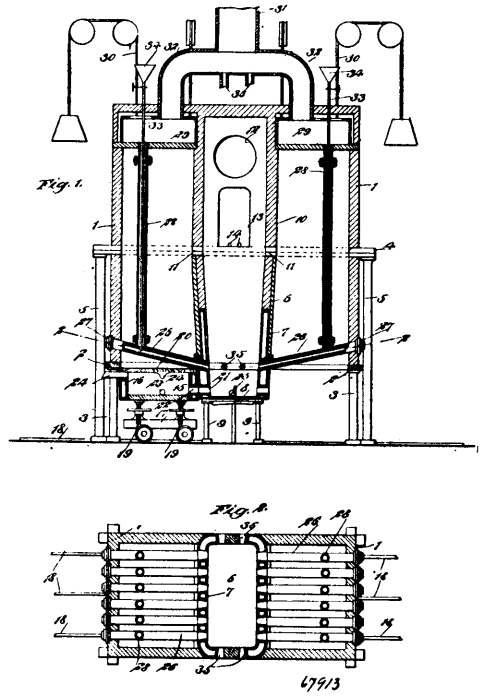
(*Appareil pour la fabrication de charbon de bois.*)



Carl W. Bilfinger, New York City, New York, U.S.A., 28th June, 1900; 6 years. (Filed 11th September, 1899.)

Claim.—1st. An apparatus for a continuous manufacture of charcoal and saving of by products, consisting of an oven provided with suitable furnace and draft flues, series of retorts, set in the oven and having charging apertures in their tops and discharging apertures on their bottoms, valves for hermetically closing these apertures, funnels set on top of the retorts and communicating with the charging apertures, means for closing the charging apertures of the retorts and of the funnels and mechanism for simultaneously operating the means for closing the charging apertures of the retorts and of the funnels reversely to each other, valves for closing the discharge apertures in the bottoms of the retorts and means for opening and closing the valves from the outside of the oven, a separator comprising a closed vessel having an inclined bottom terminating in an outlet pipe, a valve closing the outlet pipe and means for reducing the temperature within the separator, conduits connecting the retorts with the separator and a gas conduit connecting with the separator. 2nd. An apparatus for a continuous manufacture of charcoal comprising an oven, a series of retorts set in the oven and having charging apertures in their tops and discharging apertures in their bottoms and provided with valves for hermetically closing these apertures, means for operating the valves, a furnace and a chimney, a main fire flue connecting the furnace with the chimney and a series of branch fire flues arranged between and around the retorts and connecting with the furnace and with the chimney, an air flue below the ash pit of the furnace and connecting with the main flue or chimney, a hollow bridge wall, a branch air flue connecting with the air flue below the ash pit and with the fire flue beyond the bridge wall, a second air flue provided in the arch of the furnace and parallel to its axis, a series of branch air flues communicating with the fire flues, dumping pits beneath the discharging apertures of the retorts, rail tracks laid in the pits and dump cars set movably on the tracks and means for hauling the dump cars along the track, funnels provided with movable lids set on top of the retorts concentrically with the charging apertures thereof, and mechanism for simultaneously operating the lids of the funnels reversely to the valves closing the charging apertures of the retorts, a rail track laid on top of the oven midway between the rows of retorts, cars set movably on the track and means for holding the cars upon the tracks, a closed vessel provided with an outlet in its bottom and means for closing the outlet hermetically, an inlet conduit connecting the retorts with the closed vessel, and outlet conduit connecting the closed vessel with the reservoir for the gas, a continuous pipe coil set in the vessel and in the inlet and outlet conduits and means for forcing a cooling medium through the coil. 3rd. The herein described mechanism for simultaneously operating the valves closing the charging apertures of the retorts and of their funnels reversely to each other, consisting of the arms e^3 and e^4, weight p, lever I, weight q, rod o, racks k, gear wheels m. 4th. The herein described mechanism for operating the valves closing the discharging apertures of the retorts, consisting of bell crank lever t^3, axle t^1, rods t^2, rollers t, and rails u.

No. 67,913. Smelting Furnace. (*Fonderie.*)

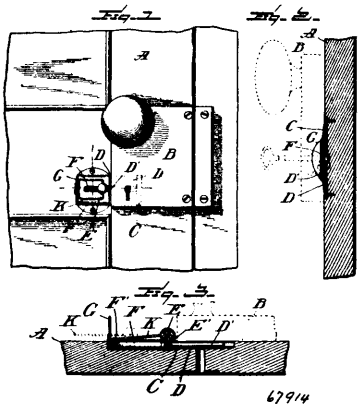


John H. Canavan, Boston, Massachusetts, U.S.A., 28th June, 1900; 6 years. (Filed 23rd October, 1899.)

Claim.—1st. A smelting furnace, comprising a casing or outer shell, a cupola arranged within the outer shell, the said outer walls or shell and the cupola walls forming walls of hot air chambers open at the bottom, forehearths mounted on trucks, means for elevating the forehearths relatively to the trucks while underneath the hot air chambers, tuyeres discharging into the cupola, air blast pipes in the hot air chamber and communicating with tuyeres, and means for conducting air to said air blast pipes, substantially as specified. 2nd. A smelting furnace, comprising an outer shell or casing, a cupola arranged therein and having a water jacket, a chimney at the upper end of the cupola, the outer shell or jacket and the walls of the cupola and chimney forming walls of hot air chambers open at the bottom, forehearths movable underneath the hot air chambers, water jackets surrounding the forehearths, trucks on which the forehearths are mounted, means for vertically moving the hearths, tuyers extended into the cupola at opposite sides, air blast pipes in the hot air chambers and communicating with the tuyeres, air boxes with which the upper ends of said pipes communicate, and a pipe for discharging air into said air boxes, substantially as specified. 3rd. A smelting furnace, comprising a cupola, a chimney on said cupola having a downtake, a shell or casing surrounding the cupola and chimney and forming the outer walls of hot air chambers, a water jacket surrounding the cupola, tuyeres extended through opposite walls of the cupola, air blast pipes in the hot air chambers and communicating with the tuyeres, valve controlled pipes passing through the air blast pipes, hoppers on the upper ends of said valve controlled pipes and forehearths movable underneath the hot air chambers, substantially as specified. 4th. A smelting furnace, comprising a casing or outer shell, a cupola arranged within the outer shell, the said outer walls or shell and the cupola walls forming walls of hot air chambers open at the bottom, forehearths adjustably mounted underneath the hot air chambers, tuyeres discharging into the cupola, air blast pipes in the hot air chambers and communicating with the tuyeres, and means for conducting air to said air blast pipes, substantially as specified. 5th. A smelting furnace, comprising a cupola, a chimney on said cupola, an outer shell or casing forming the outer walls of hot air chambers, the inner walls being formed by the cupola and chimney, a water jacket surrounding the cupola, tuyeres leading into the cupola, air blast pipes in the hot air chambers communicating at their lower ends with the tuyeres, a

movable air box with which the upper ends of the blast pipes communicate, and means for directing atmospheric air to said box, substantially as specified.

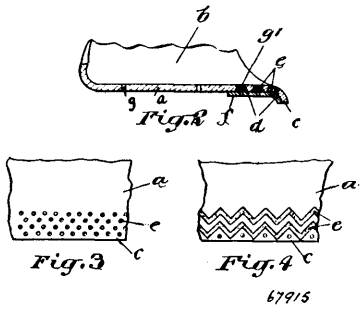
No. 67,914. Keyhole Guard. (*Garde entrée de serrure.*)



Priscilla Stephens, Express, Oregon, U.S.A., 28th June, 1900; 6 years. (Filed 12th June, 1900.)

Claim.—A keyhole guard comprising in combination a stationary grooved angle plate seated in a recess in the face of a door, a sliding grooved plate resting on said stationary plate, a lug on the sliding plate, a bail carried by said lug, a slitted plate fastened over said stationary and sliding plates, and having an outwardly bent end against which the end of the bail is adapted to be held to lock the slide plate over the keyhole of a door lock, as set forth.

No. 67,915. Step for Cars, Stairways, etc.
(*Marche pour chars, escaliers, etc.*)



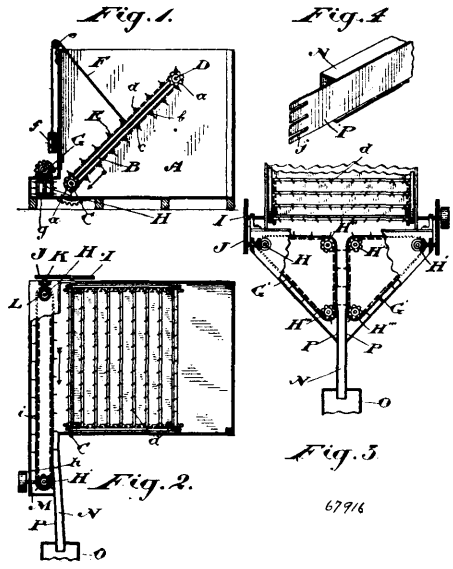
Henry James Hamilton, Toronto, Ontario, Canada, 28th June, 1900; 6 years. (Filed 16th June, 1900.)

Claim.—1st. A step, embracing in its construction a body portion, having grooves formed through it in which are contained anti-slipping material, a plate fastened to the underside of the step to hold the anti-slipping material in place, substantially as specified. 2nd. A step, embracing in its construction a body portion, having grooves formed therethrough, the front edge of the step having a downturned nose, a longitudinal groove formed in the downturned nose and grooves formed in the body portion contiguous to the nose, anti-slipping material contained in the grooves, a plate at the back of the step to hold the anti-slipping material in place, having its front edge curved downwards to correspond with the curvature of the nose of the step, substantially as specified. 3rd. A step, embracing in its construction a body portion, having grooves formed therethrough, the front edge of the step having a downturned nose, a longitudinal groove formed in the downturned nose and grooves formed in the body portion contiguous to the nose, anti-slipping material contained in the grooves, a plate at the back of the step to hold the anti-slipping material in place, having its front edge curved downwards to correspond with the curvature of the nose of the step, and holes through the body portion, anti-slipping material and plate, substantially as specified.

No. 67,916. Straw Furnace Feeding Mechanism.
(*Alimentateur de fournaise pour la paille.*)

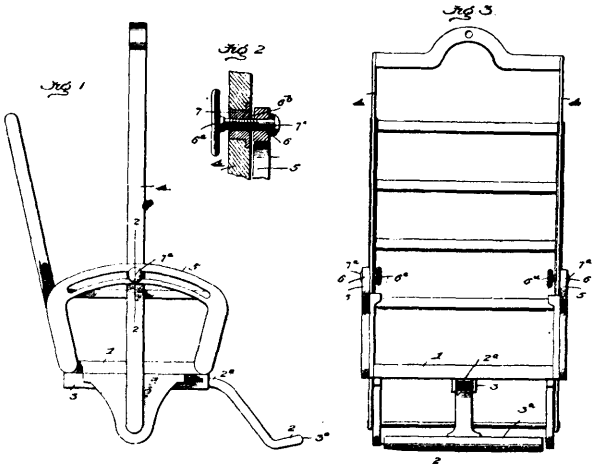
John Alexander Cowan, Qu'Appelle, Assiniboia, North-West Territory, Canada, 28th June, 1900; 6 years. (Filed 6th June, 1900.)

Claim.—1st. In an automatic feed for straw burning furnaces, a box or cage for straw and an endless feed apron suitably carried on a frame pivoted near the bottom and one side of the cage, in combination with a suitably supported transverse conveyer arranged in proximity to the outer side of the lower end of the apron, a feed



box adapted to receive straw from the transverse conveyer, and means for driving the apron and conveyer, substantially as and for the purpose specified. 2nd. In an automatic feed for straw burning furnaces, a box or cage for the straw and an endless feed apron suitably carried on a frame pivoted near the bottom and one side of the cage, a cord attached at one end to the said frame, a guide or pulley on the cage, and a counterbalancing weight to which the other end of the cord is secured, in combination with a suitably supported transverse conveyer arranged in proximity to the outer side of the lower end of the apron, a feed box adapted to receive straw from the transverse conveyer, and means for driving the apron and conveyer, substantially as and for the purpose specified. 3rd. In an automatic feed for straw burning furnaces, a box or cage for straw and an endless feed apron suitably carried on a frame pivoted near the bottom and one side of the cage, in combination with means for receiving the straw from the apron and conveying it to the furnace, substantially as and for the purpose specified. 4th. In an automatic feed for straw burning furnaces, a box or cage for straw and an endless feed apron suitably carried on a frame pivoted near the bottom and one side of the cage, a cord attached at one end to the said frame, a guide or pulley on the cage, a counterbalancing weight to which the other end of the cord is secured, in combination with means for receiving the straw from the apron and conveying it to the furnace, substantially as and for the purpose specified. 5th. In an automatic feed for straw burning furnaces, the combination of a box or cage for straw, a transverse conveyer arranged in communication with the front part of the bottom of the cage, means to move straw in the cage to the conveyer, and a feed box arranged to receive straw from the conveyer, and a slotted tongue forming one side of the feed box and adapted to strip the conveyer, substantially as and for the purpose specified. 7th. In an automatic feed for straw burning furnaces, a box or cage for straw, a transverse canvas covered toothed conveyer arranged in communication with the bottom part of the cage, means to move straw in the cage to the conveyer, a feed box arranged to receive straw from the conveyer, and a slotted spring tongue forming one side of the feed box and adapted to strip the conveyer, substantially as and for the purpose specified. 8th. In an automatic feed for straw burning furnaces, a box or cage for straw, and an endless feed apron provided with slats and teeth inclined to one side, and suitably carried on a frame pivoted near the bottom and one side of the cage in combination with a transverse conveyer arranged in proximity to the outer side of the lower end of the feed apron, a box adapted to receive straw from the transverse conveyer, and means for driving the apron and the conveyer so that the former delivers straw to the latter and the latter moves in the direction of inclination of the teeth of the apron, substantially as and for the purpose specified. 9th. In an automatic feed for straw burning furnaces, the combination of a box or cage for straw, means to move straw in the cage to the front part of the bottom of the cage, transverse conveyers arranged in communication with the said part of the cage and so carried as to draw straw from said part of the cage between them, a feed box adapted to receive straw from the conveyers, and means for driving the different parts, substantially as and for the purpose specified.

No. 67,917. Swinging Chair. (*Siége de balançoires.*)

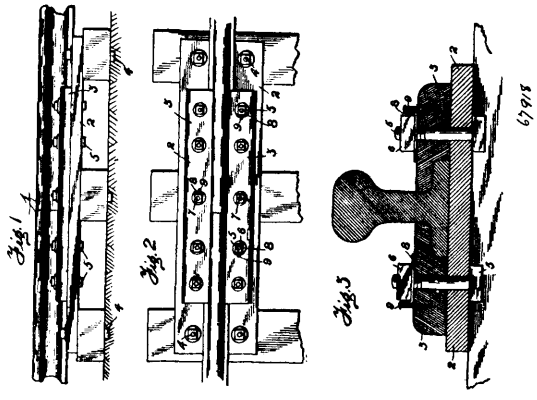


67917

Charles H. Barrows, Milford, Delaware, U.S.A., 28th June, 1900; 6 years. (Filed 9th June, 1900.)

Claim.—1st. In a chair of the character described, the combination of a seat or chair and parallel suspending bars suitably braced or connected together, with their lower ends secured to a cross rod or pivot bearing in the underside of said seat or chair, and means for the relative adjustment and clamping together of said suspending bars and chair or seat, substantially as set forth. 2nd. In a chair of the character described, the combination of a seat or chair and parallel suspending bars with their lower connecting cross rod bearing in the underside of said chair or seat, a set or adjusting screw working in a screw threaded aperture, of a block or piece in each of said suspending bars, and having one end provided with a hand wheel and its other end terminating in a disc or plate, substantially as set forth.

No. 67,918. Rail Joint. (*Joint de rails.*)



67918

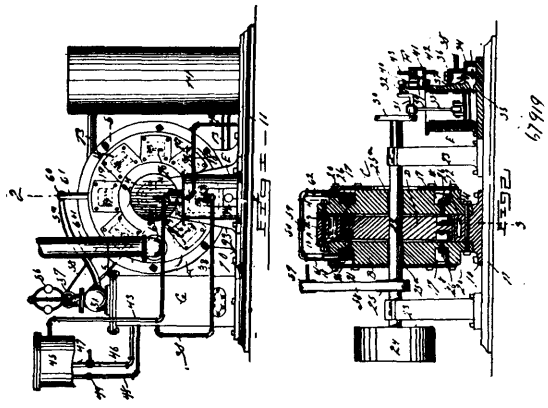
John Nicholas Powers, Shreveport, Louisiana, U.S.A., 28th June, 1900; 6 years. (Filed 22nd May, 1900.)

Claim.—The combination with a supporting plate provided with bolt holes, three sets of which are designed to be placed over the ties and two sets of which are designed to be placed over the space between the ties, of rails seated upon said plate, clamping plates seated upon said plate and engaging the base of the rails, said clamping plates being provided with bolt holes which register with all of the bolt holes aforesaid with the exception of those at the ends of the plate, bolts inserted through the said bolt holes and provided with nuts, the bolts of the nuts which are located over the ties extending entirely through the ties, washers placed upon the upper ends of said bolts and having a portion bent upward against the side of said nuts, and fixed pins arranged adjacent to said nuts to prevent the rotation of said washers, substantially as and for the purpose set forth.

No. 67,919. Combustion Engine. (*Machine à combustion.*)

James L. Baillie, Shawnee, Ohio, U.S.A., 28th June, 1900; 6 years. (Filed 5th May, 1900.)

