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RECORD




Vol. XXVII.—No. 11.

NOVEMBER 30th, 1899.

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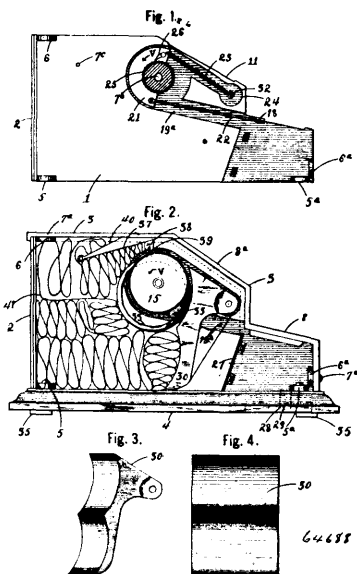
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INVENTIONS PATENTED.

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No. 64,688. Cigar Cutter and Advertising Machine.
(Coupe-cigare et appareil d'annoncee.)



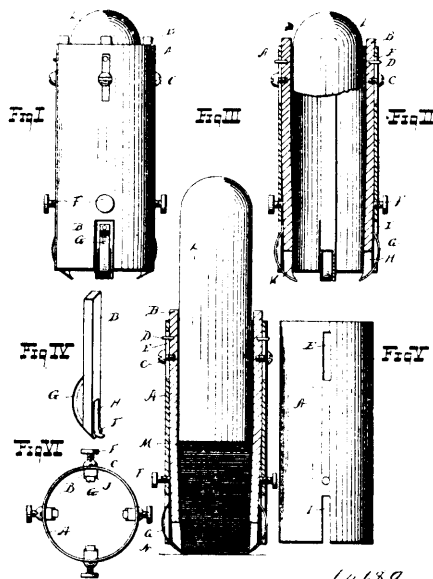
Albert Augustus Root, Tonawanda, New York, U.S.A., 2nd November, 1899; 6 years. (Filed 2nd September, 1898.)

Claim.—1st. In an advertising device, the combination with an enclosing case having a window, of an endless belt carrying advertisements, mechanism supporting said belt within the enclosing case, and a cigar cutting attachment adapted to operate the supporting mechanism and thereby move the belt to successfully reveal the advertisements through the window, as set forth. 2nd. In an advertising device, the combination with an enclosing case, of rollers mounted therein, an endless belt having advertisements therein, mounted upon said rollers, a cigar cutting attachment and operating mechanism connecting the rollers with the cigar cutting

attachment. 3rd. The combination of an enclosing case, and main and auxiliary roller mounted therein, an endless belt carrying advertisements supported upon said rollers, a ratchet upon the main roller, a pawl adapted to engage with the ratchet, and mechanism for operating said pawl to rotate or partially rotate the rollers, as set forth. 4th. The combination of an enclosing case, a main and auxiliary roller mounted therein, an endless belt carrying advertisements supported upon said rollers, a ratchet upon the main roller a rotating device having a pawl adapted to engage with the ratchet, a lever for operating said rotating device. 5th. The combination of an enclosing case, a main and auxiliary roller mounted therein, an endless belt carrying advertisements supported upon said rollers, a ratchet upon the main roller, a rotating device having a pawl adapted to engage with the ratchet, a lever for operating said rotating device, and a spring for rotating said device and the lever to their normal position upon release of said lever. 6th. In an advertising device, the combination with an enclosing case, of a main roller mounted in said case, an auxiliary feed roller, an endless band carrying advertisements supported upon said rollers, a cigar cutting attachment, a connection between said attachment and the rollers to operate the same to feed the band, and a spring for restoring said attachment to its normal condition, as set forth. 7th. The combination with the enclosing case provided with a window, a slide slot and one or more openings through which a cigar may be introduced, of rollers mounted within said case, an endless belt carrying advertisements supported upon said rollers, a cutting attachment having a handle protruding through the slot and a connection between the rollers and attachment, whereby the operation of the cutting attachment will operate the rollers to feed the belt and thus successfully reveal the advertisements through the window. 8th. In an advertising device, the combination with an enclosing case, of a roughened surface main roller actuated in said case, an auxiliary feed roller, an endless band carrying advertisements supported upon said rollers, spring means for holding said band in engagement with the roughened surface of the roller, a cigar cutting attachment, a connection between the said attachment and the rollers to operate the same to feed the band, and a spring for restoring said attachment to its normal condition, as set forth. 9th. In an advertising device, comprising an enclosing case having a window, rollers journaled in said case, an endless belt or band carrying advertisements supported upon said rollers, a lever for operating said rollers to successively reveal the advertisements through the window, and automatic means for returning said lever to its normal position immediately upon its release after it has been moved to operate the device. 10th. An advertising device comprising an enclosing case having a window, rollers journaled in said case, an endless belt or band carrying advertisements supported upon said rollers, a lever for operating said rollers to successively reveal the advertisements through the window, and a spring for returning said lever to its normal position. 11th. An advertising device comprising an enclosing case having a window, rollers journaled in said case, an endless belt or band carrying advertisements supported upon said rollers, means for loosely enclosing the larger portion of the belt, a spring controlled roller for tensioning the belt upon the main roller, a lever for operating said rollers to successively reveal the advertisements through the window, and automatic means for returning said lever to its normal position immediately upon its release after it has been moved to operate the device. 12th. An advertising device comprising an enclosing case, rollers journaled within said case, an endless band carrying advertisements supported upon said rollers, and a combined cigar cutting and operating mechanism for rotating the rollers and also removing the tips of cigars. 13th. In an advertising device, the combination of an enclosing case, having a window, a main roller and an auxiliary roller journaled therein, said main

roller having a series of circumferential grooves, a series of annular rings of larger circumference than the roller hung loosely in the grooves, an endless band carrying advertisements supported upon said rollers, and a block in front of the main roller for directing the ribbon to and by the window, the annular rings preventing the ribbon from forcing its way between the main roller and the block to clog the machine, as set forth. 14th. In an advertising device, the combination of an enclosing case comprising a base, side and end pieces, and top portion having a window and one or more openings for the insertion of a cigar tip, a main roller mounted upon journals attached to the side pieces and provided with a roughened surfaced periphery and a series of circumferential grooves, an auxiliary roller also journaled in the side pieces, an endless belt carrying advertisements partially encircling said rollers and having its larger portion enclosed within the case, a series of annular rings larger in circumference than the main roller and loosely supported in the grooves thereof, a partition or block below the window and in front of the main roller, an upper portion pivotally supported by the side portions of the enclosing case, a roller at the forward end thereof, spring means for pressing said roller against the belt and the belt against the main roller to tension the same, a ratchet upon the main roller, a pivoted portion having a pawl adapted to engage with said ratchet, a lever cigar cutting device, a connection between said lever and the pivoted portion and a spring for returning said lever and pivotal portions to their normal position, as set forth. 15th. In a combined advertising device and cigar cutter, the combination of an enclosing case, roller mechanism mounted therein, an endless ribbon supported upon said rollers, and a combined cutter and actuating device for removing the cigar tip and also operating the rollers, as set forth.

No. 64,689. Label or Stamp Affixing Machine. (*Machine à affixer les étiquettes et estampilles.*)

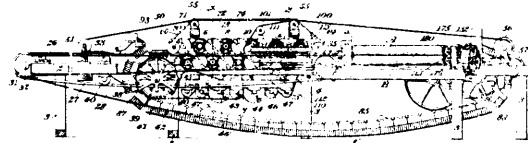


Julius John Karges, Kansas City, Missouri, U.S.A., 2nd November, 1899; 6 years. (Filed 19th January, 1899.)

Claim.—1st. In a label or stamp affixer of the kind described, the combination with a tube vertically disposed, of a plurality of guiding arms longitudinally arranged around the inner wall of the tube and contractible at their lower ends, a movable arm or arms normally extending under the bottom label and within the inner side of the guiding arms but adapted to be forced outward beyond the said inner side of the guiding arms after the label has been affixed, substantially as described. 2nd. In a label or stamp affixer of the kind described, the combination with a vertical tube, of a plurality of guides arranged around the inner wall of the tube and provided each with an inwardly extending projection at its lower end, a spring arm secured at one end to each guide, the other end extending normally toward and beyond the inner side of the guide, but adapted to be forced outwardly after the label has been affixed, substantially as described. 3rd. In a label or stamp affixer of the kind described, the combination with a suitable framework, of a plurality of guides adjustable thereon and radially adjustable at their lower ends and adapted to hold between them the pile of labels, and a plurality of movable arms, one end of each arm resting upon the underside of the bottom label but adapted to be withdrawn thereunder after the label has been affixed, substantially as described. 4th. In a label or stamp affixer of the kind described, the combination with a tube A, of the guides B secured therein and radially adjustable at their lower ends, the spring arms G secured to the guides B and having their lower ends normally extending

within the inner sides of the guides B, substantially as described. 5th. In a label or stamp affixer of the kind described, the combination with the frame A, of the guides B secured therein and having transverse corrugations near their lower ends, a movable arm connected at one end to each guide and having the free end normally within the inner side of the guide, and a plunger L, substantially as described. 6th. In a label or stamp affixer of the kind described, the combination with suitably supported guides between which the labels are held, of means for adjusting the guides relatively to the pile of labels, and one or more releasable catches normally engaging the bottom label, but released therefrom after the label has been affixed, substantially as described. 7th. In a label or stamp affixer of the kind described, the combination with suitably supported guides between which the labels are held, of means for adjusting the guides relatively to the pile of labels, and one or more spring actuated catches normally engaging the bottom label but adapted to be released therefrom when the label is affixed, substantially as described. 8th. In a label or stamp affixer of the kind described, the combination with suitably supported guides between which the pile of labels is held, of means for adjusting the guides relatively to the pile of labels, one or more rigid retaining devices, and one or more releasable retaining devices adapted to engage the bottom label, the releasable retaining devices being adapted to release the label when it has been affixed, substantially as described. 9th. In a label or stamp affixer of the kind described, the combination with suitably supported guides between which the labels are held, the said guides being adjustable toward and from the labels, and provided at their lower ends with one or more inwardly extending projections, of one or more releasable catches normally engaging the bottom label, said catches being released from the bottom label when it has been affixed, substantially as described. 10th. In a label or stamp affixer of the kind described, the combination with a support, of guides for the pile of labels, one set of ends of the guides being adapted to be secured rigidly to the support and the free ends of the guides being movably adjustable toward or from the pile of labels, substantially as described. 11th. In a label or stamp affixer of the kind described, the combination with a support of guides, one set of ends of which are rigidly secured to the support, and means for adjusting the free ends of the guides toward or from the pile of labels held between the guides, substantially as described. 12th. In a label or stamp affixer of the kind described, the combination with a support of guides for the pile of labels, having one set of ends secured to the support and vertically adjustable thereon and means for readjusting the free ends of the guides toward or from the pile of labels, substantially as described. 13th. In a label or stamp affixer of the kind described, the combination with a support, of guides mounted thereon for the pile of labels, and means by which the lateral pressure upon the lower labels may be varied without affecting the upper labels, substantially as described. 14th. In a label or stamp affixer, the combination with a support adapted when in use to be held in the hand of the operator and provided with side walls, of guides between which the pile of labels is held and which are secured to the side walls, and means for adjusting the guides toward and from the said side walls, substantially as described. 15th. As an article of manufacture, a portable label or stamp affixer, comprising a tubular frame adapted to be held in the hand of the operator when in use, and label guides supported by the inner walls of the tubular frame and adjustable toward and from the same, substantially as described.

No. 64,690. Tobacco Leaf Stemming Machine. (*Machine à retirer les côtes des feuilles de tabac.*)

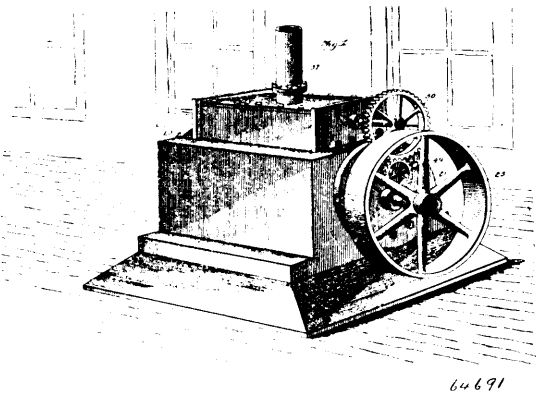


George Pierce Butler and William Henry Butler, both of New York City, New York, U.S.A., 2nd November, 1899; 6 years. (Filed 13th February, 1899.)