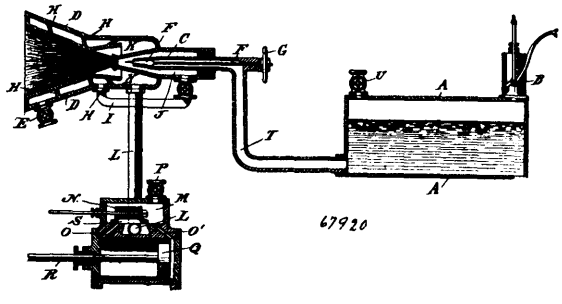
Claim.—1st. In a combustion engine, the combination with a combustion chamber, and oil and air supply pipes projecting into the same, of a pipe projecting into the chamber between the air anp oil pipes, said pipe having a closed inner end and an open outer



67919

end, and an oil pipe projecting into the said pipe, substantially as described. 2nd. In a combustion engine, the combination of a combustion chamber, a horizontally extending pipe in the chamber, the inner end of the pipe being closed and its outer end open, an air pipe leading into the chamber below the horizontally extending pipe, a gas or oil tank, a pipe leading from said tank into the chamber above the horizontally extending pipe, and a second pipe leading from the tank into the said horizontally extending pipe, substantially as described. 3rd. In a combustion chamber, the combination of a casing having chambers in its sides, a turbine driving wheel mounted in the casing and provided with pockets in its sides, nozzles in the chambers of the casing and discharging into the pockets of the turbine wheel, a combustion chamber, a governor casing on the combustion chamber and communicating therewith, a hollow partition in said casing and provided with valve seats, a pipe leading from the hollow partition and connected with each chamber of the driving wheel casing, valves adapted to be seated on the seats of said partition, and a governor driven from the driving wheel and having the said valves secured to its rod, substantially as described. 4th. In a combustion engine, the combination with a combustion chamber, a casing, a connection between the casing and chamber and a wheel in the casing driven by the products of combustion from said chamber, of a disc on the shaft of the said wheel, two cranks eccentrically secured to the discs, an air pump having its piston connected with one crank, an oil pump on the upper part of the air pump and having its piston connected with the other crank, and connections between the said pumps and combustion chamber, substantially as described.

No. 67,920. Vacuum Engine. (*Machine à vide.*)



67920

Gustav Emil Hesse, New York City, New York, U.S.A., 28th June, 1900; 6 years. (Filed 3rd May, 1900.)

Claim.—1st. The combination of an apparatus having a combustion chamber adapted to continuously burn fuel, means to continuously supply fuel to said combustion chamber, a part or chamber adjacent to the combustion chamber within which the uninterrupted combustion continuously produces a partial vacuum, an engine cylinder provided with suitable valves, and a pipe connecting said vacuum chamber with the cylinder, for the purposes set forth. 2nd. The combination of an apparatus having a combustion chamber adapted to continuously burn fuel, means to continuously supply fuel to said combustion chamber, a part or chamber adjacent to the combustion chamber within which the uninterrupted combustion continuously produces a partial vacuum, means to put the fuel under pressure, an engine cylinder provided with suitable valves, and a pipe connecting the vacuum with the cylinder, for the purposes set forth. 3rd. The combination of an apparatus having a combustion chamber adapted to continuously burn fuel, an air duct for supply-

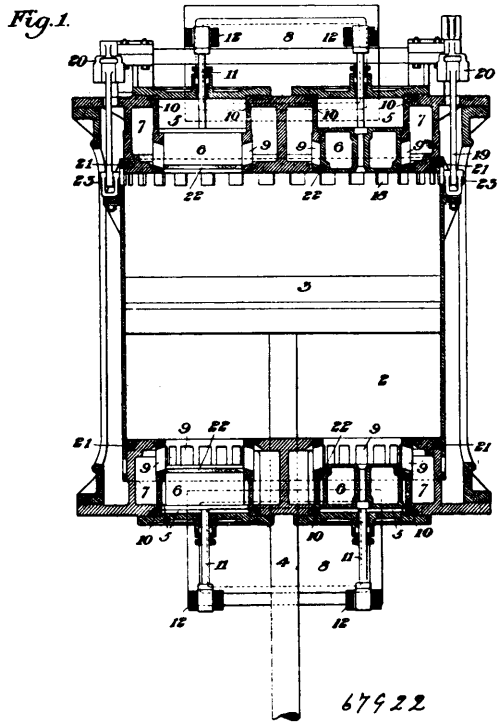
ing oxygen to the fuel located in the wall of the combustion chamber, a chamber adjacent to the combustion chamber within which a partial vacuum is continuously maintained by the combustion of the fuel, an engine cylinder provided with suitable valves and a pipe connecting the vacuum chamber with the cylinder, for the purposes set forth. 4th. The combination of a reservoir adapted to contain fuel, a burner, means to continuously convey the fuel to the burner, a chamber adjacent to the burner within which the uninterrupted combustion of the fuel continuously produces a partial vacuum, an engine cylinder and its piston, a duct connecting the chamber with the exhaust of a cylinder, and means to permit atmospheric air to alternately impinge upon the piston of the cylinder at the side opposite that where the vacuum is present, for the purposes set forth. 5th. The combination of a reservoir adapted to contain fuel, a burner, means to continuously convey the fuel to the burner, a chamber adjacent to the burner within which the uninterrupted combustion of the fuel continuously produces a partial vacuum, an engine cylinder and its piston, a pipe connecting the vacuum chamber with the cylinder of the engine, means to permit atmospheric air to alternately impinge upon the sides of the piston opposite that where the vacuum is present, and means to regulate the speed of the motor by allowing more or less air to enter the cylinder, for the purposes set forth. 6th. A motor power generator embodying a valveless apparatus provided with a combustion chamber adapted to continuously burn fuel, means for continuously supplying fuel to the apparatus, a chamber adjacent to the combustion chamber within which the continuous combustion of the fuel maintains a partial vacuum, a cylinder provided with a piston removed from said combustion apparatus whereby the former will be always cool or relatively cool, means connecting the combustion apparatus and the cylinder whereby the vacuum or partial vacuum generated in the former may be alternately present in the opposite ends of the latter, and means for admitting air at atmospheric pressure alternately at the sides of the piston of the cylinder where the vacuum is not present, for the purposes set forth. 7th. The combination of a burner, a chamber within which the air and fuel mix adjacent to the burner, a vacuum chamber enclosing said first named chamber, a combustion chamber in front of the vacuum chamber, and a pipe to extend the vacuum chamber to the point of use, for the purposes set forth. 8th. The combination of a burner, a chamber within which the air and fuel mix, a combustion chamber surrounded by an air flue for the purpose of heating the air, a vacuum chamber adjacent to the combustion chamber, a pipe connecting the air flue with the mixing chamber, and another pipe for extending the vacuum chamber to the point of use, for the purposes set forth. 9th. The combination of a burner, a chamber within which the air and fuel mix, a combustion chamber in front of said mixing chamber, a vacuum chamber adjacent to the burner, a fuel tank connected with the burner, an air compressing pump connected with the fuel tank, and a pipe which connects with the vacuum chamber and extends it to the point of use, for the purposes set forth. 10th. The combination of a burner, a chamber within which the air and fuel mix, a combustion chamber in front of said mixing chamber, a vacuum chamber adjacent to the burner, and an air flue surrounding the combustion chamber and having an opening for the admission of air at the coolest part thereof, whereby the air will be heated to a higher degree prior to reaching the mixing chamber, for the purposes set forth. 11th. The combination of a burner, a chamber within which the fuel and air mix, a combustion chamber in front of said mixing chamber, a vacuum chamber adjacent to the burner, and an air flue arranged spirally around the combustion chamber, for the purposes set forth. 12th. The combination of a burner, a vacuum chamber adjacent to the burner, a chamber within which the air and fuel mix, surrounding the burner, a combustion chamber having a conical shape in front of the mixing chamber, whereby the burning gases may expand as they burn, for the purposes set forth. 13th. The combination of a burner, a chamber within which the air and fuel mix, a vacuum chamber, a combustion chamber, a fuel supply pipe, a cylinder with its valves and connections, and a pipe connecting the vacuum chamber with the exhaust of the cylinder, for the purposes set forth. 14th. A motor embodying the combination of apparatus to burn fuel and thereby uninterruptedly produce a vacuum or partial vacuum, a cylinder removed from the combustion chamber whereby the cylinder will be always cool or relatively so, a piston in the cylinder, means connecting the combustion apparatus and the cylinder provided with devices whereby the vacuum may be alternately present in the opposite ends of the cylinder, and means for admitting air at atmospheric pressure alternately to the sides of the piston opposite the vacuum, for the purposes set forth.

No. 67,921. Artificial Fuel. *(Combustible artificiel.)*

Helen Mar Vanetten and Hull Greenfield, both of Moravia, New York, U.S.A., 28th June, 1900; 6 years. (Filed 11th January, 1900.)

Claim.—1st. The combination for artificial fuel consisting of bituminous coal dust or slack, alum, sal soda, and whiting in about the proportions specified. 2nd. The treatment of coal dust or slack by mixing therewith sufficient water to impart a pulpy character to the mass, then boiling said mass, and while maintained at boiling temperature adding thereto a solution of alum, and asphaltum, sal soda, whiting, and sulphur, and meantime stirring said mass, as set forth. 3rd. A composition for artificial fuel consisting of bituminous coal dust or slack, alum, sal soda, and whiting in about the proportions specified.

No. 67,922. Blowing Engine. *(Machine soufflante.)*



The Braddock Machine and Manufacturing Co., Braddock Borough, Pennsylvania, assignee of Edwin Elmer Slick, North Braddock, Pennsylvania, 28th June, 1900; 12 years. (Filed 7th March, 1900.)

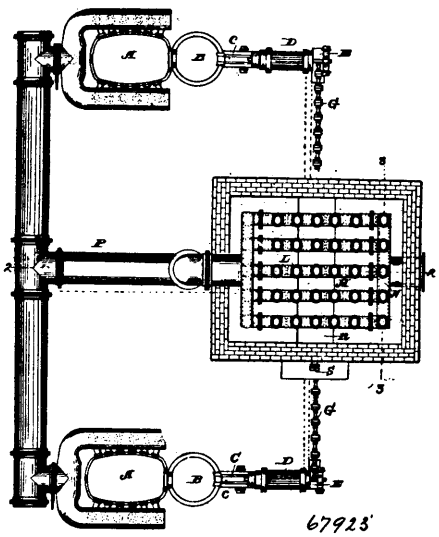
Claim.—1st. The combination with a cylinder containing a piston said cylinder having valved heads and being provided with ports near its ends, of means for reciprocating the cylinder over the heads, substantially as described. 2nd. A cylinder having heads provided with piston valves whose ports communicate with an outlet, said cylinder having ports near its ends, and actuating connections arranged to reciprocate the cylinder over the heads, substantially as described. 3rd. A cylinder containing a reciprocating piston and having heads provided with piston valves whose chambers are connected to an outlet, said cylinder having an annular series of inlet ports near each end, and actuating connections arranged to reciprocate the cylinder over the heads, substantially as described. 4th. In a blowing engine, a reciprocatory piston therein, and reciprocating piston valves in the cylinder heads, controlling ports leading to the outlet, said cylinder, piston and valve having suitable actuating connections to impart the proper movements thereto, substantially as described. 5th. In a blowing engine, the combination with a cylinder containing a piston, said cylinder having relatively stationary heads supported by distance pieces and inlet and outlet valves, of means for reciprocating the cylinder over the heads, and for reciprocating the piston, substantially as described. 6th. In a blowing engine, the combination with a reciprocating piston, said cylinder having relatively stationary heads provided with valves, of an inlet valve for the cylinder, means for reciprocating the cylinder over the heads, and for reciprocating the piston, and means for actuating the valves, substantially as described. 7th. The combination of a cylinder containing a piston and having ports near its ends, and a cylinder head controlling said ports, said cylinder and heads being reciprocable one with relation to the other, substantially as described.

No. 67,923. Means of Utilizing the Heat of Furnace Slag. *(Moyen d'utiliser la chaleur des scories de fournaises.)*

James McArthur, Copper Cliff, near Sudbury, Ontario, Canada, and Henry Payne McIntosh, Cleveland, Ohio, U.S.A., 28th June, 1900; 6 years. (Filed 26th August, 1899.)

Claim.—1st. The combination of a chute adapted to subject molten slag to water treatment, and a rotating open worked device which separates such water from the resulting granular slag, substantially as set forth. 2nd. The combination of a chute for granulating molten slag by water, a rotating open worked device for separating such water from the granulated slag, a hot air pipe stove, and a granular slag conveyor between said water separating device and stove, substantially as set forth. 3rd. The combination of a chute for

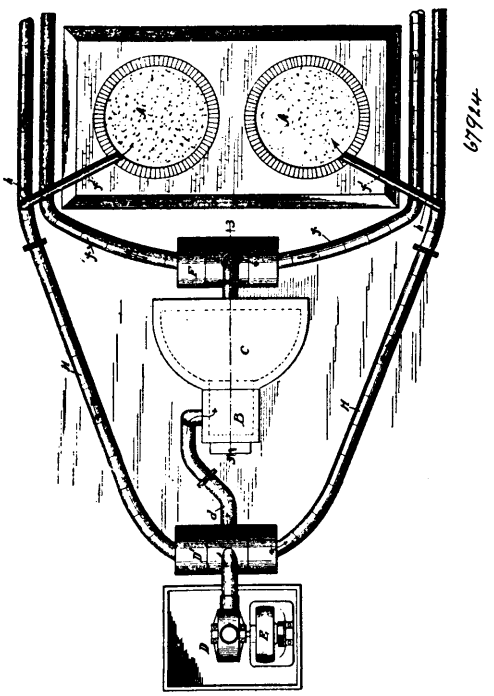
receiving molten slag, a water pipe for subjecting such chute slag to water, a rotating open worked cylinder for separating the water



from the granulated slag, a hot air pipe stove, and an elevator for conveying the grandulated slag from said cylinder to said stove, substantiallly as set forth.

No. 67,924. Coke Making Process.

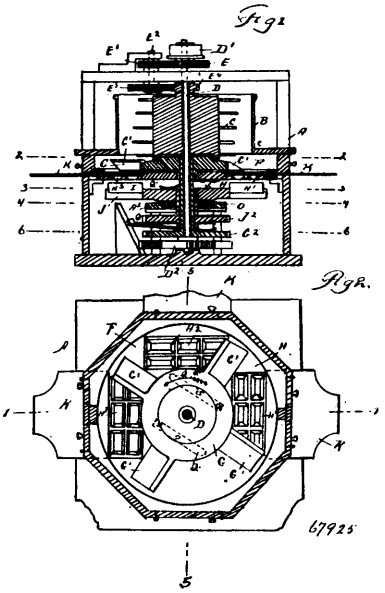
(Procédé pour la fabrication du coke.)



The Universal Fuel Company, 81 South Clark Street, Chicago, Illinois, assignee of Joseph Hemingway, Spearfish, South Dakota, both in the U.S.A., 28th June, 1900; 6 years. (Filed 5th December, 1899.)

Claim.—1st. The process of coking coal, which consists in confining the coal in an oven, firing the coal, and then subjecting the coal to a temperature sufficiently high to cause not only the generation of gases but also the disintegration of their elements and the conversion of volatile carbons into fixed form and their deposition as constituent appreciable integral additions to the coke product, substantially as described. 2nd. The process of coking coal, which consists in confining the coal in an oven, firing the coal, and then introducing into the oven above the coal an extraneously heated de-oxygenized blast to accelerate the generation and induce circulation or movement in the volatile gases in the oven while the trunnel hole in the top of the oven is open, thus causing the ingress into the oven of atmospheric air to support combustion and the egress through the same hole of non-combustible or consumed gases, substantially as described. 3rd. The process of coking coal, which consists in confining the coal in an oven, firing the coal, and then introducing into the oven above the coal an extraneously specially prepared highly heated blast, having imparted to it during the act of heating it, as an additional quality the property of de-sulphurizing coal under heat, substantially as described. 4th. The process of coking coal, which consists in confining the coal in an oven, firing the coal, then introducing into the oven above the coal an extraneously heated de-oxygenized blast of a temperature before its introduction, greater than that usually employed in the coking operation to increase the heat in the oven above the temperature produced by the combustion therein of the gases generated from the coal and to accelerate the generation of such gases, and then permitting the de-oxygenized blast and that portion of the evolved gases not converted into fixed carbon to escape through an opening at the top of the oven, substantially as described. 5th. The process of coking coal which consists in confining the coal in an oven, firing the coal, then introducing into the oven above the coal an extraneously heated de-oxygenized blast, of a temperature, before its introduction, greater than that usually employed in the coking operation to increase the heat in the oven above the temperature produced by the combustion therein of the gases generated from the coal and to induce a condition favorable to the rapid generation of such gases, then introducing a sufficient volume of live air into the oven to cause the combustion of the combustible gases being evolved, and then shutting off the supply of live air with the cessation of the generation of combustible gases to prevent the combustion of fixed carbon, substantially as described. 6th. The process of coking coal, which consists in confining the coal in an oven, firing the coal, then introducing into the oven above the coal a blast comprising extraneously heated de-oxygenized air, of high temperature, and live air containing free oxygen to induce in the oven a temperature and quality of heat favorable to the simultaneous generation and combustion of volatile combustible gases and thus accelerate the coking operation, substantially as described. 7th. The process of coking coal, which consists in confining the coal in an oven, firing the coal, and then introducing into the oven above the coal, alternately and in the order preferred, extraneously highly heated de-oxygenized blasts and supplies of live air to regulate and control the coking operation by adjusting and balancing the temperature and quality of the heat in the oven at the will of the operator to secure the proper relative rates of the generation and combustion of the volatile gases, substantially as described.