Claim.—1st. A leaf stemming machine, including means for first transversely incising the web of a leaf, and second, for detaching that part of the web located between the line of incision and the butt of the leaf. 2nd. In a leaf stemming machine, including means for transversely incising the web of a leaf, means for detaching that part of the web located between the line of incision and the butt of the leaf, and means for feeding the leaf past the web-incising and web-detaching means. 3rd. In a leaf stemming machine, including means for transversely incising the web of a leaf, means for detaching that part of the web located between the line of incision and the butt of the leaf, and means for severing the stem. 4th. The combination, with means for first transversely incising the web of a leaf, of means for detaching that part of the web located between the line of incision and the butt of the leaf, and means for gripping said leaf near its opposite ends for advancing it sidewise for treatment. 5th. The combination, with means for

transversely incising the web of a leaf, of means for carrying the leaf past the incising means, the stemming mechanism diagonally disposed to the line of feed of the leaf. 6th. The combination, with means for transversely incising the web of a leaf, of means for carrying the leaf to and past the incising mechanism, and stemming mechanism consisting of a series of superposed clothed rolls diagonally disposed to the line of feed of the leaf. 7th. A machine of the class specified, including means for forming the blade of a leaf a multiplicity of punctures or apertures to produce an incision in said blade. 8th. A machine of the class specified, including means for forming in the blade of the leaf a multiplicity of punctures or apertures to produce an incision in said blade, and for severing the veins lying across the incision. 9th. A machine of the class specified, including means for first forming transversely in the blade of the leaf a multiplicity of punctures or apertures to produce an incision in said blade, second, for severing the veins lying across the incision, and, finally, for detaching the web located between the incision and the butt of the leaf. 10th. The combination, with leaf puncturing means, including a device comprising a body portion and a series of puncturing points secured to said body portion and serving to form in the blade of the leaf a multiplicity of punctures to produce an incision, of means for detaching that part of the web located between the incision and the butt of the leaf. 11th. The combination, with leaf puncturing and carrying means, of an independent device for guiding and feeding a leaf while it is being punctured. 12th. The combination, with leaf puncturing and carrying means, of a device for guiding and feeding a leaf while it is being punctured, said guiding and feeding device having two working surfaces, between which the puncturing means is disposed. 13th. The combination, with leaf carrying means, of a leaf puncturing device, a device for guiding and feeding the leaf while under treatment, and means for driving said several parts in unison. 14th. The combination, with leaf carrying means, of a leaf puncturing device and a leaf feeding device projecting across the line of the leaf, and means for driving said several parts in unison. 15th. The combination, with a vein severing device, of a co-operative device in position to engage, and to force, a vein into contact with the vein severing device. 16th. The combination, with means for puncturing the blade of a leaf to produce an incision, of a vein severing device, means for forcing therein the vein or veins lying across the incision into contact with said severing device, and means for guiding the leaf. 17th. The combination, with means for incising a leaf for cutting the veins, of an independent vein severing device, means for forcing the vein or veins lying across the incision into contact with the vein severing device, and a device for separating the veins and stem.

No. 61,691. Engine. (Machine à vapeur.)

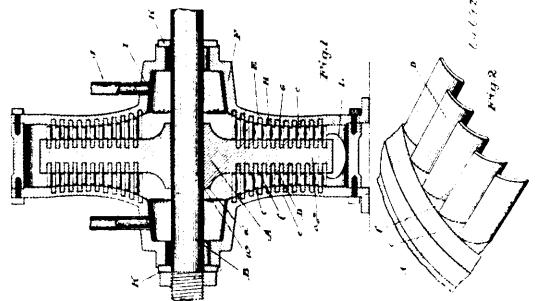


Alfred E. McCollum, West Leisoring, Pennsylvania, U.S.A., 2nd November, 1899; 6 years. (Filed 19th May, 1899.)

Claim.—1st. In an engine, the combination with a cylinder of a piston rod or shaft centrally journaled therein and having right and left pitched, spiral grooves in its surface, and a movable head or piston mounted upon said rod and provided with tenons or feathers, to engage in the grooves, substantially as described. 2nd. In an engine, the combination with a cylinder of a piston rod or shaft centrally journaled therein and having right and left pitched, spiral grooves in its surface, two blocks or cones, mounted upon said shaft and having tenons to engage in said grooves respectively, and means for alternately locking said blocks against turning while being moved in a longitudinal direction over said shaft, substantially as described. 3rd. In an engine, the combination with a cylinder of a piston rod or shaft journaled therein, having right and left pitched, spiral grooves in its surface, a head or piston, consisting of movable plates, loosely mounted upon said rod and held against turning, two blocks mounted upon said shaft between said plates and having feathers to engage said grooves respectively, and means for alternately locking said blocks against turning between said plates, substantially as described. 4th. In an engine, the combination with a cylinder of a piston rod or shaft centrally journaled therein and having right and left pitched, spiral grooves in its surface, two blocks mounted upon said head or piston and having feathers to engage in said grooves

respectively, a second rod or shaft journaled in said cylinder and provided with a spiral groove in its periphery, two blocks mounted upon the last mentioned shaft, each having a feather to engage in said groove and means for alternately locking one of each pair of blocks against turning upon its shaft while being longitudinally moved through the cylinder, substantially as described. 5th. In an engine, the combination with a cylinder of a piston rod or shaft, consisting of movable plates, locked against turning therein, a valve governor shaft journaled therein, a slide valve having openings with interior feathers, a valve rod passing through said opening and having a spiral groove in which said feathers engage, means for rotating the valve governor shaft, and gearing to communicate its rotation to the valve rod, substantially as described. 6th. In an engine, the combination with the cylinder of a piston rod or shaft journaled therein but held against longitudinal movement, a piston head, longitudinally movable in said cylinder but held against turning, and means whereby the piston rod or shaft is rotated by the longitudinal movement of the piston head, substantially as described. 7th. In an engine, the combination with the cylinder and the steam chest of a valve governor shaft, journaled in the cylinder and held against longitudinal movement, a piston head, longitudinally movable in said cylinder but held against turning, a valve rod journaled in the steam chest, a slide valve mounted on the valve rod within the steam chest means whereby the longitudinal movement of the piston head is caused to rotate the valve governor shaft, gearing connecting the valve governor shaft with the valve rod, and means for causing the rotation of the valve rod to reciprocate the sliding valve, substantially as described. 8th. In an engine, the combination with a piston head, consisting of three plates longitudinally movable but locked against turning in the cylinder, of rods or bolts passing through said plates and connecting the two outer plates at a fixed distance apart, the central plate being movable upon said rod, a piston rod or shaft centrally journaled in the cylinder and having oppositely pitched spiral grooves, and two blocks located in recesses between the plates mounted upon said rod or shaft and having feathers to engage said grooves respectively, substantially as described. 9th. In an engine, the combination of the cylinder with a steam chest, steam channels being provided extending from the steam chest to the opposite end of the cylinder, a slide valve located in the steam chest and having a recess in its under side, the steam chest being provided with an exhaust port communicating with said recess, and means for reciprocating the slide valve whereby communication is established alternately through its bottom recess between the respective steam channels and the exhaust port, substantially as described. 10th. In an engine, the combination with twin cylinder of piston rods centrally journaled therein, and gear wheels on the end of said piston rods meshing with each other, substantially as described. 11th. In an engine, the combination with twin cylinder of piston rods centrally journaled therein and held against reciprocation, a gear wheel on each of said piston rods meshing with each other, a steam chest communicating with each piston, a throttle chest communicating with each steam chest, and throttle valves in said throttle chests simultaneously actuated to alternately admit steam to each of the cylinders, substantially as described. 12th. In an engine, the combination with a steam cylinder and a pumping cylinder arranged in line therewith, of a piston rod or shaft extending through both cylinders, journaled therein and held against reciprocation, a piston head in the steam cylinder longitudinally movable but held against turning, a piston head rotated in the pumping cylinder longitudinally movable therein and held against turning, means for causing the longitudinal movement of the piston head in the steam cylinder to rotate the shafts, and means for causing the rotation of the shaft to reciprocate the piston head in the pumping cylinder, substantially as described.

No. 61,692. Steam Engine. (Machine à vapeur.)



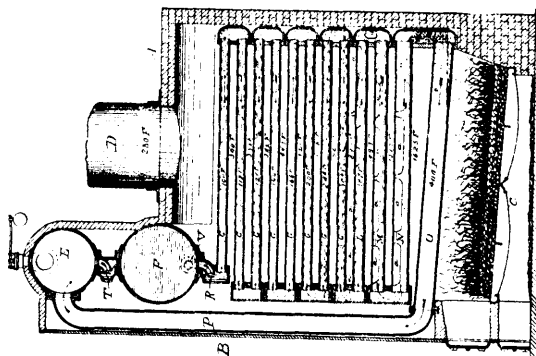
Samuel Lount, Barrie, Ontario, Canada, 2nd November, 1899; 6 years. (Filed 10th April, 1899.)

Claim.—1st. A steam turbine motor consisting of a disc like driving wheel having concentric sets of blades or vanes projecting from its side face, the blades of each set to stand parallel to the axis of revolution and to be inclined as to their width secant to their circle of revolution, a casing enclosing the driving wheel having concentric sets of blades or vanes intermeshing with the sets of blades or vanes on the driving wheels, the blades of each set being arranged parallel

to the axis of revolution of the wheel, and inclined in a direction opposed to the inclination of the blades on the driving wheel, and an inlet for the admission of the actuating fluid to the centre of the motor, and an outlet for its exhaust from the periphery, substantially as specified. 2nd. A radial flow steam turbine motor consisting of a disc like driving wheel having concentric sets of blades or vanes projecting from its face or faces, the blades of each set being arranged parallel to the axis of revolution and inclined secant to their circle of revolution, a casing enclosing the said wheel convexed as to its interior surface, and having concentric sets or blades or vanes projecting from said convexed surfaces to the surfaces of the driving wheel (but without contact therewith) and intermeshing with the sets of blades on the driving wheel, the blades to stand parallel to the axis of revolution of the wheel, and be inclined in a direction opposed to the inclination of the blades on the driving wheel, the extremities of the blades in the several sets to be in the same plane of revolution, but the length of the blades in the different sets to be controlled by the nature and extent of the curvature or convexity given to the surface of the casing, this curvature be such as to establish and control the effluent velocity of the steam within the limits designed for the engine, an inlet for admission of steam to the centre of the motor, and an outlet for its exhaust, substantially as specified. 3rd. In a steam turbine motor, a driving wheel consisting of a hub, and a web or disc having grooves concentric to the hub and blades or vanes, the bases of which are contained and fastened in the grooves, in combination with a steam tight casing provided with grooves concentric with the hub, and stationary blades or vanes, the inner ends of which are fastened in the grooves and intermesh with the blades or vanes on the driving wheel, substantially as specified. 4th. In a steam turbine motor a driving wheel consisting of a hub and a web or disc having grooves concentric with the hub and blades or vanes, the bases of which are contained and fastened in the grooves, in combination with a steam tight casing provided with grooves concentric with the hub, blades or vanes, the inner ends of which are fastened in the grooves, intermeshing with the blades or vanes of the driving wheel, and an outlet for admission of steam to the centre of the motor, and an outlet for its exhaust from the perimeter, substantially as specified. 5th. A steam turbine motor embracing in its construction a disc like driving wheel having a concentric set of blades or vanes projecting from its side faces, the blades of each set standing parallel to the axis of revolution, and inclined as to their width secant to their circle of revolution, and arranged to rotate with increased velocity of flow of steam through the sets of blades, graduated to conform to the increasing diameter of the sets of blades, substantially as specified. 6th. A steam turbine motor embracing in its construction a disc like driving wheel having concentric sets of blades or vanes projecting from its side faces, the blades of each set standing parallel to the axis of revolution, and inclined as to their width secant to their circle of revolution, and arranged to rotate with increased velocity of flow of steam through the blades, graduated to conform to the increasing diameter of the sets of blades, in combination with a casing enclosing the driving wheel having concentric sets of blades or vanes intermeshing with the sets of blades or vanes on the driving wheel, the blades of each set being arranged parallel to the axis of revolution of the wheel, and being inclined in a direction opposed to the inclination of the blades on the driving wheel, and an inlet for the admission of the actuating fluid to the centre of the motor, and an outlet for its exhaust from the periphery, substantially as specified.

No. 64,693. Steam Generator. (*Générateur à vapeur.*)

64-693

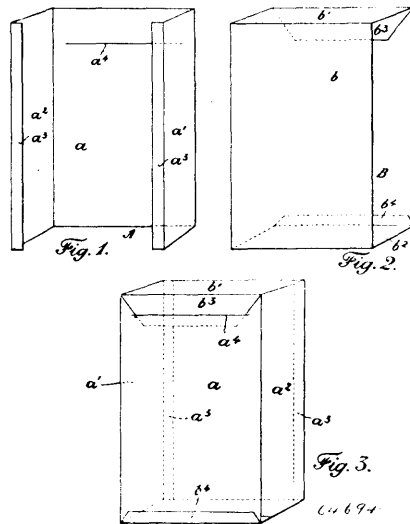


John Clinton Parker, San Francisco, California, U.S.A., 2nd November, 1899; 6 years. (Filed 21st January, 1899.)