No. 67,925. Brick Machine. *(Machine à brique.)*



John Rowe, Sidney, Iowa, U.S.A., 29th June 1900; 6 years. (Filed 4th October, 1899.)

Claim.—1st. A brick machine provided with a former having sets of openings, of which the openings in a succeeding set are larger than those in the preceding set, a presser operating in conjunction with the said former to press the material successively in layers through the sets of openings into the registering compartments of the sanded moulds and means for bringing the sanded moulds into position at the said openings of the former, substantially as described. 2nd. A brick machine, provided with a former having sets of openings, of which the openings in a succeeding set are larger than in the preceding set, substantially as shown and described. 3rd. A brick machine, provided with a former having sets of openings and a

presser, the latter and the said former operating in conjunction with each other to press the material successively in layers through the sets of openings into the registering compartments of the sanded mould, and means for bringing the sanded moulds into position at the said openings of the former, substantially as shown and described. 4th. A brick machine provided with a fixed former having sets of openings, means for bringing the sanded moulds into position at the said openings and an intermittently revolving presser operating over the openings in the former, to press the material successively in layers through the former and into a mould held below the former, substantially as shown and described. 5th. A brick machine provided with a fixed former having sets of openings, an intermittently revolving presser operating over the openings in the former, to press the material successively in layers through the former and upon a mould held below the former, and an intermittently rotating mould carrier, for carrying the moulds under the said openings, as set forth. 6th. A brick machine comprising a mixing chamber containing a continuously revolving agitator, a former having sets of openings arranged in the bottom of said chamber, a presser having angular wings, and arranged to rotate intermittently above the said former and below the agitator, to press the material through the former and openings, and an intermittently rotating carrier arranged below the said former, and adapted to carry removable moulds, substantially as shown and described. 7th. A brick machine comprising a mixing chamber containing a continuously revolving agitator, a former having sets of openings arranged in the bottom of said chamber, a presser having angular wings, and arranged to rotate intermittently above the said former and below the agitator, to press the material through the former and openings, an intermittently rotating carrier arranged below the said former, and adapted to carry removable moulds and means, substantially as described for rotating the said carrier and said presser intermittently, but at different times, as set forth.

No. 67,926. Starting Device for Gas Engines.

(*Appareil de mise en mouvement à gaz.*)

Fig. 1

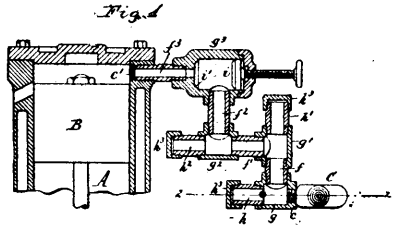
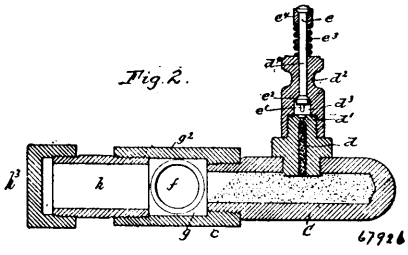


Fig. 2.



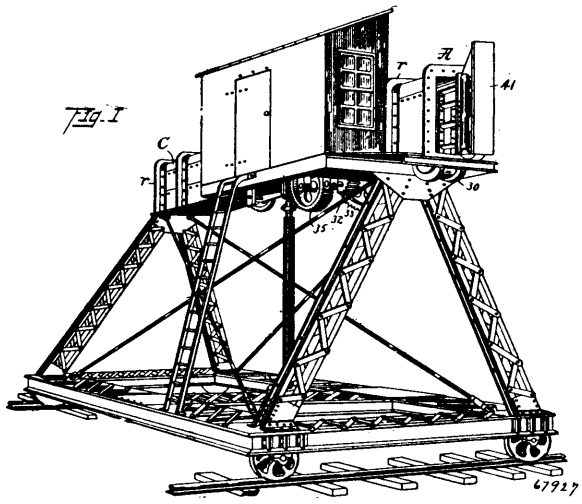
The Standard Automatic Gas Engine Company, assignee of John Walter Raymond, all of Oil City, Pennsylvania, U.S.A., 29th June, 1900; 6 years. (Filed 6th October, 1899.)

Claim.—1st. The combination with the engine cylinder, of a horizontal starting barrel containing a main powder chamber which is closed at its outer end and open at its inner end and adapted to contain loose powder, a removable upright plug secured in the upper side of said barrel between the ends thereof and containing an auxiliary powder chamber which opens at its lower end into the horizontal main chamber and has at its outer end a seat for the percussion cap, a guide sleeve mounted on the outer end of said plug, and a starting rod guided in said sleeve and provided at its inner end with a firing pin, substantially as set forth. 2nd. The combination with the engine cylinder and the powder chamber of the starting device, of a conduit connecting said powder chamber and cylinder and consisting of a number of sections, each section being deflected or arranged at an angle with reference to the adjacent sections, and pockets opening into the conduit and each pocket facing the outlet of one of said section, substantially as set forth. 3rd. The combination with the engine cylinder and the powder chamber, of the starting device, of a conduit connecting said powder chamber and cylinder and consisting of a number of sections, each section being arranged at an angle to the adjacent sections, pockets opening into the conduit and each pocket facing the outlet of one of said sections, and caps closing the outer ends of said pockets, substantially as set forth.

No. 67,927. Coke Pusher Machine.

(*Outil de chauffe pour le coke.*)

Fig. 1



Alexander Ephraim Brown, Cleveland, Ohio, U.S.A., 29th June, 1900; 6 years. (Filed 3rd February, 1900.)

Claim.—1st. In an apparatus for charging or drawing coke ovens, open hearth or steel heating furnaces and the like, the combination of a frame or supporting structure, and a pusher bar or ram composed of sectional members, one of which members rests and is movable horizontally upon said frame or supporting structure, upon or against rollers or similar rotating supports or bearings provided for the purpose, and the other of which members rests upon the first named of said members, upon or against like rollers or rotating supports or bearings, sheaves or similar appliances, at the rear and forward portions respectively of said first named member, and chains or like devices fastened to the rear portion of said second named member, and respectively to the rear and forward portions of said frame or structure, which chains in one case pass over said sheave or sheaves at said forward portion of said first named member, together with suitable means for actuating said first named member horizontally forward and back on said frame or supporting device, substantially as shown and described. 11th. In an apparatus for charging or drawing coke ovens, open hearth or steel heating furnaces and the like, the combination of the box girder C, having a suitable frame or supporting structure, the hollow beam or bar B horizontally mounted on said box girder C upon and against rollers, as described, the pusher bar A mounted upon or within said beam or bar B, upon and against rollers provided for the purpose, likewise as described, and sheaves 22 and 25 journalled in said beam or bar B at its rear and forward portions respectively, and chains 21 passing over the sheaves 22 and anchored at one end of the rear portion of the pusher bar A and at the other end to the girder C or its frame or support at or near the point described, chains 24 passing over the sheaves 25 and anchored at one end to the rear portion of the girder C or its frame or support, together with suitable means for actuating said beam or bar B forward and back upon said girder C, substantially as shown and described. 3rd. In an apparatus for charging or drawing coke ovens, open hearth or steel heating furnaces and the like, the combination of the box girder C horizontally mounted upon a suitable frame or supporting structure provided for the purpose, the hollow beam or bar B having racks 31 and pinions 32 meshing therewith, the track rollers 29 journalled to the sides of the beam or bar B at its inner end resting on the girder tracks *g* provided for the purpose, the rollers 30 journalled to the outer end of said beam or bar, as described, the pusher bar A provided with supporting rollers 27 resting on flanges or tracks provided for the purpose on or near the lower side edges of the beam or bar B, and the rollers 28 bearing against suitable tracks along the upper portion of said beam or bar B, sheaves 22 and 25 journalled in said beam or bar B at its rear and forward portions respectively, chains 21 anchored, at one end to the girder C, as described, which pass over the sheaves 22 and are anchored at their other end to the portion of the pusher bar A, chains 24, anchored at one end to the rear portion of the pusher bar A, which pass up over the sheaves 25 and are anchored at their other end to the girder C at its rear portion, together with a suitable gear system, in train with the pinion 32, and connected with a source of power, substantially as shown and described. 4th. In an apparatus for drawing coke ovens, open hearth or steel heating furnaces, and the like, the combination of a frame or supporting structure and a pusher bar or ram composed of

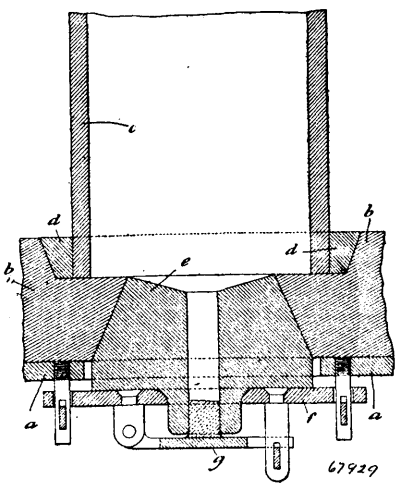
sectional members, one of which rests upon said frame or supporting structure upon or agaisnt rollers or similar rotating supports or bearings provided for the purpose, and the other of which rests upon the first named of said members, upon or against like rollers or rotating supports or bearings, sheaves or similar appliances on the rear and forward portions of the first named of said members and chains or like devices, anchored to the rear portion of the second named of said members, one of which chain or set of chains passes up and over the said sheave on the said rear portion to, and is anchored at, the forward portion of said first named member, and the other of said chains pass up and over the said sheave on the said forward portion of said first named member to, and is anchored at the forward portion of said first named member, together with a drum or like device, connected with suitable driving mechanism and a chain or similar band or like device, which passes around said drum and an oppositely related sheave or drum provided for the purpose, and is fastened to the first above named member at the rear of the same, substantially as shown and described. 5th. In an apparatus for charging and drawing coke ovens, open hearths or steel heating furnaces and the like, the combination of a frame or supporting structure and the beam or bar B mounted on said frame or structure upon and against rollers, as described, the pusher bar A mounted upon or within said beam or bar upon and against rollers likewise as described, the actuating drum 53^a, the sheaves 50^a, 51^a, 51^b, 52^a, 52^b, the continuous chain or cable P, fastened to the rear end of the bar A, together with the stops 59 on said bat A, and the stops or bearings 54 and 55 on the beam B, and suitable means for actuating said drum 53^a, substantially as shown and described.

No. 67,928. Wall Plaster Composition.
(*Plâtre pour murs.*)

John F. Pharo, New York City, New York, U.S.A., 29th June, 1900; 6 years. (Filed 12th February, 1900.)

Claim.—1st. A composition of matter to form a wall plaster comprising short fibred asbestos, calcined plaster, lime and a retainer mixed dry in substantially the proportions specified. 2nd. A composition of matter to form a wall plaster comprising short fibred asbestos, calcined plaster, lime, sand and a retainer mixed dry in substantially the proportions specified. 3rd. A composition of matter to form a wall plaster comprising short fibred substances, calcined plaster, sand, lime and sugar in substantially the proportions specified.

No. 67,929. Crucible. (*Crucible.*)



Alleyne Reynolds, Riverdale, York, England, 29th June, 1900; 6 years. (Filed 14th February, 1900.)

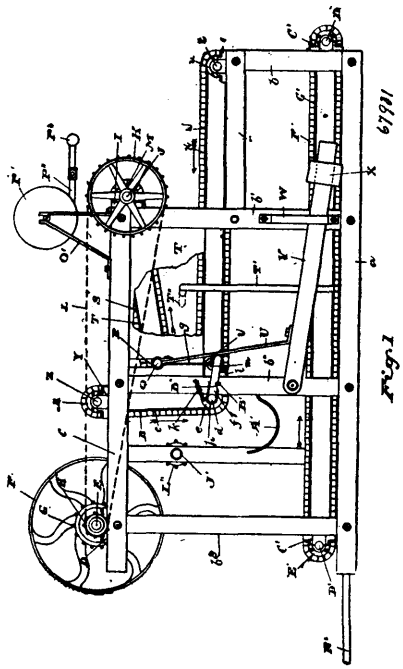
Claim.—A crucible furnace having a hearth with a recess for a crucible in the form of a tube, or several of these and a tap hole plug secured in a hole through a supporting plate below each crucible, substantially as described.

No. 67,930. Wall Plaster. (*Plâtre pour murs.*)

William Coale, Warren, Ohio, U.S.A., 29th June, 1900; 6 years. (Filed 28th February, 1900.)

Claim.—A composition of matter comprising calcined plaster, cement, clay, lime, fibre, and a stucco-retarder in the proportions substantially as described.

No. 67,931. Machine for Making Straw and Peat Fuel.
(*Machine pour la fabrication du combustible de paille et tourbe.*)

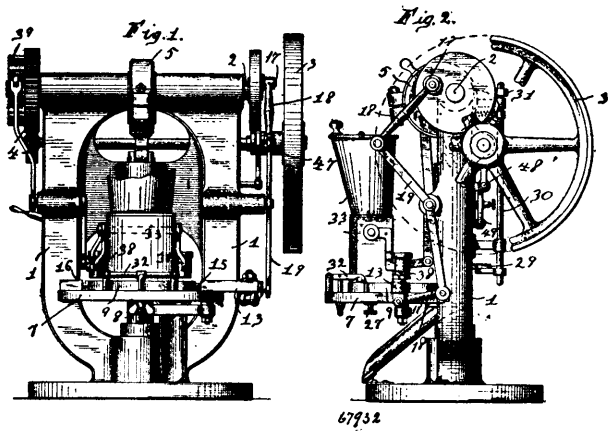


Harman Bunker, Barrie, Ontario, and George Edward Horn, Cavalier, North Dakota, U.S.A., 29th June, 1900; 6 years. (Filed 1st March, 1900.)

Claim.—1st. A machine for making straw and peat or other fuel, embracing in its construction a frame, a substantially horizontal conveyer belt, a butting belt opposed to the inner end of the conveyer, the lower end of which is outwardly movable, a compresser belt above the conveyer belt and means for imparting a rotary motion to the belts, substantially as specified. 2nd. A machine for making straw and peat or other fuel, embracing in its construction a frame, substantially horizontal conveyer belt, a butting belt opposed to the inner end of the conveyer belt, the lower end of which is outwardly movable, a compresser belt above the conveyer belt, means for imparting a rotary motion to the belts, a water tank supported above the conveyer belt, provided with a spraying apparatus to discharge its contents on the material carried by the conveyer belt, and a steam pipe having upwardly extending branches at each end to direct a jet of steam on the material being formed by the belts, substantially as specified. 3rd. A machine for making straw and peat or other fuel, embracing in its construction a frame, a substantially horizontal conveyer belt, a butting belt opposed to the inner end of the conveyer belt, the lower end of which is outwardly movable, a compresser belt above the conveyer belt, means for imparting a rotary motion to the belts and receivers connected to the frame below the inner end of the conveyer belt to receive the fuel after its formation, substantially as specified. 4th. A machine for making straw and peat or other fuel, embracing in its construction a frame, a substantially horizontal conveyer belt, abutting belt opposed to the inner end of the conveyer belt, a shaft within the butting belt, springs connected to the shaft and to the frame, a compresser belt passing around the shafts, one of which is vertically movable in the bearings and the other of which is stationary, means for imparting motion to the belts, an arm depending from the end of the movable shaft, a lever pivoted to the lower end of the arm and connected to the shaft within the butting belt, a second arm depending from the movable shaft, connected to a lever, one end of which is pivoted to the frame, the other end of which is weighted, receivers connected to the frame below the inner end of the conveyer belt, a water tank mounted on the frame above the conveyer belt, a spray for the water tank adapted to dampen the material passing over the conveyer belt, and a steam pipe adapted to throw a jet of steam on the materials during its formation by the belts, substantially as specified. 5th. A machine for making straw and peat or other fuel, embracing in its construction a frame, a substantially horizontal conveyer belt passing around shafts journalled in the frame, a butting belt passing around a shaft journalled in the frame, the lower end of the butting belt opposed to the inner end of the conveyer belt, a shaft within the butting belt, a collar mounted on the shaft in the butting belt, a spring connected to the collar and to the frame, a compresser belt passing around shafts one of which is vertically movable in the frame, the other of which is stationary, means for imparting motion to the belts, an arm depending from the end of the movable shaft, a ever pivoted to the lower end of the arm and connected to the shaft

within the vertical belt, a second arm depending from the movable shaft connected to a lever one end of which is pivoted to the frame, the other end of which is weighted, receivers connected to the frame below the inner end of the conveyer belt, a spray for the water tank adapted to dampen the material passing over the conveyer belt and a steam pipe adapted to throw a jet of steam on the materials during its formation by the belts, and a return belt below the conveyer belt to return any of the material falling from the conveyer belt to the front of the machine, substantially as specified.

No. 67,932. Machine for Moulding Powdered Material into Cakes. *(Machine pour mouler les matiéres en poudre en forme de pain)*



Hermann Böhmken, Berlin, Prussia, 29th June, 1900; 6 years. (Filed 10th March, 1900.)

Claim.—1st. The combination with a pastille pressing machine of a frame bearing a crank axle, a stamper and an ejector receiving an up and down movement from said axle, an anvil resting on the frame bottom opposite the stamper, a work table bearing an annular groove, a perforation crossing said groove, and an adjustable flat spring covering part of said groove, a rotating toothed form table bearing underneath an annular groove and a number of form holes closed at the bottom by movable valves fitting in said groove, spring governed pins perforating said valves and projecting with their enlarged heads into the form holes, a feeding funnel and two powder boxes, the latter receiving a shaking movement from the main axle, a horizontal arm oscillating in a slot of the work table and bearing at both ends spring governed pins engaging the teeth of the form table, substantially as shown and described. 2nd. The combination with a pastille pressing machine having a vertical stamper and ejector, a work table fixed to the frame, and a rotating form table bearing form holes closed by valves of a spade movably fastened to the stamper and being governed by a bent handle gliding in an ear fastened to the frame, substantially as shown and described. 3rd. The combination with a pastille pressing machine having a rotating axle and a vertical stamper and ejector, of a horizontal brush governed by a cam on the main axle. 4th. The combination with a pastille pressing machine having a fixed work table and a rotating form table bearing a number of form holes, a funnel on top of these holes, of an oscillating glide table and stirrers movably fastened to said funnel, substantially as shown and described. 5th. The combination with a pastille pressing machine of the type described, of a stopper and means for securing the same, viz., a two-armed lever, a spring governed pin in said lever and two holes in the frame opposite said pin, substantially as shown and described.

No. 67,933. Food Compound. *(Composé d'alimentation.)*

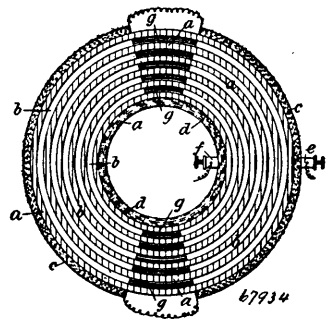
James Macredy, 1 Brick Court, Temple, London, England, 29th June, 1900; 6 years. (Filed 26th May, 1900.)

Claim—1st. A new food product consisting of milk and eggs blended or incorporated together in a fluid condition and thereafter concentrated and treated to preserve the same. 2nd. A new food product consisting of milk and eggs blended together and having incorporated therewith a preservative agent, the mixture being concentrated to a semi-fluid condition, substantially as described. 3rd. A new food product consisting of milk and eggs blended together and having incorporated therewith a preservative agent, the mixture being desiccated to a solid condition and subsequently reduced mechanically to a flaky substance, substantially as described.

No. 67,934. Electrical Treatment of Gases. *(Traitement électrique des gaz.)*

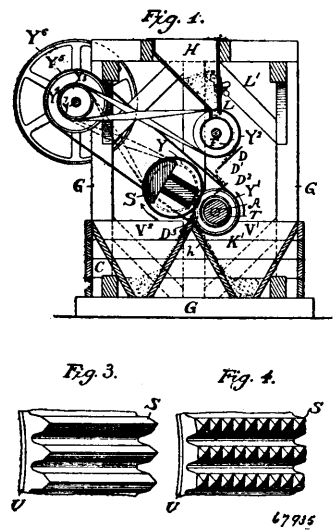
Reginald John Yarnold, Upper Tulse, Hill, Surrey, England, 29th June, 1900; 6 years. (Filed 9th August, 1899.)

Claim.—In apparatus for electrolysing or electrically treating gases and gaseous mixtures or compounds, in combination, a compilation of respectively insulated dielectrics, and a pair of outer or covering conductors respectively connected with the poles of the



source of the electric energy, the insulated dielectrics being of different inductive capacity to that of the gas or gaseous mixture or compound to be acted on, and being so arranged as to divide the entire space between the covering conductors into a series of through channels in such manner that each adjacent pair of the dielectrics forms and is separated by one of said channels which is bounded at its sides only by the insulators of the dielectrics, so that said dielectrics and the channels alternate, and that, when the apparatus is in operation and submitted to high potential electric alternating or pulsating currents of electricity, the alternating dielectrics and layers of the gas or mixture or compound under treatment and flowing therebetween will constitute a parallel compilation, dividing the entire space between the two covering conductors and between the end insulators into alternating layers of respectively different inductive capacities without any intermediate insulators or conductors, so producing high potential uniform electric induction discharges from conductor to conductor through the intermediate alternating dielectrics and layers of gas or mixture or compound, as set forth.

No. 67,935. Magnetic Separation. *(Séparation magnetique.)*



Clarence Quintard Payne, Manhattan, New York, U.S.A., 29th June, 1900; 18 years. (Filed 8th January, 1900.)

Claim.—1st. The method of separating substances of all degrees of magnetic susceptibility from one another, or from non-magnetic substances with which they may be mixed, which consists in introducing the mixture into a magnetic field of undulating magnetic potential, formed in an air gap of a magnetic circuit, attracting to one side of said field the more magnetic particles, thereby separating them from the less magnetic or non-magnetic particles, conveying both groups of particles along vertically diverging lines out of the field and discharging them in different paths of movement at the end thereof. 2nd. The method of separating substances of all degrees of magnetic susceptibility from one another, or from non-magnetic substances with which they may be mixed, which consist in inductively intercepting the lines of force on one side of a field formed between opposing magnetic surfaces in the air gap of a magnetic circuit, producing line dispersions of the flux density and wide differences of magnetic potential within said field, generating cyclic variations or undulations of the magnetic potential therein, introducing the mixture to be separated into said field, attracting to one side thereof the more magnetic particles, thereby separating

them from the less magnetic or non-magnetic particles, conveying both groups of particles along vertically diverging lines out of the field, and discharging them in different paths of movement at the end thereof.

No. 67,936. Air Compressor. (*Compresseur à air.*)

Fig. 1.

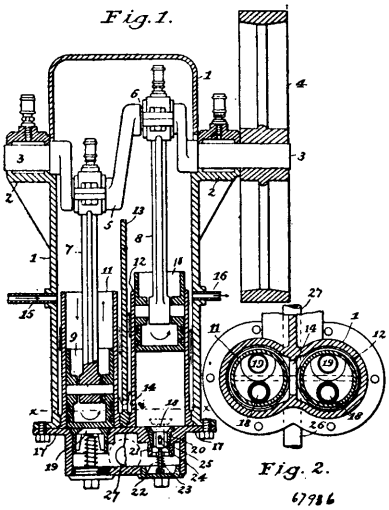


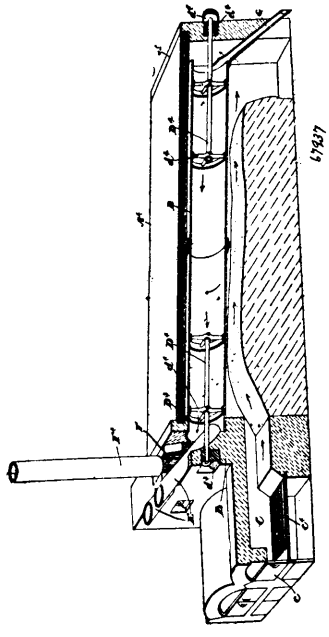
Fig. 2.

6736

John Behrens Buss, Woodlawn, assignee of William Davis Hooker, St. Louis, both in Missouri, U.S.A., 29th June, 1900; 6 years. (Filed February 13th, 1900.)

Claim.—1st. In an air compressor the combination with a series of compression cylinders of an outer surrounding shell for containing a cooling medium, having a dividing partition separat ng the shell into chamb ers, each chamber containing a cylinder, substantially as described. 2nd. In an air compressor the combination with a series of compression cylinders of an outer surrounding shell for containing a cooling medium, having a dividing partition separating the shell into chambers, each chamber containing a cylinder, the dividing partition integral therewith, said partition provided with an opening in its lower portion, substantially as described. 3rd. In an air compressor the combination with a series of compression cylinders of an outer surrounding shell for containing a cooling medium, having a dividing partition separating the shell into chambers, and open top inserted cylinders and plungers adapted to permit the circulation of the cooling medium outside and inside of said cylinders and plungers, substantially as described.

No. 67,937. Peat Fuel Dryer. (*Sechoir à tourbe.*)



6737

Alexander Dobson, Beaverton, and Wilson Irwin, Toronto, Ontario, Canada, 29th June, 1900; 6 years. (Filed 11th December, 1899.)

Claim.—1st. The method of drying peat consisting in causing the peat to pass through a suitable retort, applying heat and the flames directly at the feed end of the retort and carrying such heat along the length of the retort, so as to apply a graduated heat from intense heat at one end to a mild heat at the opposite end of the retort and then carrying the modified heat back through the retort and over and through the pulverized moving peat, so as to carry away the steam arising from the moisture in the peat, as and for the purpose specified. 2nd. In an apparatus of the class described, the combination with the casing and fire box located at the front end of the same, and the cylinder suitably journalled and deriving a rotary movement from a suitable source of power, of a chute leading into the cylinder at one end, means for conveying the peat through the cylinder, the discharge chute at the opposite end and a flue leading upwardly from the front end of the cylinder, as and for the purpose specified. 3rd. In an apparatus of the class described, the combination with the casing and fire box located at the front end of the same and the cylinder suitably journalled and having a downward incline from the front to the rear end and deriving a rotary movement from a suitable source of power, of a chute leading into the cylinder at one end, the discharge chute at the opposite end and a flue leading upwardly from the front end of the cylinder, as and for the purpose specified. 4th. The combination with the casing and fire box secured at the front end thereof, of the inclined cylinder suitably journalled at the front and rear ends in the casing and having the rear end open and separated from the rear wall of the casing, as and for the purpose specified. 5th. The combination with the casing and the fire box secured at the front end thereof, of the inclined cylinder suitably journalled at the front and rear ends in the casing and having the rear end open and separat d from the rear wall of the casing and the flue at the front end of the casing, as and for the purpose specified.

No. 67,938. Reversing Valve and Block for Steam Engines. (*Soupape de renversement pour machines à vapeur.*)

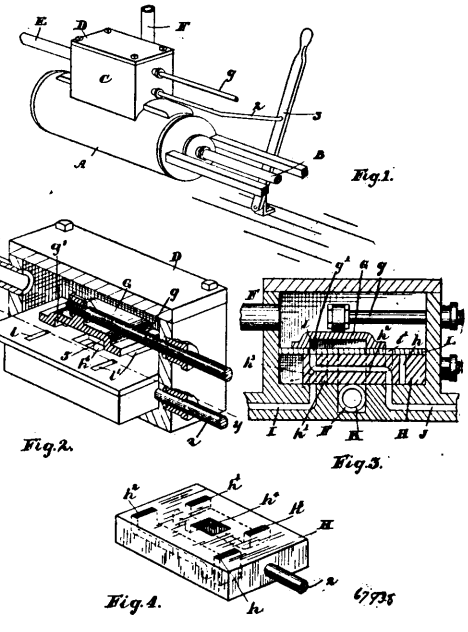


Fig. 1.

Fig. 2.

Fig. 3.

Fig. 4.

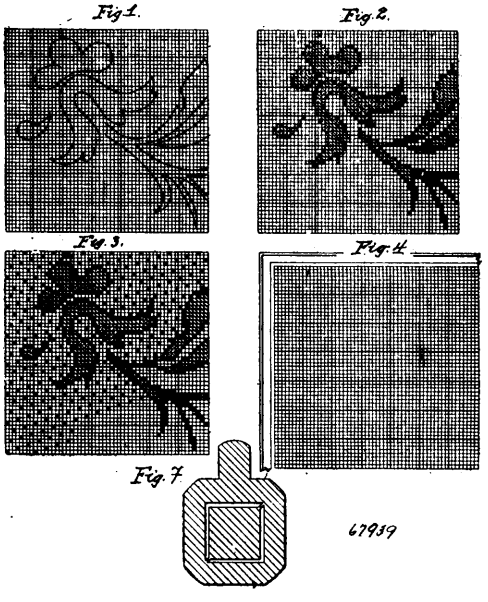
6738

George Gilmore and John Hawthorne, both of Simcoe, Ontario, Canada, 29th June, 1900; 6 years. (Filed 12th June, 1900.)

Claim.—1st. In a valve for steam engines, the combination with the steam chest and valve proper and ports leading to the cylinder from the steam chest, of a block and plate superimposed upon the ports leading to the cylinder, said block having straight ports situated at corresponding distances apart to the distance between the entrances to the inlet and exhaust lea ing to the cylinder, and zigzag ports having their entrances at the top and bottom of the block at equal distances apart to the entrances of the ports leading into the cylinder, and said plate having ports located opposite to the ports leading into the cylinder, one port of each set of the straight and zigzag ports in the block being designed to communicate with the inlet ports in the plate and cylinder, and the other port of each set being arranged to communicate with the port in the cylinder and the port in the plate and through the valve to the exhaust, as and for the purpose specified. 2nd. In a valve for steam engines, the combination with the steam chest and valve proper and ports leading to the cylinder from the steam chest, of a block and plate superimposed upon the ports leading to the cylinder, said block having straight ports situated at corresponding distances

apart to the distance between the entrance to the inlet and exhaust leading to the cylinder, and zigzag ports having their entrances at the top and bottom of the block at equal distances apart to the entrances of the ports leading into the cylinder, and said plate having ports located opposite to the ports leading into the cylinder, one port of each set of the straight and zigzag ports in the block being designed to communicate with the inlet ports in the plate and cylinder and the other port of each set being arranged to communicate with the port in the cylinder and the port in the plate and through the valve to the exhaust, and means for adjusting the block longitudinally to throw one set in at a time, as and for the purpose specified. 3rd. In a valve for steam engines, the combination with the steam chest and valve proper and ports leading to the cylinder, to the steam chest, of a block and plate superimposed upon the ports leading to the cylinder, said block having straight ports situated at corresponding distances apart to the distance between the entrances to the inlet and exhaust leading to the cylinder, and zigzag ports having their entrances at the top and bottom of the block at equal distances apart to the entrances of the ports leading into the cylinder, and said plate having ports located opposite to the ports leading into the cylinder, one port of each set of the straight and zigzag ports in the block being designed to communicate with the inlet ports in the plate and cylinder, and the other port of each set being arranged to communicate with the port in the cylinder and the port in the plate and through the valve to the exhaust, a rod connected at one end to the block extending through the end of the steam chest, and a lever connected to the outer end of the rod suitably pivoted and designed to be manipulated, as shown and for the purpose specified.

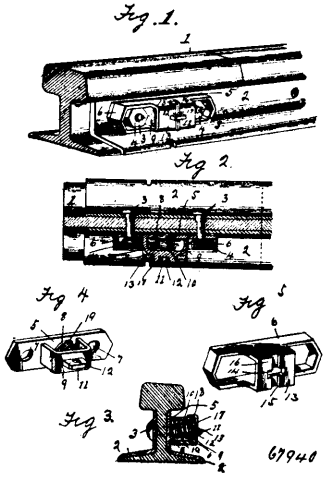
No. 67,939. Method and Apparatus for the Production of Weaving Diagrams. (*Appareil pour la production de programme de tissage.*)



Jan Szczepanik and Ludwig Kleinberg, both of Vienna, Lower Austria, 29th June, 1900; 6 years. (Filed 20th February, 1899.)

Claim.—1st. The method of producing diagrams for weaving purposes by photography, wherein the design, after peing projected upon a dull plate ruled into squares, is projected upon sensitized paper, by means of a whole plate which is inserted in place of the said dull plate, and which hole plate is provided with small apertures corresponding in number and arrangement, to the squares of the dull plate, the arrangement being such that the squares, particularly the outline of the design and also the colours of the same, are produced with the aid of shutters having differently formed apertures, the outline shape of which is projected through the holes of the hole plate on to the said sensitized paper, so that the image appears covered over in its whole extent with figures corresponding to the shape of the shutter aperture, whilst the bindings are produced by means of binding plates which cover corresponding apertures in the hole plate, substantially as described. 2nd. The adoption of the method of producing diagrams for weaving purposes by photography for the production of shaded patterns whereby the different degrees of transparency that serve to indicate the different bindings of the differently toned portions are produced with the aid of a hole plate having apertures of different sizes, and in some cases with squares, the arrangement being such that when this plate is provided with squares, the squares and the shading are adapted to be copied separately by covering the holes and the outlined squares in succession by means of suitable covering plates, substantially as described. 3rd. The adoption of the method of producing diagrams for weaving purposes by photography for the production of shaded patterns, whereby the projected image with corresponding bindings is copied either by using differently sized shutters separately with the hole plate formed with similar apertures and with a corresponding binding plate during the same length of time, or the bindings may be copied separately with one and the same shutter but for different lengths of time, substantially as described.

No. 67,940. Nut Lock. (*Arrête-écrou.*)



Lifburn Wa'e and Thomas J. Brennan, both of Escalon, California, U.S.A., 29th June, 1900; 6 years. (Filed 13th June, 1900.)

Claim.—1st. In a nut lock, the combination with adjacent bolts and the nuts thereof, of a base plate having opposite bolt openings adapted to receive the bolts, a locking cap plate adapted to embrace the nuts and having an interlocking engagement with the base plate, and a s ring projecting from the inner face of the base plate, whereby the latter is yieldingly mounted upon the bolts, substantially as and for the purpose set forth. 2nd. In a nut lock, the combination with adjacent bolts and nuts thereof, of a base plate having opposite bolt openings adapted to loosely receive the bolts, an opening intermediate of the bolt openings, and a housin or bridge piece spanning the latter opening, a spring bearing against the inner side of the housing and projecting through the intermediate opening, and a locking cap plate adapted to embrace the nuts and having an interlocking engagement with the base plate, substantially as and for the purpose set forth. 3rd. In a nut lock, the combination with adjacent bolts and the nuts thereof, of a base plate provided with opposite bolt openings adapted to loosely receive the bolts, an intermediate opening located between the bolt openings, and a housing or bridge piece spanning the intermediate opening and having a lug extending inwardly toward the base plate in line with the intermediate opening, and an outwardly extending ear provided with a vertical opening, a locking cap plate in the form of a link having an offset plate intermediate of its ends provided with a longitudinal slot and a transverse groove intersecting the slot, the cap plate being adapted to embrace the nuts and the bridge pieces and receive the ear through the slot in the offset plate, and a key adapted to be passed through the opening in the ear and received in the groove of the offset plate, substantially as and for the purpose set forth.