Claim.—1st. In a steam generator, series or units of evaporating tubes disposed in tiers in a heating furnace, connecting to superimposed steam and water chambers, such tubes increasing in size in the direction of flow approximately as the volumes of steam and water therein, and from the top downward in the furnace, substan-

tially as herein explained and described. 2nd. In a steam generator, separate superimposed chambers for steam and water, the steam chamber set above and draining into the water chamber by a connection between the two, a series of evaporating tubes of successively increasing size connecting through a heating furnace from the water to the steam chamber and arranged for the passage of water from the top downward, or from the coolest to the hottest portion of the heating furnace, substantially as hereinbefore described. 3rd. In a steam generator, separate superimposed chambers for steam and water, a communicating passage between these chambers and a check valve therein, evaporating tubes of successively increasing size connecting to and extending downwards from the superimposed water chamber, a check valve or valves to prevent upward or back flow from the evaporating tubes, or from the water to the steam chambers, in the manner and for the purposes substantially as herein explained.

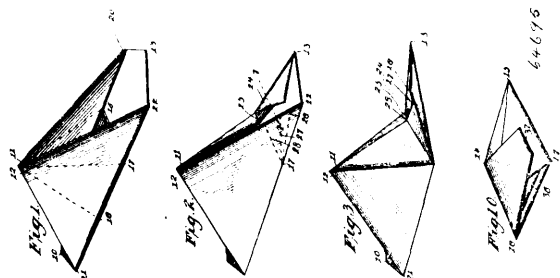
No. 64,694. Box. (*Boîte.*)



Arthur Hickman Windsor, Horley, Surrey, England, 2nd November, 1899; 6 years. (Filed 25th March, 1899.)

Claim.—1st. A box made of two strips such as A, B, the part A forming the front and two sides and the part B forming the back, top and bottom, substantially as described and illustrated. 2nd. A box, consisting of two strips A and B, the strip A being folded or bent so as to form the parts a^1 and a^2 , the parts a^1 and a^2 being bent or folded at their edges so as to form flaps or equivalents a^3 and the central part a having a slit a^4 , and the strip B being folded or bent so as to form the parts b^1 and b^2 , the parts b^1 and b^2 being respectively folded or bent so as to form flaps or equivalents b^3 and b^4 respectively, the flap or part b^3 having its corners cut off, for the purposes and substantially as described and illustrated. 3rd. A box as herein described and illustrated, said box being strengthened and having the interstices between the flaps a^3 and the back b closed by means of an external label or equivalent, substantially as set forth. 4th. A box, consisting of two strips which are cut, bent or folded and joined, substantially as described and illustrated.

No. 64,695. Hat Bag. (*Sac à chapeau.*)

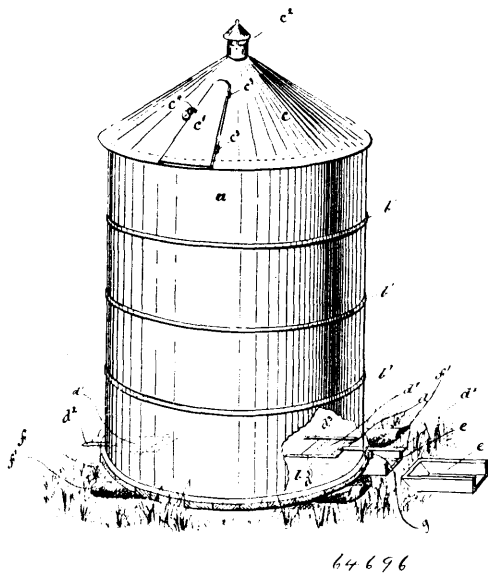


Martin L. Horning, Albion, Michigan, U.S.A., 2nd November, 1899; 6 years. (Filed 6th May, 1899.)

Claim.—1st. A pyramidal bag, box or receptacle formed of a square sheet of paper stiffened to form the bottom by means of a square of pasteboard or similar material secured centrally thereto,

the centre of the paper coinciding with the centre of the pasteboard and the paper folded on the lines extending from the corners of the pasteboard to the points 10, 19, 32, 33, 34, 11, 25, 24, 23, 20, 13, 22, 26, 27, 28, 12, 31, 30, 29 and 21, and along the sides of the pasteboard, substantially as described. 2nd. A pyramidal bag, box or receptacle formed of a square sheet of paper stiffened to form the bottom by means of a square of pasteboard or similar material secured centrally thereto, the centre of the paper coinciding with the centre of the pasteboard, and the paper folded to form triangular sides 10 14 16, 11 14 15, 13 15 17 and 12 16 17, the sections of paper between lines 10 11 14, 11 13 15, 12 13 17 and 10 12 16, being folded inwardly and inclosed by the triangular sides, substantially as described. 3rd. A pyramidal bag, box or receptacle formed of a square sheet of paper stiffened to form the bottom by means of a square of pasteboard or similar material secured centrally thereto, the centre of the paper coinciding with the centre of the pasteboard, the sides of the pasteboard lying substantially parallel with but at a slight angle to the diagonals of the sheet of paper and the paper folded on the lines extending from the corners of the pasteboard to the points 10, 19, 32, 33, 34, 11, 25, 24, 23, 20, 13, 22, 26, 27, 28, 12, 31, 30, 29 and 21, and along the sides of the pasteboard, substantially as described. 4th. A pyramidal bag, box or receptacle formed of a square sheet of paper stiffened to form the bottom by means of a square of pasteboard or similar material secured centrally thereto, the centre of the paper coinciding with the centre of the pasteboard and the sides of the pasteboard lying substantially parallel with but at a slight angle to the diagonals of the sheet of paper, and the paper folded to form triangular sides 10 14 16, 11 14 15, 13 15 17 and 12 16 17, the sections of the paper between lines 10 11 14, 11 13 15, 12 13 17 and 10 12 16, being folded inwardly and inclosed by the triangular sides, substantially as described.

No. 64,696. Grain Tank. (*Citerne pour le grain.*)



Arthur Atkinson, Winnipeg, Manitoba, Canada, 2nd November, 1899; 6 years. (Filed 1st June, 1899.)

Claim.—In a grain tank a cylinder preferably constructed of sheet metal, strengthened by means of wrought iron bands, and having a bottom in which are sliding doors arranged to be operated from the outside, provided with bars passing through the said cylinder and perforated to receive the catch of any suitable pad lock, a conical cover or roof having a weather proof door with hinges and staples for an ordinary padlock, with conical cover and bent pipe in apex of roof, the whole suitably set on platform and bearers, and provided with box or shoe for removing grain, all formed and arranged and combined as set forth.

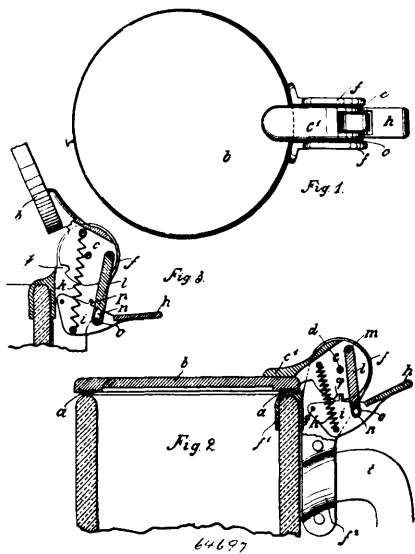
No. 64,697. Receptacle and Cover.

(*Receptacle et couvercle.*)

Emil Richard Berude and Moritz Bernhard Emil Sobadky, both of Blasowitz, near Dresden, Saxony Germany, 2nd November, 1899; 6 years. (Filed 17th January, 1899.)

Claim.—1st. In receptacle with self-closing covers, the combination of the two upstanding ears or flaps *f*, the two parts *f*¹, *f*², of which are secured to the receptacle, the disc-shaped hinge parts *c*, secured to the cover *b*, and being pivoted between the said flaps *f*, a link *l*, pivotally secured to said hinge parts *c*, and two the levers *i*, said levers *i*, to be pivotally secured to the said flaps *f*, a finger plate *h*, connecting the said levers *i*, and a helical spring secured with one end to the said hinge parts *c*, and with the other end to the said

levers *i*, all for the purpose set forth. 2nd. In receptacles with self-closing covers the combination of the two upstanding ears or flaps



f, the two parts *f*¹, *f*², of which are secured to the receptacle, the disc-shaped hinge parts *c*, secured to the cover *b*, and being pivoted between said flaps *f*, a link *l*, pivotally secured to the said hinge parts *c*, and to the levers *i*, said levers *i*, to be pivotally secured to the said flaps *f*, a finger plate *h*, connecting the said levers *i*, and a helical spring secured with one end to the said hinge parts *c*, and with the other end to the said levers *i*, a projections or nose *p*, upon the upper edge of one of the said levers *i*, taking into a recess *q*, provided in the lower edge of the respective hinge part *c*, a pin *o*, connecting the said two levers *i* and a slot *n*, provided in the lower end of the said link *l*, the parts being constructed, arranged and working, substantially as and for the purpose set forth.

No. 64,698. Process of Canning Mashed Potatoes.

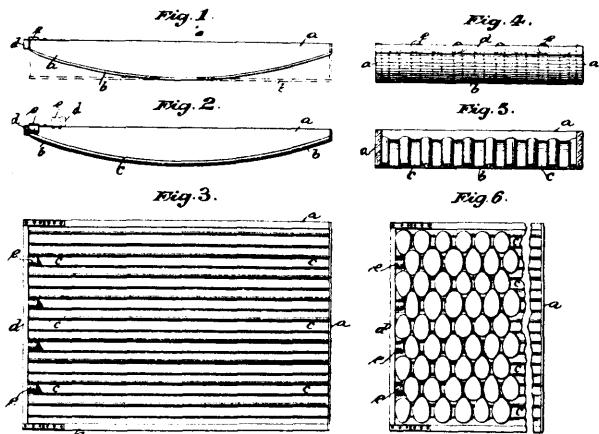
(*Procédé pour mettre en boîtes les pommes de terre écrasées.*)

Daniel Ferguson, Springhill, Nova Scotia, Canada, 2nd November, 1899; 6 years. (Filed 24th June, 1899.)

Claim.—The herein described process for canning potatoes, consisting essentially in thoroughly cooking and then mashing them, then placing the mashed potatoes in cans and expelling the moisture by subjecting the filled cans to the action of excessive heat and finally hermetically sealing said cans while in the heated state, substantially as described.

No. 64,699. Method of Packing Eggs.

(*Méthode d'emballage des œufs.*)

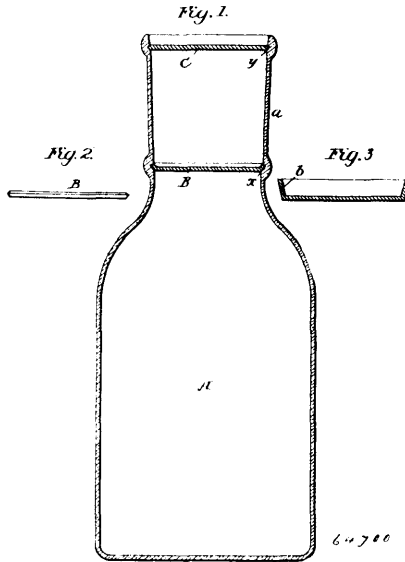


Alfred, James and George Lyons, all of Manchester, Lancaster, England, 2nd November, 1899; 6 years. (Filed 26th June, 1899.)

Claim.—1st. A tray or receptacle for packing eggs, having a grooved or corrugated bottom *b* and both sides and one end closed, all substantially as and for the purpose set forth. 2nd. A tray or

receptacle for packing eggs, having a grooved or corrugated bottom and both sides and one end closed, having a rail or movable end *d* furnished with projections *c* which protrude into the grooves or corrugations *c* in alternate order, all substantially as and for the purpose set forth.

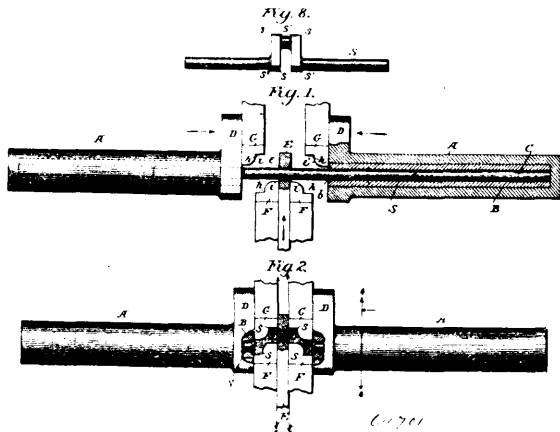
No. 64,700. Milk Bottle. (*Bouteille à lait.*)



Charles E. Crane, Seattle, Washington, U.S.A., 2nd November, 1899; 6 years. (Filed 26th June, 1899.)