No. 67,941. Voting Machine. (*Machine à voter.*)

The Trommlitz Vote Register Company, assignee of George William Trommlitz and William Henry Powers, all of Denver, Colorado, U.S.A., 29th June, 1900; 6 years. (Filed 23rd April, 1900.)

Claim.—1st. In a voting machine, the combination with a suitable case and counting registers, of push keys mounted on the case for actuating the registers, said push keys being provided with notches, levers operated by the keys, and locking slides actuated by the levers, whereby the slides are shifted to engagement with the notches of the actuated keys and to a position immediately in the rear of the idle keys, whereby the actuated keys are locked against the return movement, and the idle keys against inward movement. 2nd. In a voting machine, the combination with a suitable case and counting registers, of a series of push keys mounted on the case, and a sectional slide also mounted in the case and adapted to engage the keys as they are pressed inwardly in the act of voting, the sections of the said slides being adapted to open sufficiently for the entrance of a single key only in the series, whereby the simultaneous operation of a plurality of keys in the series is prevented. 3rd. In a voting machine, the combination with a suitable case and counting registers, of a series of push keys for actuating the counters, an integral

locking slide, a sectional locking slide whose expansion is limited to prevent the simultaneous operation of a plurality of keys, and a

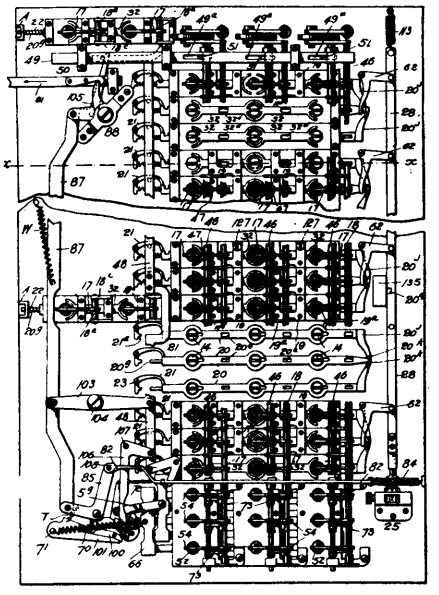


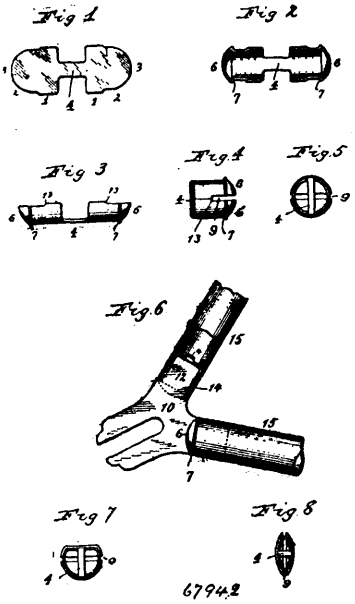
Fig 1. 6941

lever connected with each push key, for actuating the integral slide as any key is operated, whereby the slide is made to lock the operated key against the return movement and the idle keys against inward movement. 4th. The combination with a suitable case and counting registers, of push keys mounted on the case and provided with notches, a locking slide, a lever, a link connecting the key with the lever, the opposite extremity of the lever being adapted to engage the slide and actuate the same, whereby the slide is made to enter the notch of the actuated key and to occupy a position immediately in the rear of the idle keys of the same series. 5th. The combination with a case and counting registers, of push keys for operating the registers, said keys being provided with notches and having shouldered inner extremities, a locking slide having key openings, and slots between the openings, levers connected with the keys at one extremity, their opposite extremities projecting into the slots of the slide, whereby as any key is actuated the corresponding lever shifts the slide to engagement with the notch of the actuated key, and the shoulders of the idle keys, the slots of the slide being of sufficient length to allow the slide the necessary locking movement while all the levers except that connected with the operated key, remain idle. 6th. The combination with a case and counting registers, of push keys for actuating the registers, said keys having notches in their body portion, their inner extremities being shouldered and provided with wedge-shaped lugs, an integral locking slide, a sectional locking slide engaging the lugs of the keys, levers connected with the lugs and engaging the integral slide whereby as any key is pressed, the sectional slide is expanded, and the lever actuated by the key, the lever acting on the integral slide to shift it to engage the notch of the actuated key and the shoulders of the idle keys. 7th. The combination with a case, of push keys, a total counter, locking slides, an operating connection between the slides and the keys, and a connection between each slide and the total counter, whereby the operation of any slide actuates said counter. 8th. The combination of push keys, individual counters for the keys, a total counter, locking slides actuated by the keys, and a connection between the total counter and the slides, whereby the slide first actuated operates the total counter, and the subsequent operation of a slide will not affect the counter, until the slide first actuated has been released. 9th. The combination of push keys-individual counting registers for the keys, locking slides, a connec, tion between the keys and said slides, a total register, an actuating bar therefor, and levers connected with the bar and arranged to be actuated by the slides, substantially as described. 10th. The combination of push keys, individual counting registers actuated by the keys, a total counting register, locking slides arranged in groups, a bar for operating the said counter, levers connected with the bar, one arm of each lever projecting into the path of each slide of the group, as the slide is operated. 11th. The combination of push keys, individual counting registers, actuated by the keys, a total counting register, an operating bar therefor, locking slides arranged in groups of three, two of the slides having angular arms and the third a straight arm, and levers connected with the bar, each lever having an arm lying in the path of each arm of one of the groups of slides, whereby as any lever is actuated the total counter is operated. 12th. The combination of push keys, individual registers actuated by the keys, a total register, an operating bar therefor, locking slides arranged in groups of three, two of the slides having angular arms, and the third a straight arm, levers connected with the bar, each lever having an arm lying in the path of each arm of one of the groups of slides, whereby as any slide is actuated, the total counter is operated, and means for locking the slides in the actuated position. 13th. The combination with a case of push keys, individual counters operated thereby, locking slides also actuated by the keys, a total counter, an operating bar therefor, bell crank levers having one arm of each connected with the bar, while the other arm projects into the path of one or more slides, and means for locking the slides individually in the actuated position, whereby the total counter actuating means can only be operated once by each voter. 14th. The combination with a case and counting registers, of push keys for operating the registers, locking slides actuated by push keys, dogs for individually locking the push keys in the actuated position, return springs engaging the slides, and suitable means for simultaneously operating all the dogs to release the slides, whereby they are returned to their normal position by the recoil of the springs. 15th. The combination with a case and counting registers, of push keys for operating the registers, locking slides actuated by the push keys, a dog located adjacent one extremity of each slide and adapted to engage a recess therein as the slide is actuated, whereby the slide is held against the return movement, a return spring placed under tension by the movement of the slide, and a vertical bar adapted to engage all the locking dogs whereby the slides are released as the bar is raised. 16th. The combination with a case and counting registers, of push keys for operating the registers, locking slides actuated by the push keys, a dog located adjacent the extremity of each slide and adapted to engage a recess therein as the slide is actuated, whereby the slide is locked against the return movement, a return spring placed under tension by the movement of the slide, a vertical releasing bar adapted to engage all the locking dogs, a booth in which the machine is located, and a suitable connection between the releasing bar and the exit door of the booth, whereby the said bar is actuated from the said door. 17th. The combination of push keys, locking slides therefor, a vertical bar, levers connected with the bar and projecting into the path of the slides and means for locking the bar to prevent movement of the slides. 18th. The combination of push keys, individual counters actuated by the keys, a total counter, locking slides actuated by the push keys, a total counter, locking slides actuated by the push keys, a bar for operating the total counter, bell crank levers connected with the bar and projecting into the path of the slides, and means for locking said bar, whereby the slides as well as the push keys are locked against movement, 19th. In a voting machine, the combination with a case and counting registers, of a series of punch keys arranged one above another, leaves connected with said keys, locking slides for the keys, said slides being actuated by the levers, a rock shaft having dogs engaging all the key levers, and means for actuating the rock shaft whereby all the push keys in the same series are actuated. 20th. In a voting machine, the combination of a case and counting registers, of a series of push keys arranged one above another, levers connected with said keys, locking slides for the keys, said slides being actuated by the levers, a rock shaft having dogs engaging all the key levers, means for actuating the rock shaft, whereby all the push keys in the same series are actuated, said means comprising a key, a lever connected with the outer extremity of the key, a gear connected with the inner extremity of the key, and a pinion fast on the rock shaft and meshing with the gear. 21st. In a voting machine, the combination of a case and counting registers, of a series of push keys arranged one above another, levers connected with said keys, locking slides for the keys, said slides being actuated by the levers, a rock shaft having dogs engaging all the key levers, means for actuating the rock shaft whereby all the push keys in the same series are actuated, said means comprising a key, a lever connected with the outer extremity of the key, a link connected with the inner extremity of the key, a gear, an arm fast on the gear and connected with the link, and a pinion fast on the rock shaft and meshing with the gear. 22nd. In a voting machine, the combination with push keys and counting registers, the push keys being arranged in horizontal and vertical series, any vertical series of push keys corresponding with the candidates on a ticket, locking slides for the push keys, each slide corresponding with the push keys in a horizontal series, levers for operating said slide when any key of the horizontal series is actuated, a rock shaft provided with dogs engaging all the levers on the push keys in each vertical series, and means for actuating the rock shafts, whereby all the keys in the same vertical series are simultaneously actuated. 23rd. The combination with a suitable case and counting ing registers, of a series of push keys for operating the registers, a locking slide apertured to receive the push keys of the series, a lever having one arm connected with each push key, its other arm projecting through a slot formed in the locking slide, whereby as any key is pressed the slide is actuated to lock the push keys, the slots of the slides to receive the levers being of such length as to allow the slides to move in response to the action of any lever without interfering with the idle levers, and suitable means for returning the slide to its normal position, whereby the actuated push key is returned to its normal position through the medium of the slide acting on the lever. 24th. In a voting machine, the combination with a casing and counting registers, of a number of vertical series of keys, each vertical series corresponding with the number of candidates for offices of the same rank on a ticket, horizontal locking

slides for the several horizontal series of keys, each horizontal series being composed of one key of each vertical series, the said slides being all connected together forming a sliding frame and provided with key openings, means arranged to actuate the sliding frame step by step as each key is pushed until the number of actuated keys corresponds with the number of candidates for which each person is entitled to vote, the openings in the slides being large enough to permit the necessary movement of the sliding frame, and suitable means for holding the sliding frame in actuated position during its step by step progress. 25th. In a voting machine, the combination with a casing and counting registers, of a number of vertical series of keys, each vertical series corresponding with a number of candidates for offices of the same rank on a ticket, horizontal locking slides for the several horizontal series of keys, each horizontal series of keys being composed of one key of each vertical series, the said slides being all connected together forming a sliding frame and provided with key openings, means arranged to actuate the sliding frame step by step as each key is pushed until the number of actuated keys corresponds with the number of candidates for which each person is entitled to vote, the openings in the slides being large enough to permit the necessary movement of the sliding frame, suitable means for holding the sliding frame in the actuated position during its step by step progress, a booth in which the machine is located, and means actuated from the exit door of the booth for releasing the said holding means of the sliding frame. 26th. In a voting machine, the combination with a casing and counting registers, of a number of vertical series of keys, each vertical series corresponding with the number of candidates for offices of the same rank on a ticket, horizontal locking slides for the several horizontal series of keys, each horizontal series of keys being composed of one key of each vertical series, the said slides being all connected together forming a sliding frame and provided with key openings, means arranged to actuate the sliding frame step by step as each key is pushed until the number of actuated keys corresponds with the number of candidates for which each person is entitled to vote, the openings in the slides being large enough to permit the necessary movement of the sliding frame, suitable means for holding the sliding frame in the actuated position during its step by step progress, a booth in which the machine is located, means actuated from the exit door of the booth for releasing the said holding means of the sliding frame, and means also actuated from the exit door of the booth for returning the sliding frame to its normal position. 27th. In a voting machine, the combination with a casing and counting registers, of a number of vertical series of keys, each vertical series corresponding with a number of candidates for offices of the same rank on a ticket, horizontal locking slides for the several horizontal series of keys, each horizontal series being composed of one key of each vertical series, the said slides being all connected together forming a sliding frame and provided with key openings, an actuated spring connected with the sliding frame, means for locking the frame against the tendency of the spring to operate it, means connected with the push keys for releasing the locking mechanism, permitting a step by step action in response to the spring, as the required number of keys is actuated, the openings of the slides being large enough to permit the necessary movement of the sliding frame. 28th. In a voting machine, the combination with a casing and counting registers, of a number of vertical series of keys, each vertical series corresponding with the number of candidates for offices of the same rank on a ticket, horizontal locking slides for the several horizontal series of keys, each horizontal series being composed of one key of each vertical series, the said slides being all connected together forming a sliding frame and provided with key openings, an actuating spring connected with the sliding frame, means for locking the frame against the tendency of the spring to operate it, means connected with the push keys for releasing the locking mechanism, permitting a step by step action in response to the spring, as the required number of keys is actuated, the openings of the slides being large enough to permit the necessary movement of the sliding frame, a booth, and means operated from the exit door of the booth for finally releasing the sliding frame locking device, and returning the said frame to its normal position. 29th. In a voting machine, the combination with a casing and counting registers, of a number of vertical series of keys, each vertical series corresponding with the number of candidates for the same office on a ticket, horizontal locking slides for the several horizontal series of keys, each horizontal series being composed of one key of each vertical series, the said slides being all connected together to form a sliding frame and provided with openings, an actuated spring connected with the sliding frame, a device for holding the frame against the tendency of the spring to operate it, an auxiliary sliding frame connected with said locking device, levers connected with the push keys and adapted to actuate said frame to release said locking device, and permit a step by step action in response to the spring of the sliding frame as the keys are actuated, the levers being constructed to release the auxiliary frame as soon as the key is actuated, the openings of the slides being of sufficient size to permit the necessary movement of the sliding frame, whereby all the idle keys are locked against movement. 30th. In a voting machine, the combination with a casing and counting registers, of a number of vertical series of keys, each vertical series corresponding with the number of candidates for the same office on a ticket, horizontal locking slides for the several horizontal series of keys, each horizontal series being composed of one key of each vertical series, the said slides being all connected together to form a sliding frame and provided with openings, an actuated spring connected with the sliding frame, a device for holding the frame against the tendency of the spring to operate it, an auxiliary sliding frame connected with said locking device, levers connected with the push keys and adapted to actuate said frame to release said locking device, and permit a step by step action in response to the spring of the sliding frame as the keys are actuated, the levers being constructed to release the auxiliary frame as soon as the key is actuated, the openings of the slides being of sufficient size to permit the necessary movement of the sliding frame, whereby all the idle keys are locked against movement, means for locking the levers of the actuated keys to prevent the return movement of the keys, a booth in which the machine is located, and means connected with the exit door of the booth for releasing the levers allowing them to return together with the keys to their normal position. 31st. In a voting machine, the combination with the casing and counting registers, of a number of vertical series of keys, each vertical series corresponding with the number of candidates for the same office on the ticket, horizontal locking slides for the several horizontal series of keys, each horizontal series being composed of one key of each vertical series, the said slides being all connected together to form a sliding frame and provided with openings, an actuating spring connected with the sliding frame, a device for holding the frame against the tendency of the spring to operate it, an auxiliary sliding frame connected with said locking device, levers connected with the push keys and adapted to actuate said frame to release said locking device, and permit a step by step action in response to the spring of the sliding frame as the keys are actuated, the levers being constructed to release the auxiliary frame as soon as the key is actuated, the openings of the slides being of sufficient size to permit the necessary movement of the sliding frame, whereby all the idle keys are locked against the movement, a booth in which the machine is located, and means connected with the exit door of the booth for actuating the auxiliary frame to unlock the sliding frame. 32nd. In a voting machine, the combination with a casing and counting registers, of a number of vertical series of keys, each vertical series corresponding with the number of candidates for the same office on a ticket, horizontal locking slides for the several horizontal series of keys, each horizontal series being composed of one key of each vertical series, the said slides being all connected together to form a sliding frame and provided with openings, an actuating spring connected with the sliding frame, a device for holding the frame against the tendency of the spring to operate it, an auxiliary sliding frame connected with said locking device, levers connected with the push keys and adapted to actuate said frame to release said locking device, and permit a step by step action in response to the spring of the sliding frame as the keys are actuated, the levers being constructed to release the auxiliary frame as soon as the key is actuated, the openings of the slides being of sufficient size to permit the necessary movement of the sliding frame, whereby all the idle keys are locked against movement, a booth in which the machine is located, means connected with the exit door of the booth for actuating the auxiliary frame to unlock the sliding frame, and means also connected with the exit door of the booth for returning the sliding frame when unlocked to its normal position. 33rd. In a voting machine, the combination with a casing and counting registers, of a number of vertical series of keys, each vertical series corresponding with the number of candidates for offices of the same rank on a ticket, horizontal locking slides for the several horiontal series of keys, each horizontal series being composed of one key of each vertical series, means contrelled by the successive operation of the keys for locking the idle keys against movement when the required number of keys is operated, and means to prevent the simultaneous operation of a plurality of keys. 34th. In a voting machine, the combination with a casing and counting registers, of a number of vertical series of keys, each vertical series of keys corresponding with the number of candidates for offices of the same rank on a ticket, horizontal locking slides for the several horizontal series of keys, each horizontal series being composed of one key of each vertical series, means controlled by the successive operation of the keys for locking the idle keys against movement when the required number of keys is operated, and means to prevent the simultaneous operation of a plurality of keys in the same vertical series. 35th. In a voting machine, the combination with a casing and counting registers, of a number of vertical series of keys, each vertical series of keys corresponding with the number of candidates for offices of the same rank on a ticket, horizontal locking slides for the several horizontal series of keys, each horizontal series being composed of one key of each vertical series, means controlled by the successive operation of the keys for locking the idle keys against movement when the required number of keys is operated, and means to prevent the simultaneous operation of a plurality of keys in the same horizontal position. 36th. In a voting machine, the combination with a casing and counting registers, of a number of vertical series of keys, each vertical series of keys corresponding with the number of candidates for offices of the same rank on a ticket, horizontal locking slides for the several horizontal series of keys, each horizontal series being composed of one key of each vertical series, means controlled by the successive operation of the keys for locking the idle keys against movement when the required number of keys is operated, and means to prevent the simultaneous operation

of a plurality of keys in the same horizontal and vertical series. 37th. In a voting machine, the combination with a casing, of push keys and counting registers, the latter being provided with spindles having pinions, worm shafts each engaging all the pinions of all the counter spindles in the same series, and means for operating a worm shaft to simultaneously reset all the counters in the series. 38th. In a voting machine, the combination with a casing, of push keys and a number of series of counting registers, the latter being provided with spindles having pinions, a worm shaft engaging the pinions of each register, and means for simultaneously operating all the worm shafts whereby all the counters are simultaneously reset to the zero or any desired position. 39th. The combination with a booth and a voting machine located therein, of a lever fulcrumed on the booth, a bar projecting from the machine, a suitable connection between the lever and the bar, an arm attached to the exit door of the booth and arranged to act on the lever as the door is opened, whereby the bar conneted with the voting machine is actuated to release or restore said machine to its normal position after the machine has been operated in the act of voting. 40th. In a voting machine, the combination with a case, of push keys and individual registers actuated thereby, and a total register located within the casing and adapted to be operated once during each voting operation, and a total counter mounted on the booth and arranged to be actuated by the movement of a door thereof, whereby the one total counter becomes a check on the other.

No. 67,942. Bicycle. *(Bicycle.)*



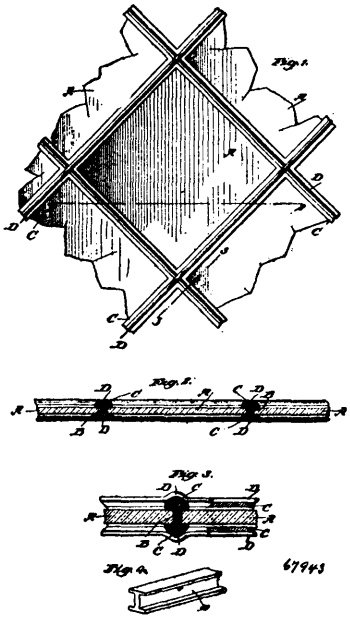
The Crosby and Mayer Co,, assignee of William Hugh Crosby and Edward Ehler, all of Buffalo, New York, U.S.A., 29th June, 1900; 6 years. (Filed 30th April, 1900.)

Claim.—1st. A thimble for connecting a tubular member of a velocipede frame with a fork-end or similar fitting, consisting of two convex or approximately semi-cylindrical sections disconnected at their outer ends and connected together at their inner ends by a transverse bars, and having their opposing straight edges separated by a longitudinal slot or recess which extends to the outer end of the thimble and is adapted to receive the lug of the fork-end or similar fitting, substantially as set forth. 2nd. A thimble for connecting a tubular member of a velocipede frame with a fork-end or similar fitting, consisting of two convex or approximately semi-cylindrical sections adapted to bear at their opposing straight edges against opposing sides of a fork-end or similar fitting and each provided in its straight edges with longitudinal recesses which extend from the central portion of the section to the outer end thereof and together form a longitudinal slot, the closed inner end of which is adapted to bear against the fork-end, the sections being connected together at their inner ends by a transverse bar formed integral therewith and each section being provided at its outer end with a head or enlargement, forming an external shoulder against which the end of a frame tube is adapted to abut, substantially as set forth.

No. 67,943. Leaded Glass. *(Vitraux enchâssés dans du plomb.)*

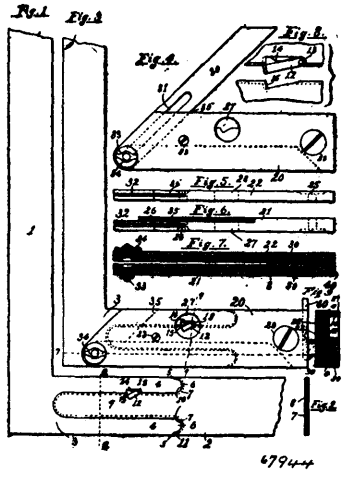
Edwin R. Childs and George W. Cantrell, both of Spokane, Washington, U.S.A., 25th June, 1900; 6 years. (Filed 20th October, 1899.)

Claim.—1st. Leaded glass, comprising cames for receiving the panes, and reinforcing wires soldered to the faces of the cames, as set forth. 2nd. Leaded glass, comprising cames for receiving the panes, a layer of solder on each face of each came, and wires embedded in said layers, as set forth. 3rd. Leaded glass, compris-



ing cames for receiving the panes, a layer of solder on each face of each came, and wires embedded in said layers, the wires crossing over one another at the joints of the cames, as set forth.

No. 67,944. Carpenter's Square. *(Equerre.)*

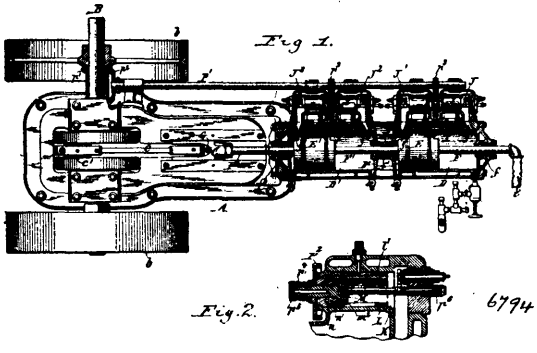


Edgar W. Hutchinson, of San Francisco, and Francis Curtis, of Sacramento, both in California, U.S.A., 29th June, 1900; 6 years. (Filed 18th April, 1900.)

Claim.—1st. A separable square having a joined arm comprising sections slidably separate from each other, said sections having co-engaging devices comprising the one prongs and the other a tongue sliding between said prongs, and shoulders extending laterally from the base of the tongue and abutting against the ends of the prongs, said tongue and prongs having tongued and grooved engaging edges, and each of said co-engaging devices being of the full thickness of the section of which it forms a part, substantially as described. 2nd. A separable square having a jointed arm in sections slidably separable from each other, said sections having, the one prongs and the other a tongue sliding between said prongs, and shoulders extending laterally from the base of the tongue and abutting against the end of the prongs, said tongue and prongs having rounded ends and the co-engaging portions of the opposite sections being correspondingly concaved, said sections having grooved and beveled engaging edges, both along the sliding edges of the tongue and prongs, and along the ends of the prongs and the shoulders abutting thereagainst, substantially as described. 3rd. A separable square having a jointed arm in sections slidably separable from each other, said sections having, the one prongs and the other a tongue sliding longitudinally between said prongs, and

shoulders extending laterally from the base of the tongue and abutting against the ends of the prongs, said tongue and prongs having rounded ends and the co-engaging portions of the opposite sections being corresponding concaved, said prong ends and the corresponding shoulders having also abutments square to the sides of the sections, said sections having grooved and beveled engaging edges, both along the sliding edges of the tongue and prongs, and along the ends of the prongs and the shoulders abutting thereagainst, substantially as described. 4th. A separable square section having a terminal portion cut away in width, said terminal portion having two longitudinal edges each with a double bevel, whereby said section is adapted to engage longitudinally with a second square section having co-relatively beveled edges, and sustain the same against transverse displacement solely by the co-engagement of said double beveled edges, substantially as described. 5th. A separable square section having a terminal portion of the full thickness of the square but cut away in width, said terminal portion having two longitudinal edges each with a double bevel, whereby said section is adapted to engage longitudinally with a second square section having co-relatively bevelled edges, and sustain the same against transverse displacement, solely by the co-engagement of said double beveled edge, substantially as described.

No. 67,945. Gas Engine. *(Machine à gaz.)*



The Standard Automatic Gas Engine Company, assignee of John Walter Raymond, all of Oil City, Pennsylvania, U.S.A., 29th June, 1900; 6 years. (Filed 5th October, 1899.)

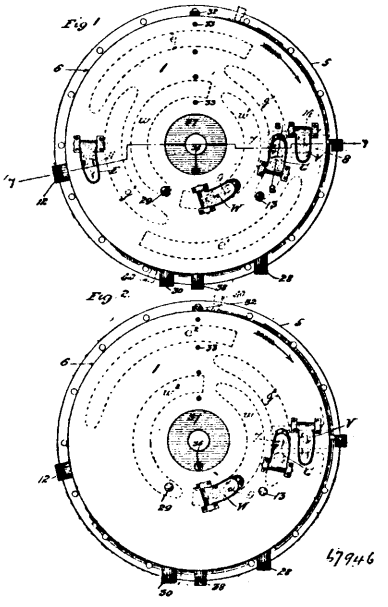
Claim.—1st. The combination with the cylinder and the piston, of a valve chamber connected with the cylinder and provided with a cylindrical valve seat and with fuel and exhaust ports extending through the bore of said seat, and a rotary cylindrical valve having its opposite ends open and provided in its cylindrical side portion with a single lateral port which is adapted to register alternately with said fuel and exhaust ports, substantially as set forth. 2nd. The combination with the cylinder and the piston, of a valve chamber connected with the cylinder and provided with a cylindrical seat, fuel and exhaust ports opening into one side of the seat and a recess formed in the opposite side of the seat, a cylindrical valve arranged in the valve seat and provided with a port adapted to register alternately with the fuel and exhaust ports, a presser plate arranged in said recess, and a spring whereby the presser plate is pressed against the valve for holding the latter firmly against the fuel and exhaust ports, substantially as set forth. 3rd. The combination with the cylinder and the piston, of a valve chamber connected with the cylinder and provided with a cylindrical valve seat and with fuel and exhaust ports opening into one side of the valve seat, a rotary cylindrical valve arranged in the said seat and provided with a port adapted to register with the fuel and exhaust ports, a curved presser plate bearing against the periphery of the valve and arranged in a recess in the side of the valve seat opposite the fuel and exhaust ports, a follower rod guided in the valve chamber and bearing with its inner end against the presser plate, a screw cap engaging with the outer side of the valve chamber and enclosing the outer end of the follower rod, and a spring arranged in said cap and bearing with its ends against the bottom of the cap and the outer end of the follower rod, substantially as set forth. 4th. The combination with the cylinder and the piston, of a valve chamber connected with the cylinder and provided with a cylindrical valve seat and with fuel and exhaust ports extending through said seat, of an open ended cylindrical valve rotating in said seat and provided with a port adapted to register with the fuel and exhaust ports, and a rotary driving sleeve provided with a finger or projection which engages with the port of the valve, substantially as set forth. 5th. The combination with the cylinder and the pistons of a valve chamber connected with the cylinder and provided with a cylindrical valve seat and with fuel and exhaust ports a cylindrical valve rotating in said seat and provided with a port adapted to register with the fuel and exhaust ports a rotary driving sleeve or plug connected with said valve and provided with a shoulder, and a spring whereby the shoulder of the sleeve or plug is pressed against the support of the sleeve or plug substantially as set forth, 6th. The combination with the cylinder and the piston, of a valve chamber connected with the cylinder and provided with a cylindrical valve seat and with fuel and exhaust ports extending through said seat, and open ended cylindrical valve rotating in said seat and provided with a port adapted to register with the fuel and exhaust ports, a rotary driving sleeve provided with a finger or projection which engages with the port of the valve and with a shoulder bearing against a support on the valve chamber, and a spring whereby the driving sleeve is pressed with its shoulder against said support, substantially as set forth. 7th. The combination with the cylinder and the piston, of a valve chamber connected with the cylinder and provided with a cylindrical valve seat and with fuel and exhaust ports extending through said seat, of an open ended cylindrical valve rotating in said seat and provided with a port adapted to register with the fuel and exhaust ports, a bushing arranged in the valve chamber, a rotary driving sleeve journalled in said bushing and provided with a shoulder bearing against the inner end of the bushing and with a finger engaging with the port of the valve, a spring whereby the driving sleeve is pressed with its shoulder outwardly against said bushing, and a driving wheel keyed to the outer end of the driving sleeve so that the sleeve is permitted to slide in the wheel but is compelled to turn therewith, substantially as set forth. 8th. The combination with the cylinder and the piston, of a valve chamber connected with the cylinder and provided with a cylindrical valve seat and with fuel and exhaust ports extending through the valve seat, a cylindrical valve rotating in said seat and provided with a port adapted to register with the fuel and exhaust ports, a driving sleeve journalled in a support in one end of the valve chamber and couplied with the valve, a shoulder arranged on the driving sleeve and bearing against a shoulder on said support, a supporting rod bearing with its inner end against the driving sleeve and passing with its outer portion through the opposite end of the valve chamber, and a spring bearing against the outer end of the supporting rod, substantially as set forth. 9th. The combination with the cylinder and the piston, of two valve chambers arranged in line and connected respectively with the opposite ends of the cylinder, each of said chambers being provided with a cylindrical valve seat and with fuel and exhaust ports extending through the valve seat, a cylindrical valve rotating in each seat and provided with a port adapted to register with the respective fuel and exhaust ports, a driving sleeve journalled in the inner end of each valve chamber and coupled with the respective valve, a coupling rod arranged with its opposite ends in the driving sleeves of both valves, and a driving wheel mounted on the outwardly projecting portions of both driving sleeves and keyed thereto so that the sleeves are compelled to turn with the wheel but are free to adjust themselves lengthwise therein, substantially as set forth. 10th. The combination with the valve chamber and the rotary fuel valve, of a driving sleeve coupled with the fuel valve and journalled in one end of the chamber, and a supporting sleeve passing through the opposite end of the valve chamber, a supporting rod connected at one end with the driving sleeve and passing with its other end through the supporting sleeve, an electric contact arranged on the supporting sleeve within the valve chamber and adapted to engage with another electric contact, a shoulder arranged on the supporting rod and bearing against the inner end of the supporting sleeve, and a screw nut arranged on the supporting rod outside of the valve chamber and bearing against the outer end of the supporting sleeve, substantially as set forth.

No. 67,946. Gas Engine. *(Machine à gaz.)*

John Straszer, DeWitt Clinton Taylor and Frederick Stoecker, all of Manchester, Missouri, U.S.A., 29th June, 1900; 6 years. (Filed 29th November, 1899.)

Claim.—1st. In a rotary engine, a rotatable piston disc, pockets formed along one face thereof and disposed along arcs of a series of concentric circles, a series of said pockets gradually tapering at one end, and having an abrupt or plane wall at the opposite end, a face plate having a series of ports located in position to come opposite said pockets, and valves controlling said ports, and adapted to bear against the walls of the pockets during the rotation of the piston disc, substantially as set forth. 2nd. In a rotary engine, a rotatable piston disc having a plane inner face, pockets formed on said face and disposed along arcs of a series of concentric circles, a series of said pockets having each an abrupt or plane terminal wall at one end, a face plate adjacent to said piston disc, a series of ports disposed along the face plate in position to come opposite said pockets, and valves controlling said ports and adapted to bear against the walls of the pockets during the rotation of the disc, substantially as set forth. 3rd. In a rotary engine, a stationary face plate having a gas inlet opening, a valve controlled port located at the same radial distance from the centre thereof, a gas chamber located at the rear of the plate and communicating with said port, an outlet valve from said chamber located along the front face of the plate at a greater radial distance than the port aforesaid, an exhaust valve located at a point diametrically opposite the outlet valve and at the same radial distance therewith from the centre of the plate, a piston disc having pockets formed along the inner face thereof and distributed in the path of the respective ports and valves of the face plate, means for exploding the gas mixture in the gas chamber at the proper moment during the rotation of the piston disc, means for opening and forcing the valves open and against the walls of the pockets in the course of rotation of the piston disc, the valves being forced to a closed position by the inner face of the disc after the

pocket has passed any valve, the ports operating, substantially as and for the purpose set forth. 4th. In a rotary engine, a piston



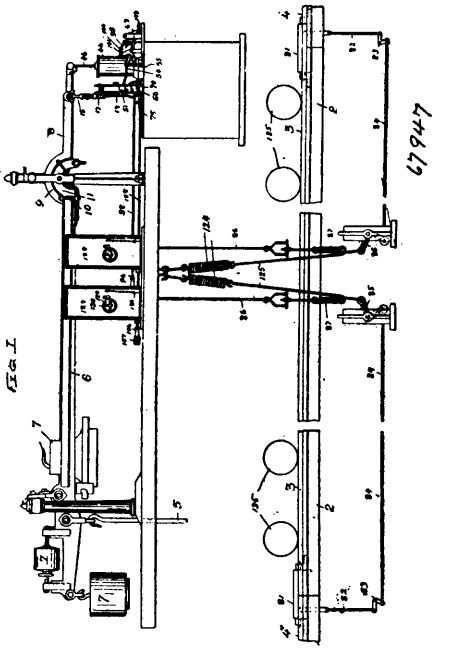
disc having a series of pockets disposed along arcs of concentric circles, and oil grooves located between the ends of the various pockets, and disposed from the centre, outwardly, a face plate, suitable valves on said face plate co-operating with said pockets of the piston disc, and oil supply openings co-operating with the oil grooves, substantially as set forth. 5th. In a rotary engine, a stationary face plate having a series of valves disposed in the path of arcs of concentric circles, a gas inlet opening formed in the plate in the path of the circle of the gas valve, a conduit leading from said opening in the back of the face plate, a water inlet opening formed in the plate in the path of the circles of the water valve, a conduit leading from said opening at the back of the face plate, a gas explosive chamber communicating with the port controlled by the gas valve, and located at the back of the face plate, a valve for permitting the discharge of the exploded mixture located along the front face of the face plate, exterior to the gas valve, an exhaust valve located diametrically opposite the gas chamber discharge valve, but disposed radially the same distance therewith, an exhaust nozzle communicating with the port of the exhaust valve on the back of the face plate, an oil conduit located in the back of the face plate and communicating with the front face thereof through a series of openings formed in the face plate, a tubular shaft bearing projecting from the centre of the face plate rearwardly, a piston disc rotating against the front ot the face plate and having pockets contiguous thereto and in the path of the several openings and valves, a shaft passing through the tubular bearing of the face plate and secured to the piston disc, and means carried by the latter for exploding the gas within the gas explosive chamber the latter being provided with electrodes to produce electric discharges, substantially as set forth. 6th. In a rotary engine, having a piston disc, a series of pockets formed along one face thereof, a series of said pockets gradually tapering at one end and having an abrupt or plane wall at the opposite end, and a face plate having a series of valve controlled ports co-operating with said pockets, substantially as set forth. 7th. In a rotary engine, a face plate, a valve hinged along the front face thereof, a tubular casing adjacent to the hinge line, a plunger mounted on the casing and adapted to bear against the valve, an outer terminal screw plug, a spring interposed between said plug and plunger, a port formed in the face plate in position to be controlled by said valve, substantially as set forth. 8th. In a rotary engine, a face plate, a ledge or wall surrounding the same, a cover plate secured to said wall whereby a water chamber is formed between said cover plate and face plate, tubular outwardly screw threaded valve casings and a tubular shaft bearing or hub projecting from the rear of the face plate, the cover plate having openings adapted to pass over said tubular casings and hub, a nut and washer passed over the screw threaded portion of each casing and adapted to form a water tight joint with the cover plate, the latter being provided with an overflow nozzle or pipe, substantially as set forth.