Claim.—1st. A can or receptacle having a body portion A, neck *a*, and a seat *x* below the top of the neck, in combination with a disc B of flexible material adapted to said seat and to form a close joint with the interior of the neck, substantially as described. 2nd. A can or receptacle having a body portion A, neck *a*, and seat *x* below the top of the neck, in combination with a disc B of flexible material having a flange *b* adapted to said seat and to form a close joint with the interior of the neck, substantially as described. 3rd. A can or receptacle having a body portion A, neck *a*, and seat *x* below the top of the neck, and a second seat *y* near the top, in combination with a disc B, of flexible material adapted to said seat and to form a close joint with the interior of the neck, and a cap C adapted to the seat *y*, substantially as described. 4th. A milk receptacle having a tapering neck *a*, with a seat *x* near the lower end thereof in combination with a flexible disc B adapted to said seat and to form a close joint with the interior of the neck, substantially as described.

No. 64,701. Apparatus for making Crank Shafts.
(*Appareil pour faire les arbres de bielles.*)

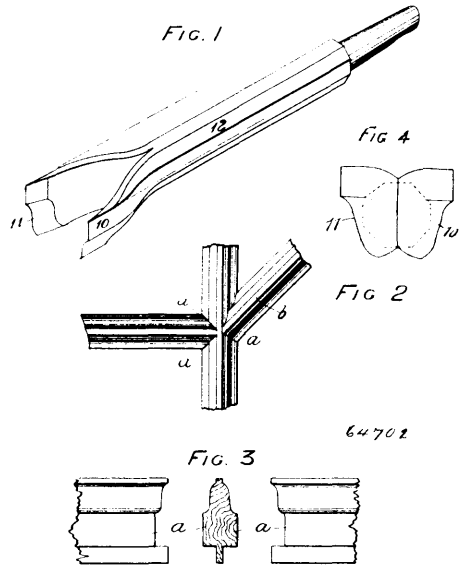


John P. Harrington, Philadelphia, Pennsylvania, U.S.A., 2nd November, 1899; 6 years. (Filed 1st May, 1899.)

Claim.—1st. A mechanism for forming from a straight blank a crank shaft having a double crank and an intermediate pin, comprising means for forcing the crank pin out of line with the blank end, at the same time upsetting the metal to provide sufficient

stock for the cranks and forming the corners of said cranks before they are brought into parallel relation with each other, and means for subsequently bringing said cranks into parallel relation by straightening their intermediate portions without disturbing their corners, whereby rupture and destruction of the fibre of the metal are reduced to a minimum. 2nd. A mechanism for forming from a straight blank a crank shaft having a double crank and an intermediate pin, comprising means for forcing the crank pin out of line with the blank and at the same time upsetting the blank to provide sufficient stock for the cranks and forming the corners of said cranks, means for subsequently forcing the crank pin to its proper position and at the same time bringing the cranks into parallel relation without disturbing said corners, and means for finishing the ends and edges of the cranks. 3rd. In a machine for making crank shafts, the combination with the sockets for holding the blank, of the crank pin die E and the opposing dies F G, substantially as described. 4th. In a machine for forming crank shafts, the combination with the sockets for holding the shaft, provided with the side dies D of the crank pin die E, substantially as described. 5th. In a machine for forming crank shafts, the combination with the sockets for holding the blank, provided with the sides D of the crank pin die E and the reciprocating dies J K for finishing the crank, substantially as described. 6th. In a machine for forming crank shafts, the combination of the sockets A, the bushings B, the filling block C and suitable dies for shaping the cranks, substantially as described. 7th. In a machine for forming crank shafts, the opposing dies F G, having angular recesses *h* to form the angles of the cranks, and the shoulders *i* for partially bending the cranks, substantially as described.

No. 64,702. Chisel. (*Ciseau.*)



Eli Beam, Vancouver, British Columbia, Canada, 2nd November, 1899; 6 years. (Filed 5th June, 1899.)

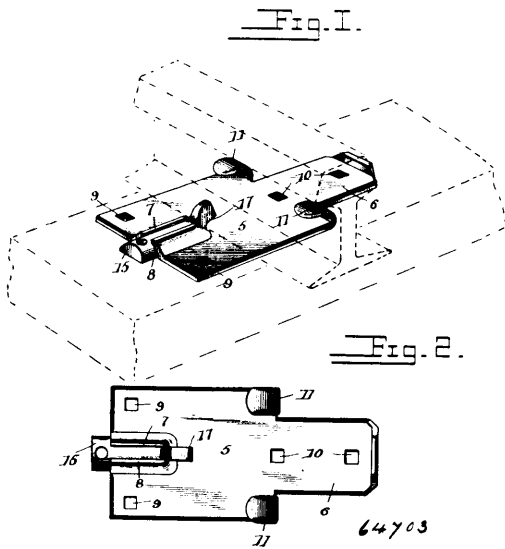
Claim.—A cutting tool for the purposes set forth, consisting of a shank 12, the one end of which is forked or divided into right and left cutting edges 10 and 11, the contour of said edges being formed to correspond with the moulding or wood to be operated upon, substantially as and for the purpose set forth.

No. 64,703. Tie Plate. (*Tirant.*)

Isaac L. Edwards, Aurora, Illinois, U.S.A., 2nd November, 1899; 6 years. (Filed 24th June, 1899.)

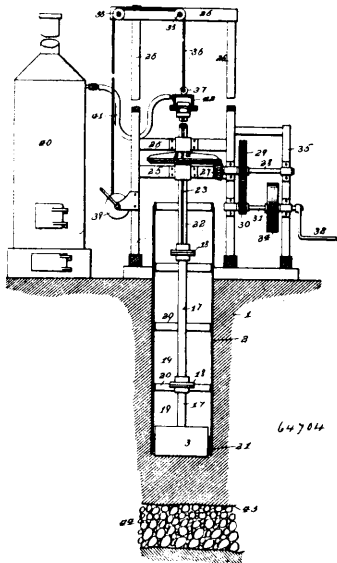
Claim.—1st. A tie plate comprising a malleable body having a narrowed extension formed integral therewith and resulting in the formation of shoulders, tongues at the sides of the narrowed portion, forming continuations of the shoulders and bent to lie over and parallel with the body portion, said tongues being separated by an interspace to expose the edge of the rail flange engaging the tongues, an opening intermediate the tongues adapted to receive a spike to secure the plate upon a tie and engage the rail flange with its head, a slot in the opposite side of the plate having its edges bent upwardly and inwardly to form converging ears, and a bolt disposed between the ears and adapted to clamp a rail against the tongues, said bolt having its under surface exposed to the supporting tie of the plate. 2nd. A tie plate comprising a malleable body having a narrowed extension formed integral therewith and resulting in the formation of a shoulder at each side of the extension, the end of the narrowed portion being turned upwardly and having an opening adjacent thereto, tongues at the sides of the narrowed por-

tion forming continuations of the shoulders and bent to lie over and parallel with the body portion, said tongues being separated by an



interspace to expose the edge of the rail flange, an opening intermediate the tongues adapted to receive a spike to hold the plate upon a tie and engage the flange of a rail with its head, a slot in the opposite side of the plate having its edges bent upwardly and inwardly to form converging ears, a bolt slidably arranged between the ears and adapted to engage the flange or a rail at its opposite sides from the tongues, the underside of the bolt being disposed against the supporting tie, and an opening in the bolt adapted to receive a spike to hold the bolt against movement.

No. 64,704. Mechanism for Mining in Frozen Earth.
(*Mécanisme pour miner dans la terre gelée*)

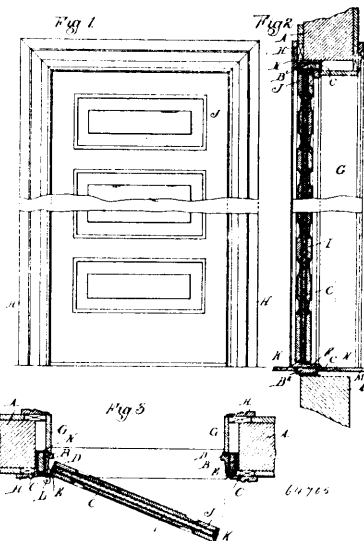


John Edward Stuart, Winchester, California, U.S.A., 2nd November, 1899; 6 years. (Filed 21st April, 1898.)

Claim.—1st. An apparatus for mining in frozen earth, comprising an auger consisting of an annular flange having an interior cross plate formed with a radial opening, and with a radial depending flange projecting beneath the opening, and a radial cutting plate secured to the depending flange, a cylinder, annular lugs and bolts whereby the cylinder is secured to the cross plate, a hollow shaft secured to the cross plate whereby the auger is supported, and a centrally located V-shaped bracket secured pendently to the cross plate beneath the hollow shaft and crosswise of the radial openings, substantially as described. 2nd. An apparatus for mining in frozen

earth comprising an auger consisting of an annular flange having an interior cross plate formed with a radial opening, and with a radial depending flange projecting beneath the opening, a radial trap door or valve controlling the radial opening, and a radial cutting plate secured to the depending flange, a cylinder, annular lugs and bolts whereby the cylinder is secured to the cross plate, a hollow shaft secured to the cross plate whereby the auger is supported, and a centrally located V-shaped bracket secured pendently to the cross plate beneath the hollow shaft and crosswise of the radial openings, substantially as described. 3rd. In an apparatus for mining in frozen earth, comprising an auger consisting of an annular flange having an interior cross plate formed with radial openings, and with radial depending flanges projecting beneath the openings, radial trap doors or valves controlling the radial openings and radial cutting plates secured to the depending flanges, a cylinder, angular lugs and bolts whereby the cylinder is secured to the cross plate, a hollow shaft secured to the cross plate, whereby the auger is supported, and a centrally located V-shaped bracket secured pendently to the cross plate beneath the hollow shaft and crosswise of the radial openings, substantially as described. 4th. The herein described method of mining in frozen earth, which consists in thawing by the application of steam, and the mechanical removal of a section of the earth, than drilling lateral holes, then thawing the earth in a lateral direction in close proximity to the "pay dirt," and then removing said thawed earth and "pay dirt," substantially as set forth.

No. 64,705. Fire Resisting Wooden Structures.
(*Construction à l'épreuve du feu.*)



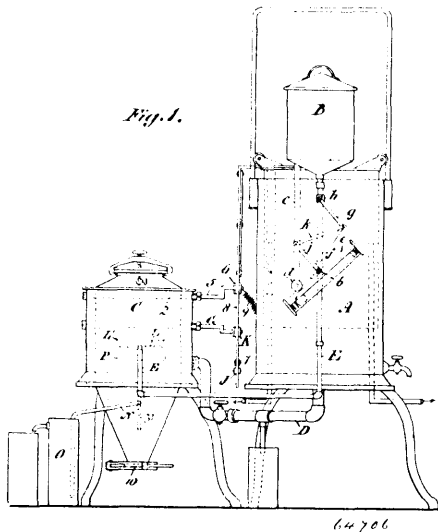
Alphonse de Man, Detroit, Michigan, U.S.A., 2nd November, 1899; 6 years. (Filed 29th August, 1898.)

Claim.—1st. In a wood structure, the combination with the various constituent members, of a non-combustible insulating wrapping for the members, the wrapping of each member consisting of penetrable material entirely surrounding, covering and sealing the same, thereby forming a double course of insulating material at the points of union and contact of the various members, substantially as described. 2nd. A fire resisting wooden structure consisting of an interior wooden core, a covering of fire proof material inclosing it to prevent access of air for combustion, and a finishing facing on the exposed portions of the insulating material. 3rd. The combination with a fire-proof wall, having a door-opening therein, of a wooden door frame, formed of a core of wood, a fire-proof insulating sheathing enclosing the core of wood, an exterior wood-finish on the core, and a practically fire-proof door within the frame, substantially and for the purpose set forth. 4th. The combination with a fire-proof wall, having a door-opening therein of a wooden door-frame, consisting of the core B, B¹, B², formed of wood, inclosed within a fire-proof insulating sheathing, and the face jambs D E veneered on the core admitting, to match any kind of wood, and a practically fire-proof door therein, substantially and for the purpose set forth. 5th. In a fire resisting door frame composed of an insulated wooden core and a wooden facing, the rabbet strips E e veneered on the fire-protected core, admitting to let in the hardware without damaging the fire-proof sheathing, also to accommodate any variation of the door by altering the thickness of the rabbet strips. 6th. Wooden fire resisting doors, comprising in combination an insulated core made of wood, inclosed by a fire-proof insulating sheathing extending unbroken over the faces and the edges,

to exclude air for combustion, and a wooden finishing facing thereon. 7th. In a fire resisting door, the combination with a wooden core, an insulating sheathing inclosing the core, to the exclusion of air for combustion, a wooden facing on the faces of the core, and the strips K on the edges, admitting of letting in the hinges, and to fit and refit the door without disturbing the fire-proof sheathing. 8th. In a fire resisting door, composed of an insulated wooden core, covered with wooden facing on each side, the wooden strip K running all round the door, covering the edges, and admitting of the door being adjusted without affecting the fire-proof sheathing of the core.

No. 64,706. Acetylene Gas Generator.

(Générateur de gaz acétylène.)