No.67,947. Railway Car Weighing Scales.

(*Balance pour chars de chemin de fer.*)

The Streeter-Amet Weighing and Recording Company, assignee of George Goetz, both of Chicago, Illinois, U.S.A., 29th June, 1900; 6 years. (Filed 26th April, 1900.)

Claim.—1st. The combination in an automatic car scale, weighing and recording apparatus, of a scale platform with track levers at each end thereof adapted to be operated by the wheels of a car, with a scale beam furnished with an extension or arm, a dash pot



cylinder furnished with a piston connected with said arm and having two upwardly opening and two downwardly opening valves, a rotary type wheel, a spring balance having a tension adjusting block, a rack connecting said scale beam with the spring balance, a gear on the type wheel shaft meshing with said rack, a pointer type adjacent to said type wheel, an impression hammer, an impression hammer lever, a pawl or trigger for holding the impression hammer lever in its elevated position, a spring for actuating the impression hammer, a paper strip wheel, take-up reel and guide rollers, a spring motor for actuating the take-up reel, a notched disc and actuating lever for controlling the forward feed of the paper strip or tape, an elastic printing disc interposed between the type wheel and pointer type and the impression hammer, two pawl carrying slides, one connected with and actuated by each of said track levers, two ratchets actuated one by each of said pawl carrying slides and furnished each with a cam and connecting lever adapted to raise the impression hammer lever at the third impulse or movement of either of said ratchets, and to disengage itself from said lever on the fourth impulse thereof, said levers being connected together so that the mechanism for raising the impression hammer lever cannot be withdrawn to permit the descent of said impression hammer lever until both of said ratchets have been given its fourth impulse or movement, the shaft of each of said ratchets being furnished with a further cam, and connecting levers and the links for moving said trigger or pawl to release the impression hammer lever, substantially as specified. 2nd. In an automatic weight recording scale, the combination with the scale beam of a type wheel connected thereto and operated thereby, and a spring balance connected with said scale beam and type wheel and furnished with a tension adjusting block having a flange adapted to fit between the coils of said spring, substantially as specified. 3rd. In an automatic weight recording scale, the combination with the scale beam of a type wheel connected thereto and operated thereby, and a spring balance connected with said scale beam and type wheel and furnished with a tension adjusting block having a flange adapted to fit between the coils of said spring, and an eye through which the spring extends as the adjusting block is turned, substantially as specified. 4th. In an automatic weight recording scale, the combination with the scale beam of a type wheel connected thereto and operated thereby, and a spring balance connected with said scale beam and type wheel and furnished with a tension adjusting block having a flange adapted to fit between the coils of said spring, an eye through which the spring extends as the adjusting block is turned, and a set screw for fixing the adjusting block in position, substantially as specified. 5th. The combination with the scale beam and type wheel connected therewith, of a dash pot cylinder 44, having piston 45 furnished with two large upwardly opening and two large downwardly opening valves 46, each having a flat spring 47, substantially as specified. 6th. In an automatic weight recording car scale, the combination with the scale beam, of a type wheel and spring balance connected therewith and provided with a tension adjusting block having a flange, an impression hammer having an operating lever, a paper strip reel, take up reel and guide rollers, a spring motor for actuating said take-up reel, a feed controlling notched disc on the shaft

of one of said tape guide rollers, and a lever actuating said disc and operated by said impression hammer lever, substantially as specified. 7th. In an automatic weight recording car scale, the combination with the scale platform, scale beam, type wheel, spring balance, impression hammer lever 54 and a movable trigger or pawl 53 for holding said lever 54 in its elevated position, of a pair of track levers 81 81, one at each end of the scale platform, a pawl, ratchet, and pawl carrying slide for and connected with each of said track levers 81, the shaft of each of said ratchets having a cam and an operating lever 95 adapted to raise said impression hammer lever, said operating levers being connected together, so that the impression hammer lever raising mechanism cannot be withdrawn out of the way of the descent thereof until both of said ratchets receive the same number of impulses through its respective track lever 81, substantially as specified. 8th. In an automatic weight recording car scale, the combination with the scale platform, scale beam, type wheel, spring balance, impression hammer lever 54, and a movable trigger or pawl 53 for holding said lever 54 in its elevated position, of a pair of track levers 81, 81, one at each end of the scale platform, a pawl, ratchet, and pawl carrying slide for and connected with each of said track levers 81, 81, the shaft of each of said ratchets having a cam and an operating lever 95 adapted to raise said impression hammer lever, said operating levers being connected together, so that the impression hammer lever raising mechanism cannot be withdrawn out of the way of the descent thereof until both of said ratchets receive the same number of impulses through its respective track lever 81, and connecting links and levers from said levers 95 for operating said impression hammer lever 54, substantially as specified. 9th. In an automatic weight recording car scale, the combination with the scale platform, scale beam, type wheel, spring balance, impression hammer lever 54, and a movable trigger or pawl 53 for holding said lever 54 in its elevated position, of a pair of track levers 81, 81, one at each end of the scale platform, a pawl, ratchet, and pawl carrying slide for and connected with each of said track levers 81, the shaft of each of said rachets having a cam and an operating lever 95 adapted to raise said impression hammer lever, said operating levers being connected together, so that the impression hammer lever raising mechanism cannot be withdrawn out of the way of the descent thereof until both of said ratchets receive the same number of impulses through its respective track levers 81, the shafts of said ratchets having each a further cam 104 and connecting links and levers for withdrawing said trigger or pawl 53 from engagement with said hammer lever 54, substantially as specified. 10th. In an automatic weight recording car scale, the combination with the scale platform, scale beam, type wheel, spring balance, impression hammer lever 54 and a movable trigger or pawl 53 for holding said lever 54 in its elevated position, of a pair of track levers 81, 81, one at each end of the scale platform, a pawl, ratchet, and pawl carrying slide for and connected with each of said track levers 81, 81, the shafts of each of said ratchets having a cam and an operating lever 95 adapted to raise said impression hammer lever, said operating levers being connected together, so that the impression hammer lever raising mechanism cannot be withdrawn out of the way of the descent thereof until both of said ratchets receive the same number of impulses through its respective track lever 81, and connecting links and levers from said levers 95 for operating said impression hammer lever 54, the shafts of said ratchets having each a further cam 104, and connecting links and levers for withdrawing said trigger or pawl 53 from engagement with said hammer lever 54, substantially as specified. 11th. In an automatic weight recording car scale, the combination with the scale platform, scale beam, type wheel, spring balance, impression hammer lever 54, and movable trigger or pawl 53 for holding said lever 54 in its elevated position, of a pair of track levers 81, 81, one at each end of the scale platform, a pawl, ratchet, a pawl carrying slide for and connected with each of said track levers 81, the shaft of each of said ratchets having a cam and an operating lever 95 adapted to raise said impression hammer lever, said operating levers being connected together, so that the impression hammer lever raising mechanism cannot be withdrawn out of the way of the descent thereof until both of said ratchets receive the same number of impulses through its respective track lever 81, each of said pawl carrying slides being provided with a device for temporarily holding its pawl out of operative position in respect to its ratchet to enable an engine or tender having a dissimilar number of wheels from a car to pass over the scale platform without getting said ratchets out of registry, substantially as specified. 12th. In an automatic weight recording car scale, the combination with a scale platform and track levers at each end thereof, of a scale beam and type wheel connected therewith, an impression hammer lever, a pair of pawls and pawl carrying slides 88 connected one with each of said track levers, a pair of ratchets operated thereby, and cams and connecting mechanism for raising the impression hammer lever by impulses imparted to said ratchets by said track levers, substantially as specified. 13th. In an automatic weight recording car scale, the combination with a scale platform and track levers at each end thereof, of a scale beam and type wheel connected therewith, an impression hammer lever, a pair of pawls and pawl carrying slides 88 connected one with each of said track levers, a pair of ratchets operated thereby, the shaft 93 of each of said ratchets having a cam 94, bent levers 95 operated by said cams, link 96 connecting said levers 95, 95, and connecting levers and links, and bent lever 101 for raising the impression hammer lever 54, substantially as specified. 14th. In an automatic weight recording car scale, the combination with a scale platform and track levers at each end thereof, of a scale beam and type wheel connected therewith, an impression hammer lever, a pair of pawls and pawl carrying slides 88 connected one with each of said track levers, a pair of ratchets operated thereby, the shaft 93 of each of said ratchets having a cam 94, bent levers 95 operated by said cams, link 96 connecting said levers 95, 95, and connecting levers and links, bent lever 101 for raising the impression hammer lever 54, and each of said ratchet shafts 93 having a further cam 104, lever 105, a connecting link 106, lever 107, link 108, lever 109, engaging trigger or paw 53 to release said hammer lever 54, substantially as specified. 15th. In an automatic weighing and recording car scale, the combination with the scale beam and spring balance, of a type wheel having a shaft furnished with a gear, a sliding rack 19 meshing with said gear, connecting rod 18, coupling 17, swivel 16 and levers 15 connecting said rack with said scale beam, substantially as specified. 16th. In an automatic weighing and recording scale, the combination with the scale beam and spring balance, of a type wheel having a shaft furnished with a gear, a sliding rack 19 meshing with said gear, connecting rod 18, coupling 17, swivel 16 and clevis 15 connecting said rack with said scale beam, connecting rod 20, coupling 21 and link 22 connecting said rack with said spring balance, substantially as specified. 17th. In an automatic weighing and recording car scale, the combination with the scale platform, of two track levers 81, 81, of two pawl carrying slides 88, 88, connected one with each of said track levers, two ratchets 92, 92, having each a shaft 93, furnished with cams 94 and 104, bent levers 95, 95, operated by said cams 94 and a connecting rod 96, substantially as specified. 18th. In an automatic weighing and recording car scale, the combination with the scale platform, of two track levers 81, 81, of two pawl carrying slides 88, 88, connected one with each of said track levers, two ratchets 92, 92, having each a shaft 93, furnished with cams 94 and 104, bent levers 95, 95, operated by said cams 94 and a connecting rod 96, and levers 105, 105, operated by said cams 104 and connecting rod 106, substantially as specified.

TRADE-MARKS

Registered during the month of June, 1900, at the Department of Agriculture—Copyright and Trade-Mark Branch.

7362. JOSEPH ALPHONSE COTE, Quebec, Que. Corsets, 1 juin, 1900.

7363. THE KENT MILLS COMPANY, LIMITED, Chatham, Ont. Flour, 4th June, 1900.

7364. PATERSON and SONS, Glasgow, Scotland. Coffee, Coffee Essence and Chicory, 4th June, 1900.

7365. VENESTA, LIMITED, London, England. Compound sheets of wood made of several thin layers united by a waterproof composition, and boxes made of compound sheets of wood, 5th June, 1900.

7366. EMILE BERLINER, Washington, D.C., U.S.A. General Trade Mark, 6th June, 1900.

7367. THE J. M. LAVOIE COMPANY, LIMITED, Ottawa, Ont. Cigars, Tobaccos and Cigarettes, 8th June, 1900.

7368. GEORGE D. ROSS and COMPANY, Montreal, Que. Cotton Threads, 11th June, 1900.

7369. WILHELMSBURGER CHEMISCHE FABRIK, Hamburg, German Empire. General Trade Mark, 11th June, 1900.

7370. THOMAS MILBURN, Toronto, Ont. Proprietary Medicines, 11th June, 1900.

7371. FRANK BROWN ALLAN, Toronto, Ont. Baking Powder, 11th June, 1900.

7372. ERNEST SIDER and ROBERT WALLACE, Township of Grantham, County of Lincoln, Ont., and JOHN FRANK LOGAN, St. Catharines, Ont. Canned Fruit and Vegetables, 11th June, 1900.

7373. SETHUR COOKSON, Montreal, Que. Flour, 11th June, 1900.

7374. WILLIAM THOMAS JAMES, Hamilton, Bermuda. Arrowroot, 11th June, 1900.

7375. NATIONAL CORSET MANUFACTURING COMPANY, Quebec, Que. Corsets, 13th June, 1900.

7376. } CROSSE and BLACKWELL, LIMITED, London, England. Pickles,
7377. } Sauces, Jams and Preserved Fruits, 13th June, 1900.

7378. PAULINE VERENA MEYER, Toronto, Ont. Confectionery, 18th June, 1900.

7379. THE McALPINE TOBACCO COMPANY, Toronto, Ont. Plug Tobacco, 18th June, 1900.

7380. ARCHIBALD WAYNE DINGMAN, Toronto, Ont. Jewellery and other Art goods, 20th June, 1900.

7381. THE ZENOLA COMPANY, Philadelphia, Pennsylvania, U.S.A. A Powder for cleaning purposes, 20th June, 1900.

7382. BILL and CALDWELL, New York, N.Y., U.S.A. Hats and Caps, 22nd June, 1900.

7383. JAMES TURNER and COMPANY, Hamilton, Ont. Tea, 22nd June, 1900.

7384. OSCAR GUYON dit LEMOINE, Montreal, Que. Assurance sur la Vie, 25 juin, 1900.

7385. GEORGE JOHN WINTER, Buffalo, New York, U.S.A. Boots and shoes, 25th June, 1900.

7386. PARISIAN CORSET MANUFACTURING COMPANY, Quebec, Que. Corsets, 26 juin, 1900.

7387. ROBERT HORN PATERSON, Vancouver, B.C. Canned Salmon, 26th June, 1900.

7388. RENE MISPOLET, Montreal, Que. General Trade Mark, 28th June, 1900.

7389. J. M. AUMONT, M.D., Paroisse de St. Esprit, Que. Un Onguent pour les maladies de la peau, 28 juin, 1900.

7390. JOSEPH A. MUSGROVE, Ottawa, Ont. General Trade Mark, 28th June, 1900.

7391. D. RANSOM, SON and COMPANY, Buffalo, New York, U.S.A. Ointment, 28th June, 1900.

7392. A. R. BREMER COMPANY, Chicago, Illinois, U.S.A. Dandruff Cure, 28th June, 1900.

7393. CHARLES HENRY BINKS, Montreal, Que. Sardines, 30th June, 190 .

INDUSTRIAL DESIGNS.

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1667. JOSEPH C. CLARKE, Toronto, Ont. Picture Holder, 5th June, 1900.

1668. ALFRED BEDARD ET EVANGELISTE MAJOR, Montreal, Que. Voiture de Commerce, 5 juin, 1900.

1669. HENRY BIRKS & SONS, Montreal, Que. Spoon *re* Sons of the Widow, 11th June, 1900.

1670. MACDONALD MANUFACTURING COMPANY, Toronto, Ont. Ornamentation of Tinware, a panel in centre with scrolls on top and bottom of panel, 11th June, 1900.

1671. MACDONALD MANUFACTURING COMPANY, Toronto, Ont. Ornamentation of Tinware, the Queen and her Generals interchangeable, 12th June, 1900.

1672. MACDONALD MANUFACTURING COMPANY, Toronto, Ont. Ornamentation of Tinware, coral shaped scroll work as a border, the Canadian Coat of Arms on the cover, and shields on the sides bearing, respectively, a lion, three lions, a dagger and a harp, 14th June, 1900.

1673. RICHARD HEMSLEY, Montreal, Que. Spoon bowl *re* South Africa, 1900. 15th June, 1900.

1674. JAMES EDWARD MAYBEE, Toronto, Ont. Shirts, 15th June, 1900.

1675. WILLIAM THOMPSON BONNER, Montreal, Que. Fire Door Arch Brick, 21st June, 1900.

1676. ANTHONY W. BURKE, Hamilton, Ont. Doubletree or Drawbar, 25th June, 1900.

1677. GEORGE FRANCIS PURSER, Sarnia, Ont. Game Table, 25th June, 1900.

1678. THOMAS BARONS, Toronto, Ont. Hoof Cutter, 30th June, 1900.

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11419. THE LATE RIGHT REVEREND ALEXANDER MACDONELL; FIRST BISHOP OF UPPER CANADA. (Photo.) Mrs. Margaret Brew, Ottawa, Ont., 1st June, 1900.

11420. WELCOME TO NORSEMEN. (BOLD NORSEMEN FROM OVER THE SEA.) By C. A. E. Harriss. Whaley, Royce & Co., Toronto, Ont., 2nd June, 1900.

11421. RECITATIVE AIR AND CHORUS: THRICE WELCOME TRUSTED VASSALS!! By C. A. E. Harriss. Whaley, Royce & Co., Toronto, Ont, 2nd June, 1900.

11422. A TRIP TO AND THROUGH SOUTH AFRICA. By Joseph H. Aiken. James Walter Lyon, Guelph, Ont., 2nd June, 1900.

11423. PAY, PRAY, PROSPER. By Rev. John E. Hunter, Evangelist. (Revised and Enlarged Edition.) William Briggs, Toronto, Ont., 2nd June, 1900.

11424. THEN THOU MAY'ST FOLLOW ME. By C. A. E. Harriss. Whaley, Royce & Co., Toronto, Ont., 2nd June, 1900.

11425. THE BATTLE OF PAARDEBERG AND SURRENDER OF GENERAL CRONJE. (Pyro-Military Drama.) Thomas William Hand, Hamilton, Ont., 4th June, 1900.

11426. TRUTH AND FICTION CONCERNING ELECTRIC BELTS. By Dr. A. T. Sanden, Montreal, Que., 4th June, 1900.

11427. TYRRELL'S SOCIETY BLUE BOOK FOR TORONTO, HAMILTON AND LONDON. Wm. Tyrrell & Co., Toronto, Ont., 4th June, 1900.

11428. THE CANADIAN MAGAZINE. (June, 1900.) The Ontario Publishing Co. (Ltd.), Toronto, Ont., 5th June, 1900.

11429. SONG BIRD WALTZES. By Herbert Doré. R. K. Ferris, Toronto, Ont., 5th June, 1900.

11430. THE LYRE OF ORPHEUS. Words by William Wilfred Campbell. Music by James Edmund Jones, Toronto, Ont., 5th June, 1900.

11431. FLOWERS OF CANADA. March Song and Chorus. Words and Music by Herbert Doré. R. K. Ferris, Toronto, Ont., 6th June, 1900.

11432. LOVELY JEAN. (Song.) Words by Robert Burns. Music by Herbert Doré. R. K. Ferris, Toronto, Ont., 6th June, 1900.

11433. DOG LISTENING TO A TALKING MACHINE. (Picture.) Emile Berliner, Washington, D.C., U.S.A., 6th June, 1900.

11434. INDIAN CANOE RACES AT THE GORGE. (Photo.) John Wallace Jones, Esquimalt, B.C., 6th June, 1900.

11435. NORTH PACIFIC SQUADRON AT ANCHOR, ESQUIMALT HARBOR. (Photo.) John Wallace Jones, Esquimalt, B. C., 6th June, 1900.

11436. HURRAH FOR BRITISH SOLDIERS. Song published in "The Toronto World." (Temporary Copyright.) John F. Davis, Toronto, Ont., 7th June, 1900.

11437. GRAFTON'S EXERCISES IN ARITHMETIC, NO. 1. Herbert J. Silver, Montreal, Que., 8th June, 1900.

11438. GRAFTON'S EXERCISES IN ARITHMETIC, NO. 2. Herbert J. Silver, Montreal, Que,, 8th June, 1900.

11439. JESUS HATH DIED. Words and Music by Herbert Doré. R. K. Ferris, Toronto, Ont., 8th June, 1900.

11440. HEALTH THROUGH NATURE'S LAWS. By A. Wallace Mason, M.D., Toronto, Ont., 8th June, 1900,

11441. PHILIP WINWOOD. Presented anew by Robert Neilson Stephens. Illustrated by E. W. D. Hamilton. William Briggs, Toronto, Ont., 8th June, 1900.

11442. THE PURPLE ROBE. By Joseph Hocking. William Briggs, Toronto, Ont., 8th June, 1900.

11443. KLOOCHMANS RACE AT THE GORGE. (Photo.) John Wallace Jones, Esquimalt, B.C., 8th June, 1900.

11444. OFFICIAL TELEPHONE DIRECTORY, DISTRICT OF NORTHERN QUEBEC, JUNE, 1900. The Bell Telephone Company of Canada (Ltd.), Montreal, Que., 9th June, 1900.

11445. HIS LAST LETTER. (Lithographed calendar.) William J. Bulman, Winnipeg, Man., 9th June, 1900.

11446. BIRD'S EYE VIEW OF THE CITY OF WINNIPEG, (Lithograph.) William J. Bulman, Winnipeg, Man., 9th June, 1900.

11447. L'INDICATEUR DE QUÉBEC ET LEVIS, 1900-1901. (The Quebec and Levis Directory, 1900-1901.) Boulanger et Marcotte, Québec, Qué., 11 juin, 1900.

11448. LISTE DE PRIX NO. 22, PRINTEMPS ET ETÉ, 1900. The S. Carsley Co. (Ltd.), Montreal, Que., 11th June, 1900.

11449. LONDON TIMES' NEWS AND VIEWS, *re* TRANSVAAL WAR, No. 7. The Globe Printing Co., Toronto, Ont., 11th June, 1900.

11450. I LOVE THEE SO. Romanza. Words by Leontine Stanfield. Music by Reginald de Koven, Op. 158. The John Church Co., Cincinnati, Ohio, U.S.A., 12th June, 1900.

11451. IT WAS A LOVER AND HIS LASS. From "As you like it." Words by William Shakespeare. Music by Reginald de Koven, Op. 159. No. 1. The John Church Co., Cincinnati, Ohio, U.S.A., 12th June, 1900.

11452. WHERE THE BEE SUCKS. From "The tempest." Words by William Shakespeare. Music by Reginald de Koven, Op. 159. No. 2. The John Church Co., Cincinnati, Ohio, U.S.A., 12th June, 1900.

11453. O MISTRESS MINE, WHERE ARE YOU ROAMING. From "Twelfth night." Words by William Shakespeare. Music by Reginald de Koven, Op. 159. No. 3. The John Church Co., Cincinnati, Ohio, U.S.A., 12th June, 1900.

11454. SO SWEET A KISS THE GOLDEN SUN GIVES NOT. From "Love's labour lost." Words by William Shakespeare. Music by Reginald de Koven, Op. 159. No. 4. The John Church Co., Cincinnati, Ohio, U.S.A., 12th June, 1900.

11455. TELL ME WHERE IS FANCY BRED. From "The merchant of Venice." Words by William Shakespeare. Music by Reginald de Koven, Op. 159. No. 5. The John Church Co., Cincinnati, Ohio, U.S.A., 12th June, 1900.

11456. THE INTERNATIONAL BUREAU AND AGENCY ASSOCIATION. Andrew James Clark, St. Thomas, Ont., 12th June, 1900.

11457. LETTER COLLECTING FORM. Orville Ezra Collins, Toronto, Ont., 12th June, 1900.

11458. THE UNIVERSAL SYSTEM OF BOOK-KEEPING. By Cyrille Leveque, St. Henri de Montréal, Qué., 12 juin, 1900.

11459. THE ALEXANDER CABLE CODE. By James Alexander, Montreal, Que., 12th June, 1900.

11460. A SHORT HISTORY OF SOUTH AFRICA. By Gilbert Wintle, Como, Que, 12th June, 1900.

11461. PROSPECTUS OF GOLTMAN'S METROPOLITAN BUSINESS COLLEGE, SESSION 1900-1901. Robert Goltman, Montreal, Que., 13th June, 1900.

11462. DILLON'S MILK BOOK AND LEDGER. Thomas J. Dillon, St. John, N.B., 13th June, 1900.

11463. MINERAL WATERS; THEIR ORIGIN AND USE. The Abenakis Springs Hotel Co., Abenakis Springs, Que., 14th June, 1900.

11464. THE RELIEF COLUMN. March and Two-Step. By Elmer H. Smith. The T. Eaton Co. (Ltd.), Toronto, Ont., 14th June, 1900.

11465. TRADING STAMPS ISSUED BY THE DOMINION TRADING COMPANY, LIMITED. The Dominion Trading Co. (Ltd.), Toronto, Ont., 16th June, 1900.

11466. LES ORIGINES DU DROIT FRANCO-CANADIEN. Par Rodolphe Lemieux, LL.D., C.R. Camille Théoret, Montréal, Qué., 16 juin, 1900.

11467. READY RECKONER WAGE TABLE. Charles Curtis, Toronto, Ont., 16th June, 1900.

11468. RALLYING ROUND THE FLAG. Patriotic Song. Words and Music by H. H. Godfrey, Toronto, Ont., 16th June, 1900.

11469. SOLDIERS OF CANADA. Words and Music by H. H. Godfrey, Toronto, Ont., 16th June, 1900.

11470. TAKE HER BACK, DAD. Words and Music by Andrew B. Sterling and Bartley C. Costello. Arranged by Lee Orean Smith. Whaley, Royce & Co., Toronto, Ont., 16th June, 1900.

11471. THE ASSESSMENT CARDS OF 1900. R. D. Richardson & Co., Winnipeg, Man., 18th June, 1900.

11472. PLYMOUTHISM AND THE MODERN CHURCHES; OR, LIFE, LIGHT, LAW AND LEARNING. By Rev. Alexander Miller, Kintail, Ont., 18th June, 1900.

11473. L'ART DE S'HABILLER SOI-MÊME. Par Mme. Boudet. Etienne Boudet, Montréal, Qué., 19 juin, 1900.

11474. POST-MORTEM EXAMINATIONS: METHOD'S AND TECHNIQUE. By John Caven, B.A., M.D., (Toronto), L. R. C. P. (London) Illustrated. J. A. Carveth, Toronto, Ont., 19th June, 1900.

11475. THE WESTMINSTER. 16th June, 1900. The Westminster Co. (Ltd.), Toronto, Ont., 20th June, 1900.

11476. CANADIAN SUMMER RESORT GUIDE, 1900. Seventh Edition. Frederick Smily, Toronto, Ont., 20th June, 1900.

11477. OFFICIAL TELEPHONE DIRECTORY, DISTRICT OF SOUTHERN QUEBEC, JUNE, 1900. The Bell Telephone Company of Canada, (Ltd.), Montreal, Que., 20th June, 1900.

11478. THE BELLE OF MAFEKING. Waltz. By A. Wellesley. Willmott H. Billing, Toronto, Ont., 21st June, 1900.

11479. THE LIFE STORY OF FINLAY BOOTH. By Rev. Hamilton Wigle, B.A., Winnipeg, Man., 21st June, 1900.

11480. THAT LITTLE GIRL I ONCE CALLED MINE. Song. By Willie D. Price. Arranged by Jos. Clauder, Chas. K. Harris, Milwaukee, Wisconsin, U.S.A., 21st June, 1900.

11481. THE MARITIME PROVINCES: NEW RAILWAY, POST OFFICE, MUNICIPAL DIVISION AND COUNTY MAP OF NOVA SCOTIA, NEW BRUNSWICK, PRINCE EDWARD ISLAND AND NEWFOUNDLAND, WITH DISTANCES. COMPILED FROM THE LATEST GOVERNMENT SURVEYS AND OTHER OFFICIAL SOURCES, 1900. The Dominion Publishing Co., Hamilton, Ont., 21st June, 1900.

11482. REPORTS OF CASES DECIDED IN THE COURT OF APPEAL, DURING THE YEAR 1899. Editor: J. F. Smith, Q.C.; Reporter: R. S. Cassels, Vol. XXVI. The Law Society of Upper Canada, Toronto, Ont., 22nd June, 1900.

11483. LE SPORT; GUIDE OFFICIEL, 1900. J. Philibert R. Drouin, Montréal, Que., 22 juin, 1900.

11484. FOR QUEEN AND FLAG. Words and Music by Sarah A. Peter, Collingwood, Ont., 22nd June, 1900.

11485. OH, SHINING LIGHT. Song, with Organ Accompaniment. By Spencer Adams. Vandersloot Music Co., Williamsport, Pennsylvania, U.S.A., 23rd June, 1900.

11486. A FRANGESA. March. Arranged by E. Kaiser on the popular song by P. Mario Costa. G. Ricordi & Co., London, England, 22nd June, 1900.

11487. THE HOME MUSIC TEACHER. (Charts.) Charles Anderson, Toronto, Ont., 25th June, 1900.

11488. BRING BACK THE HAT THAT KRUGER WORE. Words by George Falkner. Music by J. M. Maitland. The Canadian-American Music Co. (Ltd.), Toronto, Ont., 25th June, 1900.

11489. SECOND BATTALION MARCH. Royal Canadian Regiment, by J. M. Maitland. The Canadian-American Music Co. (Ltd.), Toronto, Ont., 25th June, 1900.

11490. CANADA MY COUNTRY. Words by Mrs. Cecil Bowen. Music by J. A. Warner, The Canadian-American Music Co., (Ltd.), Toronto, Ont., 25th June, 1900.

11491. QUEEN AND COUNTRY. (Song.) Words by Ernest A. Creasy. Music by R. Geddes-Harvey, E. A. Creasy, Arizona, Man., 26th June, 1900.

11492. THE DIVISION COURTS ACT FOR THE PROVINCE OF ONTARIO. Second Edition. By James Bicknell and Edwin E. Seager, Toronto, Ont., 26th June, 1900.

11493. TORONTO ALBUM OF VIEWS. The Dominion Publishing Co., Toronto, Ont., 26th June, 1900.

11494. RELIEF OF MAFEKING. (Song.) Words and Music by J. Coulter, Port Robinson, Ont., 27th June, 1900.

11495. CANADA'S GALLANT HEROES. (Song.) Words and Music by J. Coulter, Port Robinson, Ont., 27th June, 1900.

11496. PASTOR'S REGISTER. By Rev. R. H. Abraham, M.A., Sc. D Burlington, Ont., 27th June, 1900.

11497. GROUP OF STRATHCONA HORSE ON BOARD SS. *Monterey.* (Photo.) Henry Dunsford, Montreal, Que., 27th June, 1900.

11498. RIFLE DRILL—SS *Monterey.* (Photo.) Henry Dunsford, Montreal, Que., 27th June, 1900.

11499. STRATHCONA CAMP, CAPE TOWN. (Photo.) Henry Dunsford, Montreal, Que., 27th June, 1900.

11500. STANDARD BANK, CAPE TOWN. (Photo.) Henry Dunsford, Montreal, Que., 27th June, 1900.

11501. L. J. PAPINEAU. (Haut-relief.) Napoléon Bourassa, Ottawa, Ont., 27 juin, 1900.

11502. THE UNION JACK FOR EVER. (March and Two-Step.) By W. H. Hodgins, Toronto, Ont., 28th June, 1900.

11503. PRETORIA. (March and Two-Step. By A. W. Hughes. W. H. Hodgins, Toronto, Ont., 28th June, 1900.)

11504. MADELINE WALTZES. By W. H. Hodgins, Toronto, Ont., 28th June, 1900.

11505. BE TRUE TO ME. (The Soldier's Farewell.) Song. Words and Music by Lt.-Col. John W. Pratt. Whaley, Royce & Co., Toronto, Ont., 28th June, 1900.

11506. GOOD-BYE. Song. Words by G. T. Whyte, Melville. Music by F. Paolo Tosti. John Hanna, Toronto, Ont., 28th June, 1900.

11507. HIS EXCELLENCY MGR. FALCONIO. (Photo marked A.) Frederick Lyonde, Toronto, Ont., 26th June, 1900.

11508. HIS EXCELLENCY MGR. FALCONIO. (Photo marked B.) Frederick Lyonde, Toronto, Ont., 28th June, 1900.

11509. HIS EXCELLENCY MGR. FALCONIO. (Photo marked C.) Frederick Lyonde, Toronto, Ont., 29th June, 1900.

11510. HIS EXCELLENCY MGR. FALCONIO. (Photo marked D.) Frederick Lyonde, Toronto, Ont., 28th June, 1900.

11511. HIS EXCELLENCY MGR. FALCONIO. (Photo marked E.) Frederick Lyonde, Toronto, Ont., 28th June, 1900.

11512. THE PILGRIM'S REST. Words by Scott Brampton. Music by Charles A. Chase. The John Church Co., Cincinnati, Ohio, U.S.A., 29th June, 1900.)

11513. SHEARD'S BRITISH WAR SONG ALBUM. The Canadian-American Music Co. (Ltd.), Toronto, Ont., 29th June, 1900.

11514. THE KNIGHTS OF THE CROSS. By Henry K. Sienkiewicz. Authorized and Unabridged Translation from the Polish, by Jeremiah Curtin. (Second Half.) George N. Morang & Co., (Ltd.,) Toronto, Ont., 29th June, 1900.

11515. MODERN PIANOFORTE TECHNIQUE. By A. S. Vogt. Part I. Whaley, Royce & Co., Toronto, Ont., 30th June, 1900.

11516. SOMETHING THAT MONEY CAN'T BUY. Words by Charles Horwitz Music by Frederick V. Bowers. Hill, Horwitz & Bowers Chicago, Illinois, U.S.A., 30th June, 1900.

11517. WHEN YOU LOVE. Words by Charles Horwitz. Music by Fred-V. Bowers. Hill, Horwitz & Bowers, Chicago, Illinois, U.S.A. 30th June, 1900.