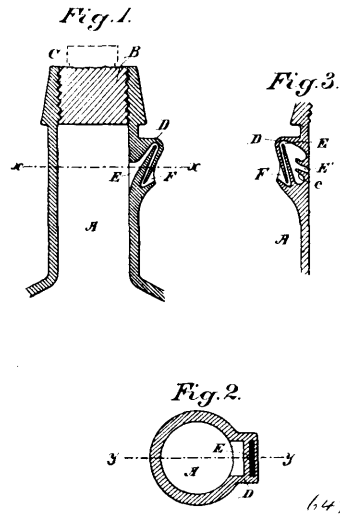
R. O. Shaw Wood, London, Ontario, Canada, 2nd November, 1899; 6 years. (Filed 8th April, 1899.)

Claim.—1st. In an automatic acetylene gas machine, comprising a gasometer, an exterior elevated water tank and a gas generator containing a carbide cage journaled to rock therein and a pipe connecting said tank and generator, the inlet to said generator provided with a spraying device to wet only the bottom of the cage and carbide therein, before and during the time said cage is rocked, substantially as set forth. 2nd. In an automatic acetylene gas machine having a generator containing a carbide cage of cylindrical form axially journaled to rock therein, and provided with a plate or keel projecting downwardly from the bottom when the cage is at rest, as and for the purpose set forth. 3rd. In an automatic acetylene gas machine having a generator containing a carbide cage journaled to rock therein and connected to a crank arm outside the generator and operated in one direction by a trip connected to a rod attached to the gasometer and in the other direction by a gravitating weight secured to the cage, substantially as set forth. 4th. In an automatic acetylene gas machine, a generator having within it a rocking carbide cage provided with an exterior radial plate, a water spraying device discharging against the bottom of said cage and upon said plate when the cage is rocked, whereby the water will be sprayed against the bottom of the cage and the carbide therein wetted from the exterior and at the bottom only, as set forth. 5th. In an automatic acetylene gas machine, a generator having within it a rocking cage to contain the carbide, a spraying device to wet the bottom of the cage and carbide only, a hood above the spraying device to prevent the perforations therein becoming clogged with ashes from the carbide, a trough or basin to catch water dripping from said hood, and a perforated device to wet the bottom of the cage and carbide only, a hood above the spraying device to prevent the perforations therein becoming clogged with ashes from the carbide, a trough or basin to catch water dripping from said hood, and a perforated pipe from said trough to drain the gasometer and carry off the water into an exterior pipe having a water seal termination, as set forth. 6th. In an automatic acetylene gas machine, a generator containing a rocking cage to hold the carbide, a shaft journaled therein having an arm carrying a hammer head and provided with a crank arm engaged by a trip bar connected to the gasometer and adapted when tripped to strike the cage and dislodge ashes from the carbide adhering thereto, and a spring to accelerate the blow of the hammer, as set forth. 7th. A valve gear for acetylene gas or other machines, comprising a rod secured to the valve plug, a lever pivoted to said rod and connected pivotally to a lever pivoted to a bearing secured to the water feed pipe intermediately of the valve and tank

or source of supply, a lever pivoted at one end to the end of the valve plug and to a lever pivoted at the intersection of the first named levers, and a gravity weight or weights accelerating the tilting motion of said rod to quickly operate the valve when said rod is tripped by an arm attached to the gasometer, as set forth.

No. 64,707. Non-Refillable Bottle.

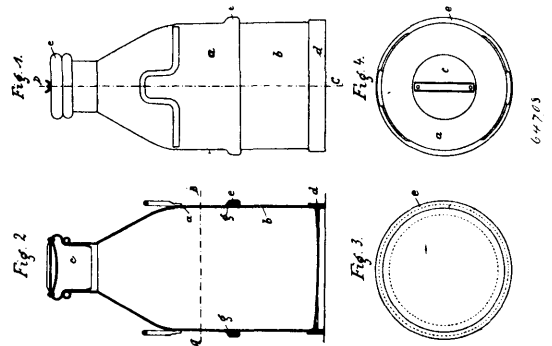
(Bouteille non récomplissable.)



Judith Blanche Dwyer, San Francisco, California, U.S.A., 2nd November, 1899; 6 years. (Filed 28th July, 1899.)

Claim.—1st. A bottle having a stopper adapted to be permanently secured in the mouth and a tortuous passage opening from the side of the neck, substantially as described. 2nd. A bottle having a projection formed upon the side of the neck near the top, a tortuous passage extending from the interior of the bottle through said projection and discharging outwardly therefrom, an opening at the top through which the bottle is filled and a stopper adapted to close and hermetically seal said opening after the bottle has been filled. 3rd. A bottle having a projection upon the side of the neck, a tortuous passage having its greatest dimensions in a line from side to side of the projection and made narrow in a direction at right angles thereto, said passage having one end communicating with the interior of the bottle and the other discharging outwardly. 4th. A bottle having a filling opening and a permanent stopper therefor, a tortuous discharge passage through the side of the neck, said passage widening from its upper curvature towards the bottle neck, and a narrow central opening connecting therewith and having an inwardly turned flange.

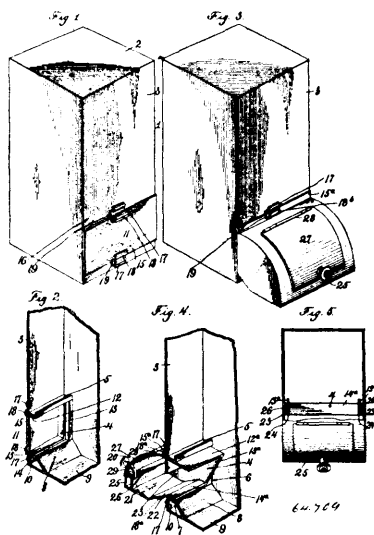
No. 64,708. Can for Liquids. (Bidon a liquides.)



Niels Christian Nielson, Copenhagen, Denmark, 2nd November, 1899; 6 years. (Filed 9th August, 1899.)

Claim.—The improved can or receptacle for the transport of milk, cream and similar liquids, consisting of two parts, an upper part and a lower part each of which parts is formed in one single piece from a metal plate and both jointed together with a double fold, the annular groove between the upper and lower part of the shell on the inner surface of the same being filled with soldering material, substantially as and for the purposes described and illustrated.

No. 64,709. Canister. (Canastre.)



Frank F. Jacques, Chicago, Illinois, U.S.A., 2nd November, 1899 ; 6 years. (Filed 16th August, 1899.)

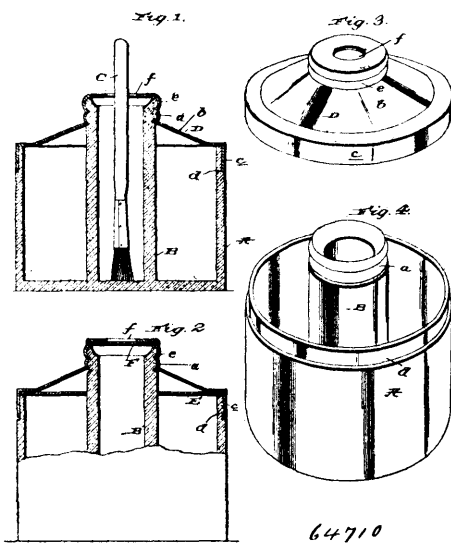
Claim.—1st. A canister comprising a body having a combined filling and dispensing opening located at one side near the bottom thereof, and formed with an inwardly projecting L-shaped upper flange, with an inwardly projecting horizontal lower flange bent downwardly to provide an incline which is joined to the bottom of the body, and with trough shaped side pieces located between the upper and lower flanges, the upper and lower sockets located above and beneath the opening respectively, a closure having flanges entering the opening, and upper and lower sockets located between the first named sockets and the upper and lower sockets whereby the upper and lower sockets respectively are coupled together, substantially as described. 2nd. A canister comprising a body having a combined filling and dispensing opening located at one side near to the bottom thereof, a vertical flange beneath the opening, the upper and lower superposed sockets secured above and beneath the opening respectively, a detachable dispensing front having its bottom on a level with the bottom of the body, formed with an incline between the bottom of the front and the edge of the vertical flange, the upper socket on the front, the lower socket in the recess formed by the incline, and the upper and lower staples whereby the upper and lower sockets respectively are coupled together, substantially as described. 3rd. A canister comprising a body having a combined filling and dispensing opening located at one side near the bottom thereof, and formed with an inwardly projecting upper flange, with an inwardly projecting horizontal lower flange bent downwardly to provide an incline which is placed to the bottom of the body, and with trough shaped side pieces located between the upper and lower flanges, and the removable front having a bottom resting on the plane of the bottom of the body, an incline extending upward to the bottom of the body-opening, and upper, lower, and side flanges, substantially as described. 4th. A canister comprising a body 1 formed with an opening 4, with a front wall 3 above the opening, with a vertical flange 10 beneath the opening, and with inwardly projecting flanges 5, 6 and 7 surrounding the opening, the upper and lower sockets 17, the detachable front 20 formed with inwardly projecting flanges 12^a, 13^a, and 14^a, and with an incline 22 leaving a recess beneath the front, the upper and lower staples whereby the upper sockets and lower sockets respectively are coupled together, substantially as described.

No. 64,710. Paste Bottle. (Pot à colle.)

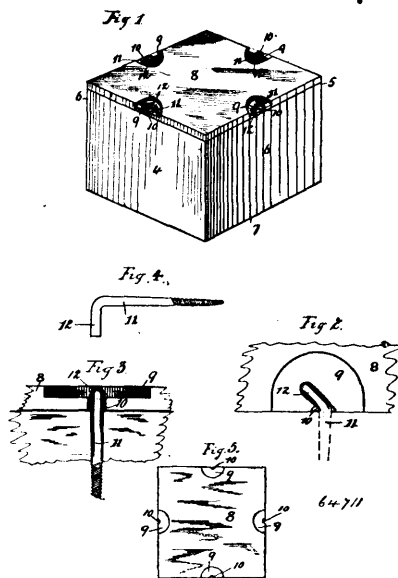
George P. Cragin, Spokane, Washington, U.S.A., 2nd November, 1899 ; 6 years. (Filed 24th August, 1899.)

Claim.—1st. The combination with a paste bottle having a central well extending above its side wall and provided at its upper end with exterior screw threads, and a removable cover having an annular, intermediate portion, a depending, marginal flange surrounding the upper edge of the side wall of the bottle, and a central, threaded portion *c*, engaging the threads of the well and having an opening *f*, in its top, substantially as specified. 2nd. The combination with a paste bottle having a central well extending above its side wall and provided at its upper end with exterior screw threads, a removable cover having an annular, intermediate portion, a depending, marginal flange surrounding the upper edge of the side wall of the bottle, and a central threaded portion *c*, engaging the threads of the well and having an opening *f*, in its top, an annular,

removable washer surrounding the well and interposed between the annular portion of the cover and the edge of the side wall of the



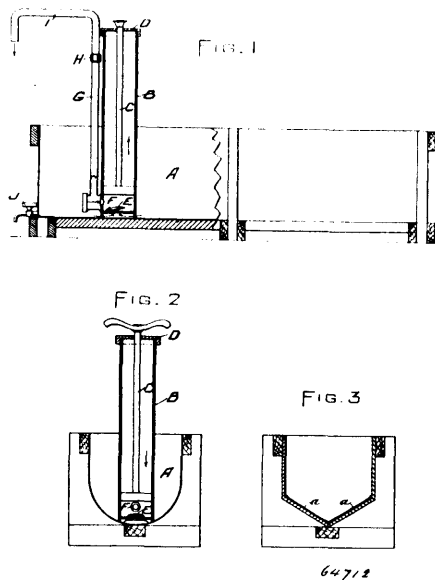
No. 64,711. Box. (Boîte.)



Joseph Roméo, Couillard, Warwick, Quebec, Canada, 2nd November, 1899 ; 6 years. (Filed 15th July, 1899.)

Claim.—1st. As a new article of manufacture, a box and the like having provided in its cover, bored recesses, as shown, holes provided therein, and screw hooks entering said holes for the purpose of fastening the cover to the body of the box, substantially as set forth. 2nd. In a box or the like, the combination, with the cover 8, of the box, having bored recesses 9, and holes 10, in said recesses, of the screw hooks 11, having head 12, made movable therein as described, and for the purpose of fastening said cover to the body of the box, substantially as set forth.

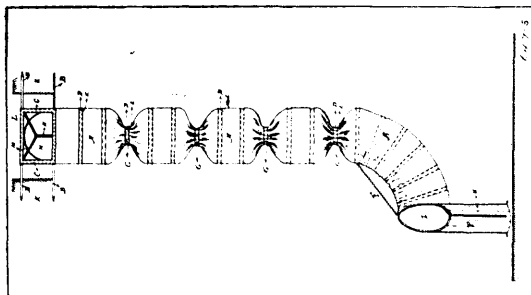
No. 64,712. Whey Distributors for Cheese Factories.
(Bassins pour tirer le petit lait des fromageries.)



Joseph Anselme Gosselin, Drummondville, Québec, Canada, 2 novembre 1899 ; 6 ans. (Déposé 7 avril 1899.)

Resumé.—La combinaison de la pompe B, sa tige graduée C, et la tube de déversement G I, avec le bassin A, de forme circulaire ou angulaire et sa chantepleur J pour faciliter son nettoyage, tel que décrit et pour les fins indiquées plus haut.

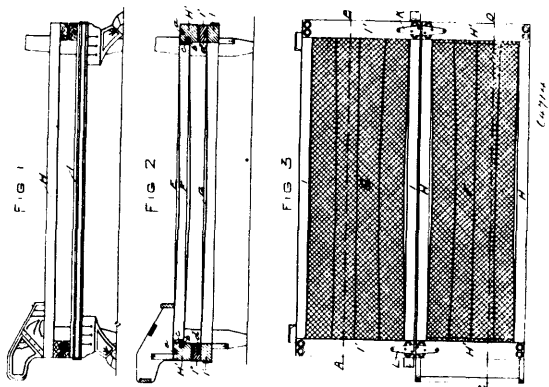
No. 64,713. Fire Escape. (Sauveteur d'incendie.)



Nazaire Bouvier et Isai Belair, de Montréal, Québec, Canada, 2 novembre, 1899 ; 6 ans. (Déposé 15 mars 1899.)

Resumé.—1° Le demi cercle de fer M tel que décrit et pour les fins indiquées. 2° Les fils de cuivre formant ressorts, le ressort F et le tablier P, tel que ci-dessus décrit et pour les fins mentionnées.

No. 64,714. Sofa Bed. (Lit canapé.)

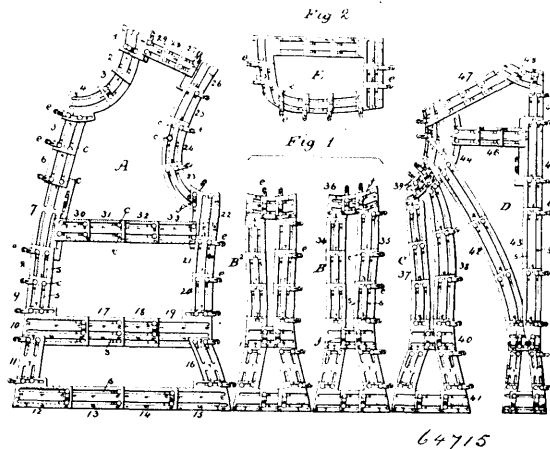


Gustave Hugues Lenoir Rolland, Montréal, Québec, Canada, 2 novembre, 1899 ; 6 ans. (Déposé 2 juin 1899.)

Resumé.—Dans un sofa-lit l'addition d'une toile métallique G au bâti inférieur 1, fixé à celui-ci à l'aide des baguettes d, d, autour

desquelles vient s'enrouler l'extrémité de la toile métallique, le tout tel que substantiellement décrit et pour les fins mentionnées plus haut.

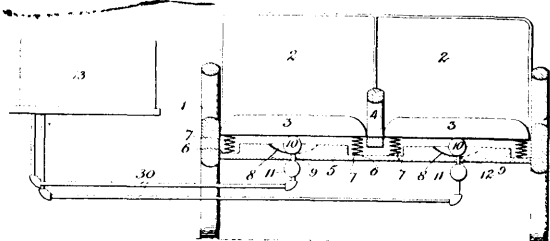
No. 64,715. Garment Chart. (Patron de vêtement.)



Jean Baptiste Peyry, New Orleans, Louisiana, U.S.A., 2 novembre, 1899 ; 6 ans. (Déposé 10 juin 1899.)

Resumé.—1° Je revendique un conformateur composé de plusieurs batis, d'ont chacun est composé de rangées de plaques ayant chacune au moins deux rainures, avec des crampons dans chaque bout de chaque rainure, de manière que chaque bati peut être rigide, sans rangée diagonale d'une rangée à une autre. 2° Un conformateur composé de plusieurs rangées de plaques ayant chacune deux rainures parallèles, et chaque plaque unie à chaque bout à ses voisines par des crampons dans les deux bouts des deux rainures et ajustable dans ces deux rainures. 3° Un conformateur composé de plusieurs rangées de plaques ayant chacune dans leur longueur deux rainures parallèles unies par des crampons dans chaque rainure et pourvu de brides bombées f attachées aux plaques par les crampons des double rainures. 4° Un conformateur composé de plusieurs rangées de plaques ayant dans leur longueur deux rainures parallèles unies par des crampons dans chaque rainure et pourvues d'agraffes montées sur les boulons de ces crampons, chaque agraffe ayant une rainure dans sa longueur et une rainure transversale conduisant dans cette rainure de longueur. 5° Un conformateur du buste composé du patron-batis du devant A, du batis du dos D, du batis du côté du dos C, du batis du dessin de bras B, et du batis additional B² du dessous de bras, ces batis étant formés de rangées de plaques ayant deux rainures parallèles, avec crampons a boulons passant par ces rainures comme il été décrit.

No. 64,716. Passenger's Record. (Régistre de passagers.)

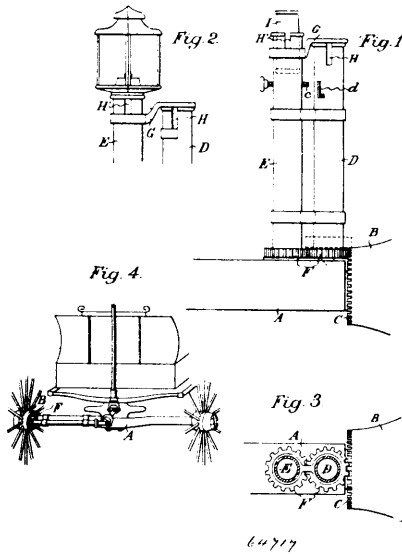


Albert Swenson and Olaf Pearson, both of Duluth, Minnesota, U.S.A., 3rd November, 1899 ; 6 years. (Filed 9th April, 1899.)

Claim.—1st. The combination, with a depressible seat of a recording mechanism, and a pneumatic mechanism for actuating the recording mechanism, which pneumatic mechanism is adapted to be operated by a depression of said seat. 2nd. The combination with a yielding supported seat and a recording mechanism, of a collapsible air bulb below the seat and adapted to be operated by each depression thereof, a metallic rigid air chamber located relative to the recording mechanism, a plunger located therein, a flexible diaphragm connected to the plunger and provided at its upper end with a recording device, and a pipe connection between the air bulb and the metallic air chamber at one side of its diaphragm. 3rd. The combination, with a depressible yielding supported seat, and a collapsible air bulb located thereunder and adapted to be compressed at each depression of the seat, of a cylinder and its support, means for rotating said cylinder, a lever supported adjacent to the cylinder and carrying a marking device, a metallic rigid air chamber adjacent to the lever, a flexible diaphragm within the chamber, a plunger carried by the diaphragm and connected to and adapted to operate

the lever to bring its marking device in contact with the cylinder, and an air pipe leading from said air chamber at the rear of its diaphragm to the collapsible bulb. 4th. The combination, with a depressible yielding supported seat, a collapsible air bulb located thereunder and adapted to be collapsed at each depression of the seat, of a recording cylinder, means for rotating and supporting the same, an air chamber located adjacent to the cylinder, a diaphragm of flexible material contained therein and adapted to operate a marking device, and an air pipe leading from the air chamber to the air bulb. 5th. The combination, with the seat frame and the seat located therein, of the stationary base arranged thereunder and provided with cavities, the springs interposed between the seat and the base, the collapsible air bulbs located in the cavities and projecting above the base, a pneumatically operated recording device, and an air pipe leading from each bulb to said recording device. 6th. The combination, with the case, the clock mechanism having the projecting shaft and the threaded shaft aligning therewith, of the cylinder adapted to travel longitudinally on the shaft and to carry a record sheet, stationary bars arranged at opposite sides of and below the cylinder, opposite levers fulcrumed on the bars and provided at their inner free ends with marking devices, and depressible seats, and means operated thereby for throwing any or all of said levers into operative position with relation to the cylinder. 7th. The combination with a casing, a clock mechanism having a square shaft, a recording cylinder supported by the shaft, means for advancing the cylinder longitudinally upon said shaft at each revolution of the same, recording devices located adjacent to the cylinder, of depressible seats, and means for actuating the recording devices at each depression of said seats.

No. 64,717. Vehicle Attachment and Holding Device.
(*Attache et appareil de retenue pour vehicules.*)



Samuel Wyatt, San Francisco, California, U.S.A., 3rd November 1899; 6 years. (Filed 23rd May, 1899.)

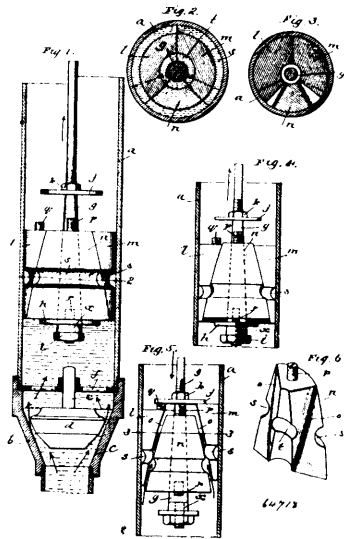
Claim.—1st. A vehicle attachment consisting of vertical standards having slots in the upper end for the attachment of reins, and means comprising intermeshing gears upon the standards and the wheel hub whereby the shafts may be rotated by the movement of the vehicle. 2nd. A vehicle attachment consisting of standards, gears upon said standards intermeshing with a corresponding gear upon the vehicle hub, a means for disengaging the gears, consisting of a right angled slot made in one of the standards, a pin projecting from the other into said slot whereby the standard may be raised to disengage its gear from the wheel hub and turned so that the pin will retain it in its raised position. 3rd. A vehicle attachment consisting of standards having engaging gear, one of which is adapted to be rotated by contact with the wheel hub, said standards having sockets in their upper ends adapted to receive a lantern or other appurtenance of the vehicle.

No. 64,718. Pump Piston. (*Piston de pompe.*)

George W. Youmans, Rochester, Minnesota, U.S.A., 3rd November, 1899; 6 years. (Filed 14th June, 1899.)

Claim.—1st. In a piston for pumps, the combination of a piston rod carrying separated stop plates or flanges, a piston confined on the piston rod between the said stop plates or flanges, said piston being comprised of a plurality of separable sections adapted to fit together upon one stroke of the piston, and to separate upon the other stroke, and means for arresting said sections at different points

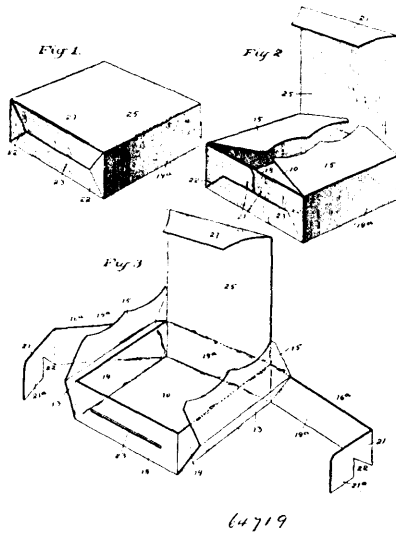
on this latter stroke, substantially as set forth. 2nd. In a pump piston, the combination of a piston rod, a piston adapted to have a



limited sliding movement thereon, said piston consisting of a plurality of sections divided substantially radially, one of said sections being tapered toward one end, said sections being adapted to fit together upon the up stroke and form a solid piston and separate endwise upon the down stroke and form water passages between the faces which come in contact upon the up stroke. 3rd. The combination of a piston rod and piston adapted to slide endwise thereon, means for limiting the movement of the piston, said piston being comprised of separate sections adapted to fit together and form a solid piston on the up stroke, and to separate endwise on the down stroke, and means for arresting the sections at different points on this latter stroke to form water passages between the adjacent faces of said sections. 4th. The combination of a piston rod tapered upward, a piston having an endwise movement on said tapered portion stops limiting the movement of the piston, said piston being comprised of a plurality of sections having their adjacent faces fit closely together to form a solid piston on the up stroke, means for separating the sections endwise on the down stroke, one of said piston sections being tapered toward one end and the central opening in the piston being tapered upward, as and for the purposes set forth. 5th. The combination of a piston rod and a piston thereon, said piston being comprised of a plurality of sections adapted to fit together and form a solid piston on one stroke, means for endwise separating the sections upon the other stroke, thereby forming water passages between the adjacent faces, said means consisting of a stop on the piston rod and a stop on one of the sections, said stop being adjustable to regulate the size of the water passage. 6th. The combination of a piston rod and a piston rotatively supported thereon said piston being comprised of sections adapted to fit together and form a solid piston on one stroke and to separate endwise on the other stroke to form water passages between the adjacent faces of the sections, one of said adjacent faces being spirally formed, whereby the piston will be rotated at each stroke. 7th. The combination of a piston rod and a piston endwisely movable thereon, said piston being comprised of a plurality of sections having their adjacent faces formed to fit closely together to form a solid, closed piston upon the up stroke, one of said sections being tapered upward, one of the faces of this tapered section and the adjacent face of the adjacent section being spirally formed, and means for separating the sections endwisely and forming water passages there between upon the down stroke. 8th. The combination with a piston rod and piston thereon, said piston being provided with an annular external groove and being comprised of a plurality of sections adapted to close and form a solid piston on one stroke and open endwisely upon the other stroke, the portions of the groove on the sections coming into alignment when the sections come together and out of alignment when the sections separate, whereby the groove fills with water at each stroke, substantially as set forth. 9th. The combination of a piston rod and piston thereon, said piston being provided with an internal open groove and an external open groove, both grooves being annular, said piston being comprised of a plurality of sections adapted to close together to form a solid piston on one stroke and to separate endwisely upon the other stroke, the portions of the groove on the sections coming into alignment when the sections come together and out of alignment when the sections separate, whereby the groove fills with water at each stroke, as and for the purposes set forth. 10th. The combination of a piston rod and piston thereon, said piston consisting of a plur-

ality of sections divided substantially radially and one of the sections being tapered toward one end, and means whereby the sections are caused to fit together upon the up stroke and form a solid piston around the piston rod and to separate endwisely upon the down stroke and form a passage or passages between the surfaces which contact upon the up stroke, substantially as and for the purpose set forth.

No. 64,719. Box. (Boite.)

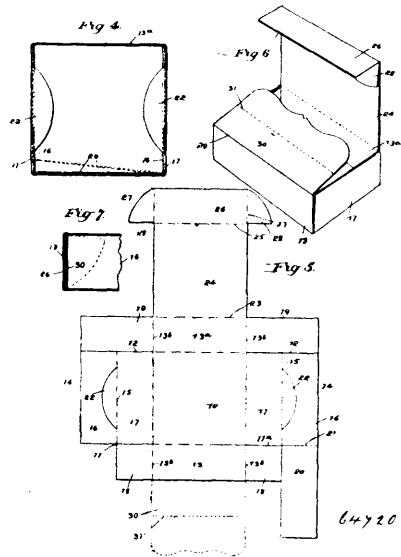


64719

Zaida B. Webb, Whippany, New Jersey, U.S.A., 3rd November, 1899; 6 years. (Filed 31st August, 1899.)

Claim.—1st. A folding box comprising a bottom having at opposite edges side pieces adapted to turn upward perpendicular to the bottom, and oppositely arranged end pieces connected to the bottom and adapted to fold perpendicular thereto, one end piece having side strips projecting from the ends and adapted to fold inward against the first mentioned side pieces, and the second end piece having side strips to fold in against the first and second side pieces and strips and terminating in flaps carrying tongues to engage the slot of the end piece, the second end piece having also connected thereto a top or cover adapted to fold inward over the box top and provided with a tongue to engage the aforesaid slot, substantially as described. 2nd. In a folding box, the combination with the bottom having folding side pieces on opposite edges, of the folding end pieces connected to the two remaining sides of the bottom, one end piece carrying side strips adapted to turn inward against the side pieces, the other end piece carrying side strips to fold inward against the first mentioned side strips, and means as the tongue flaps on the second side strips and the slot in the end piece to lock the above mentioned parts together. 3rd. A folding box, comprising a bottom having folding side pieces at two opposite edges, folding end pieces at the two opposite edges of the bottom, one of said end pieces being slotted horizontally, side strips connected to the slotted end pieces and adapted to fold inward against the side pieces, a second pair of side strips connected to the whole end piece and adapted to fold inward against the first side strips, flaps at the ends of the second side strips adapted to fold around against the box front, said flaps carrying tongues to engage the slot of the end piece, and a top for the box, substantially as described. 4th. A folding box, comprising a bottom having folding side pieces at two opposite edges, folding end pieces at the two remaining edges of the bottom, one of said end pieces being slotted, side strips connected to the slotted end piece and adapted to fold inward against the side pieces, a second pair of side strips connected to the second end piece and adapted to fold inward against the first side strips, flaps at the ends of the second side strips to fold against the box front, said flaps having tongues thereon to enter the slot of the end piece, a top or cover connected to the whole end piece and adapted to fold inward over the box top, and a tongue at the front edge of the cover, substantially as described. 5th. The combination with the folding box having a slotted end piece, of the overlapping side strips extending from the opposite end of the box around to the slotted end thereof and provided with tongues to enter the aforesaid slot, substantially as described. 6th. The combination with a folding box having a slotted end, of the side strips connected to the opposite end and adapted to fold around to the slotted end thereof, said side strips being cut under near the ends and on the under side to produce tongues adapted to enter the aforesaid slot, substantially as described.

No. 64,720. Box. (Boite.)



64720

Zaida B. Webb, Whippany, New Jersey, U.S.A., 3rd November, 1899; 6 years. (Filed 31st August, 1899.)

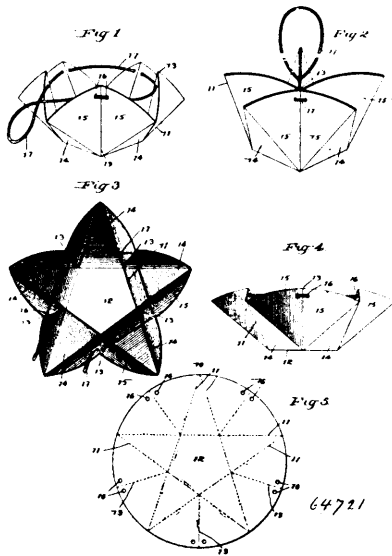
Claim.—1st. A folding box having a bottom, end pieces connected to opposite sides thereof, side pieces connected to the two remaining sides of the bottom and adapted to be folded over upon themselves to form the box sides, and a locking strip connected to the outer portion of one of the side pieces and adapted to fold into the box at right angles to the side pieces and parallel with and against one of the end pieces, substantially as described. 2nd. A folding box comprising a bottom, end pieces connected to opposite sides thereof and provided with end flaps adapted to fold inward at angles to the end pieces, side pieces connected to the two remaining sides of the bottom, said side pieces being adapted to fold in the middle and be doubled over the flaps of the end pieces, and a locking strip connected to one of the side pieces near the outer part thereof and adapted to fold inward at right angles to the side pieces and lie parallel with and against one of the end pieces, substantially as described. 3rd. A folding box comprising a bottom, end pieces connected to opposite edges thereof and provided with flaps adapted to turn inward at angles to the end pieces, side pieces connected to the two remaining sides of the bottom and adapted to be doubled over the aforesaid flaps of the end pieces, and returned flaps cut from the said side pieces and adapted to project laterally into the box, substantially as described. 4th. The combination with the box and the folding end pieces having inwardly turnable flaps, of the side pieces connected to the bottom and adapted to be doubled over the said flaps, and a locking strip connected to the outer part of one of the side pieces and adapted to fold inward at right angles to the side pieces and flat against one of the end pieces so as to extend from side to side of the box between the doubled side pieces, substantially as described. 5th. A folding box, comprising a bottom, end pieces connected to opposite edges thereof and provided with inwardly turnable end flaps, side pieces connected to the two remaining edges of the cover and adapted to be doubled over the flaps of the end pieces, a locking strip extending from one side piece to the other, a cover connected to one of the end pieces and provided with a terminal flap to overlap the box front, and locking wings at the end of the said front flap, said wings being adapted to enter the sides of the box, substantially as described.

No. 64,721. Box. (Boite.)

Zaida B. Webb, Whippany, New Jersey, U.S.A., 3rd November, 1899; 6 years. (Filed 31st August, 1899.)

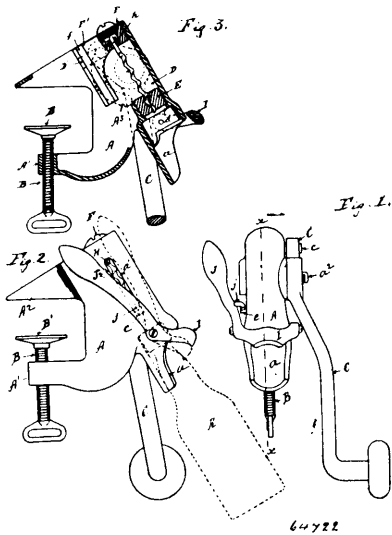
Claim. 1st. A folding box comprising a generally circular blank having a section near the centre scored around to form the box bottom, and score lines extending from the said bottom to the edge of the blank. 2nd. A folding box comprising a generally circular blank scored across to form a star, and other score lines extending from the edge of the blank to the intersecting star lines. 3rd. A folding box comprising a generally circular blank having a polygonal bottom scored around, and score lines extending from the said bottom to the edge of the blank whereby when the edge is gathered up angular meeting side pieces are formed, substantially as described. 4th. A folding box comprising a polygonal bottom, a series of angular side pieces extending from the bottom and separated therefrom by score lines, said side pieces having meeting top edges, and a cord or equivalent fastening to hold the meeting free edges together. 5th. A folding

box comprising a polygonal bottom, a series of outwardly and inwardly flaring side pieces arranged around the bottom, the



inwardly extending side pieces being adapted to meet together along their upper edges and at the centre, and a cord extending through the said inwardly flaring side pieces, substantially as described. 6th. A folding box comprising a polygonal bottom, a series of angular side pieces projecting outward from the bottom and adapted to fold inward from the box, and means for holding the side pieces in their unfolded position.

No. 64,722. Cork Puller. (Tire-bouchon.)

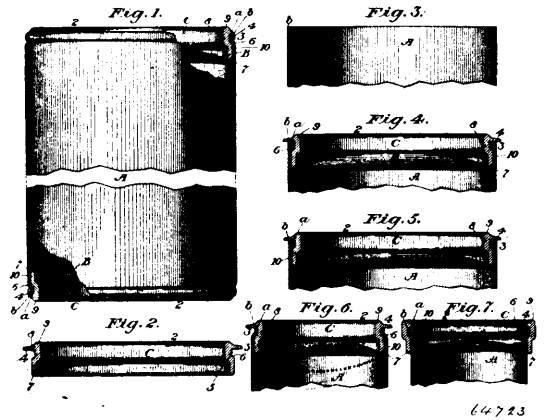


Edwin Walker, Erie, Pennsylvania, U.S.A., 3rd November, 1899; 6 years. (Filed 8th May, 1899.)

Claim.—1st. The combination in a cork puller, of a suitable frame, an operating lever pivoted thereon, a reciprocating head operated by said lever and carrying a cork screw pivoted in said head, a non-rotatable nut through which said screw operates adapted to move up and down and provided with a stud projecting out through a slot in the machine frame, a clamping jaw adapted to engage a bottle neck, an operating lever on said jaw, a lug on the operating lever of said clamping jaw engaging the stud on the nut and adapted to be disengaged therefrom by the operation of clamping a bottle neck and automatically again engage the same when the clamping jaw is released from the bottle neck, substantially as and for the purpose set forth. 2nd. The combination in a cork puller, of a frame having a tubular passage therein, a semi-circular bottle neck rest extending from the frame at the lower side of the lower end of said pas-

sage, a reciprocating head in the upper part of said passage, a cork screw pivoted in said head, an operating lever for moving said head down and up in said passage, a nut in said passage below said head through which the cork screw operates, a stud on said nut projecting out through a slot in the frame, a lever clamp pivoted to the frame for clamping a bottle neck to said bottle neck rest, and a lug on the handle of said lever clamp adapted to engage the stud on said nut and be disengaged therefrom by the operation of clamping a bottle neck, substantially as and for the purpose set forth.

No. 64,723. Receptacle. (Réceptacle.)



Henry Shaw Reynolds, New York City, New York, U.S.A., 3rd November, 1899; 6 years. (Filed 4th April, 1899.)

Claim.—1st. A receptacle comprising a head, a body, and a clamping member, said member having an annular projection or shoulder around which one part of said body and head are bent, and also having a locking flange overlapping said bent portions and clamping said parts around said projection. 2nd. A receptacle comprising a body, a head, and a clamping ring having an annular projection extending from its side wall, a locking flange, and a thrust receiving member adapted to receive the thrust of said head when under pressure, said head and body having its edges clamped around said projection and overlapped and locked in position by said locking flange. 3rd. A receptacle comprising a body and one or more heads, and means for securing each of said heads to said body, and each comprising a clamping ring having a pair of members projecting in the same direction, and intermediate which the edges of said body and head extend, one of the members of said ring having a laterally extending projection around which the edges of said head and body are locked by the other of said member, and one of said members also having a recess into which bent portions of said head and body project. 4th. A receptacle comprising a body having one or more heads each having means for securing it to said body and comprising a pair of members intermediate which the edge of the body extends, one of said members having a laterally extending annular projection and a recess formed in its side wall adjacent thereto, and around which projection and into which recess the edge of said body is bent, and the other of said members co-acting with said member to clamp the edge of the body bent around said projection and into said recess. 5th. A receptacle comprising a body, a head, and a clamping ring, said ring having an annular projection or shoulder extending from one of its side walls, and a bendable locking flange, said parts being assembled by compressing the edge of the head and the edge of the body either separately or simultaneously around said shoulder and maintaining the same in such position by bending said locking flange over the bent edges of said head and body either simultaneously with or after the compressing of said edges. 6th. The method of constructing a receptacle comprising a clamping member provided with an annular projection or shoulder, a bendable flange and a thrust receiving part, a head and a body, and which consists in assembling said parts by pressing the edge of the head and the edge of the body either separately or simultaneously around said shoulder and maintaining the same in such position by bending, either simultaneously with or after the bending of said edge, said flange over the bent portions of said head and body, the parts being so assembled that the thrust of said head is received by said clamping member whereby the strain thereon at its thrust receiving part is so transmitted to the clamping part of said member as to more firmly maintain said bendable flange in engagement with the bent portions of the head and body and thereby said head and body in firmer engagement with said clamping member.

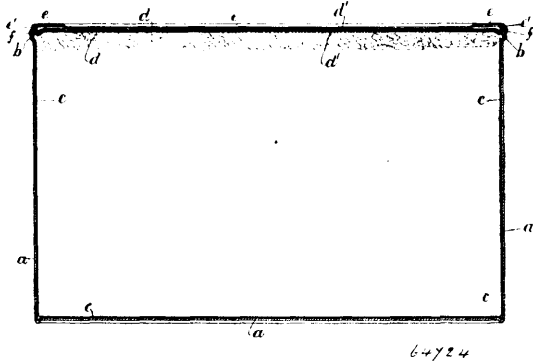
No. 64,724. Metallic Box or Canister.

(Boîte métallique ou canastre.)

William James Harries, Liverpool, Lancaster, England, 3rd November, 1899; 6 years. (Filed 17th April, 1899.)

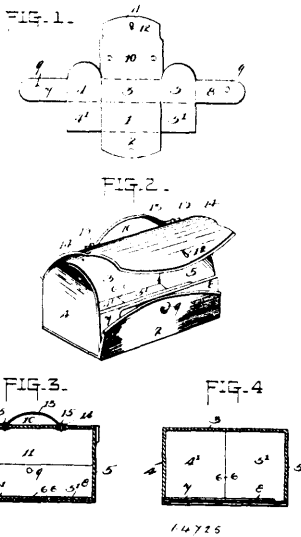
Claim.—1st. A metal can or package for perishable food stuffs, comprising a body *a*, of a plain steel or iron plate, having an internal

lining or surface of enamel *c*, fired onto and integral with the metal, an enamelled disc *d*, placed above the goods in the can body, and



substantially of the full internal diameter of the can, and filling the mouth thereof, and a metal cover *c*, fitting over the mouth of the body *a*, and soldered thereto, for the purpose described. 2nd. In a metal can or package for food stuffs, comprising a body, *a*, and a cover *c*, fitting over the mouth thereof, a metal disc *d*, externally coated with enamel all over, and placed above the goods in the can, and substantially of the full diameter of the can, as an for the purposes set forth.

No. 64,725. Lunch Box and Fastener.
(Boite à lunch et attache.)

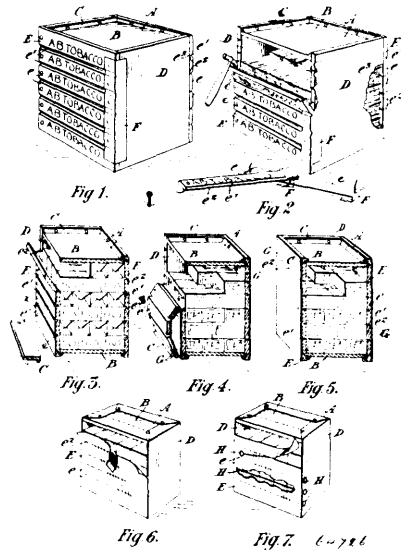


Josephine M. Unser and Arthur J. Towne, both of New York City, New York, U.S.A., 3rd November, 1899; 6 years. (Filed 26th April, 1899.)

Claim.—1st. As a new article of manufacture, a stamped blank for boxes made of a single piece of material, comprising the bottom section 1, the front 2, and the back 3 formed integral to the top 10 and arched ends 4 and 5, the end extensions 4' and 5', and the overlapping straps 7 8 formed integral with the said ends 4 and 5, the said straps 7-8 and the front section 2 provided with and held together by a fastener comprising a plate having a tubular extension provided with slots to form spring arms having humps, a washer slipped over said arms to a point at the rear of said humps, a bolt extending through said tubular extension, and preventing the compression of said arms and thereby the accidental displacement of said washer, said bolt having an angular arm and means for preventing the withdrawal of the bolt from said tubular extension, the said fastener to fit into orifice 12 of top 10 in order to fasten the said top over section 2, thus closing the box, substantially as described. 2nd. As a new article of manufacture, a paper or analogous box formed of a single piece of material, and having its end walls formed with the bottom extensions 4' and 5', the parallel edges 6-6 of which are arranged to abut across the bottom, and the straps 7-8 which are arranged to overlap on the inside of the front 2 the said straps 7-8 and the front section two provided with, and held together by a fastener, comprising a plate having a tubular extension provided with slots to form spring arms having humps, a washer slipped over said arms to a point at the rear of said humps,

a bolt extending through, said tubular extension, and preventing the compression of said arms, and thereby the accidental displacement of said washer, said bolt having an angular arm and means for preventing the withdrawal of the bolt from said tubular extension, the said fastener to fit into orifice 12 of top 10 in order to fasten the top over section 2, thus closing the box, substantially as described.

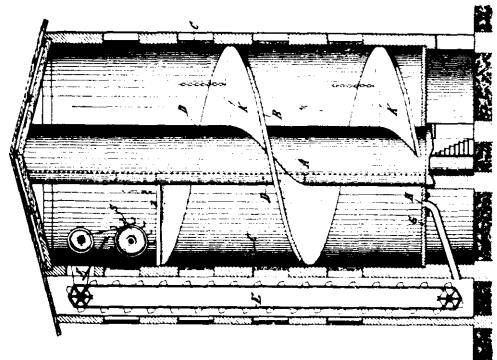
No. 64,726. Stripping Box. (Boite à dépouillement partiel.)



William Braybrooke Bayley, Toronto, Ontario, Canada, 3rd November, 1899; 6 years. (Filed 7th March, 1899.)

Claim.—1st. A box having an integral face adapted to be opened in sections, as and for the purpose specified. 2nd. A box having an integral face comprising sections separated by lines of cleavage or pliability, as and for the purpose specified. 3rd. The combination in a box, of an integral face comprising sections separated by lines of cleavage or pliability, with means for attaching the several sections individually to the sides, as and for the purpose specified. 4th. A box having an integral face divided into sections by a plurality of grooves forming lines of weakness between said sections, as and for the purpose specified. 5th. The combination in a box, of an integral face divided into sections by a plurality of grooves, forming lines of weakness between said sections with means for attaching the several sections individually to the sides, as and for the purpose specified. 6th. A box having an integral face comprising a plurality of sections joined by pliable material, as and for the purpose specified. 7th. A box having external lines marking the planes dividing specific portions of the contents, as and for the purpose specified. 8th. A box having external lines marking the planes dividing specific portions of the contents, and identification marks upon the several sections so divided, as and for the purpose specified. 9th. A box divided into sections by a plurality of encircling lines of cleavage, as and for the purpose specified.

No. 64,727. Grain Silos. (Silos à grain.)

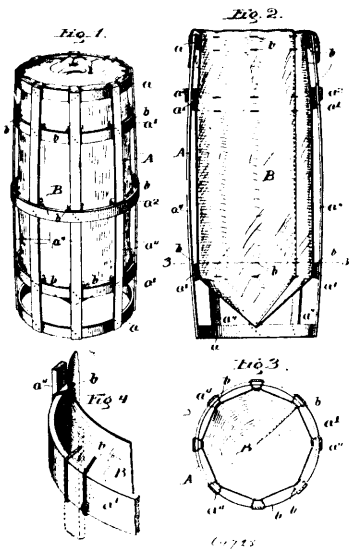


Peter Höft, Gadeland, Neumünster, Prussia, Germany, 3rd November, 1899; 6 years. (Filed 20th May, 1899.)

Claim.—1st. The combination of the various constituting a complete grain silo, all arranged and adapted for use substantially as herein described and illustrated in the accompanying drawing.

2nd. The improved grain silo comprising a tower A, helical floor B, pipe (or pipes) H, elevator E, shoot F and wheel S all arranged and adapted for use, substantially as described. 3rd. In a grain silo, the use of a helical floor such as B, with or without flaps such as K, K, in combination with means for conveying the grain from one extremity and delivering it at the other, substantially as set forth.

No. 64,728. Banana Shipping Case.
(Caisse d'emballage de bananes.)



Frank Schmitz, Chicago, Illinois, U.S.A., 3rd November, 1899; 6 years. (Filed 27th May, 1899.)

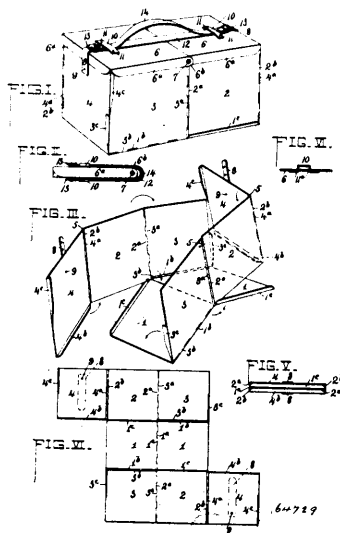
Claim.—1st. The combination with the frame A, provided with top and bottom hoops and outwardly convex vertical slats, of a bag secured to the inside of the frame and a loose intermediate hoop adapted to be crowded from the intermediate portion of the frame to crowd inward the vertical slats and thereby extend and stretch the bag, substantially as described. 2nd. The combination with a suitable rigid crate, of a flexible bag suspended therein and out of contact therewith, by means of laterally extending cords, said bag having a tapered end, centered within the package to partially support the stem of the goods, substantially as described. 3rd. The combination with a longitudinally extensible supporting frame, of a bag hung therein by means of a laterally extending cords, and means for extending the frame longitudinally to stretch the bag, substantially as described. 4th. The combination with a crate, consisting of intersecting or crossing members secured together at the intersections, of a bag hung therein by means of laterally extending cords, secured to the crate at crossings or intersections whereby slipping of said cords in any direction is prevented, substantially as described. 5th. The combination with a supporting frame composed of intersecting or crossing members secured together at the intersections or crossing, of a bag hung within said frame by means of laterally extending cords secured to the bag and to the intersections of the members, said cords being looped about the inner of the intersecting members whereby it is prevented from injury by the adjacent outer intersecting member, substantially as described. 6th. The combination with an open topped frame work, of an open topped bag suspended therein and slit below the top of the frame work, to enable it to be opened outward over the top of said frame work, substantially as described.

No. 64,729. Box. (Boîte.)

Elbert M. Cunard, Westville, and Chalkley C. Hamold, Woodbury, both of New Jersey, U.S.A., 3rd November, 1899; 6 years. (Filed 25th August, 1899.)

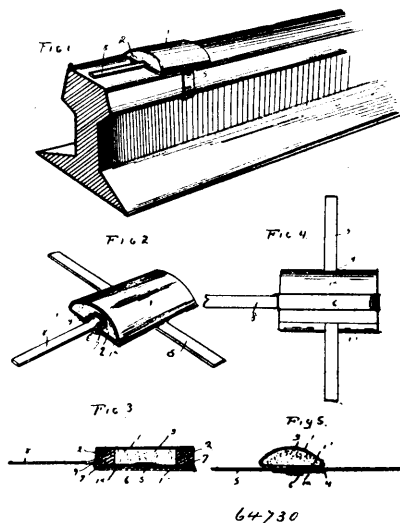
Claim.—1st. A folding box body comprising the bottom pieces hinged together, the sides, each sides consisting of two pieces hinged together, one piece of each side being formed with an inturned lap flange at its vertical outer edge, and hinged to a bottom piece, and the end pieces, each end piece being formed with an inturned bottom lap flange at its vertical outer edge and hinged to one of the other side pieces, substantially as described. 2nd. A folding box body comprising the bottom pieces hinged together, each of the bottom pieces having an upturned lap flange, the sides, each side consisting of two pieces hinged together, one piece of each side being formed with an inturned lap flange at its vertical outer edge and hinged to a bottom piece, and the end piece, each end piece being formed with an inturned bottom lap flange at its

vertical outer edge and hinged to one of the other side pieces, substantially as described. 3rd. A folding box comprising a



body having bottom pieces hinged together, the sides, each side consisting of two pieces hinged together, one piece of each side being formed with an inturned lap flange at its vertical outer edge, and hinged to a bottom piece, and the end pieces, each end piece being formed with an inturned bottom lap flange, and an inturned lap flange at its vertical outer edge and hinged to one of the other side pieces, and the cover consisting of two pieces having downturned lap flanges at their sides formed with ears hinged together and with downward lap flanges at their ends, substantially as described.

No. 64,730. Signal. (Signal.)

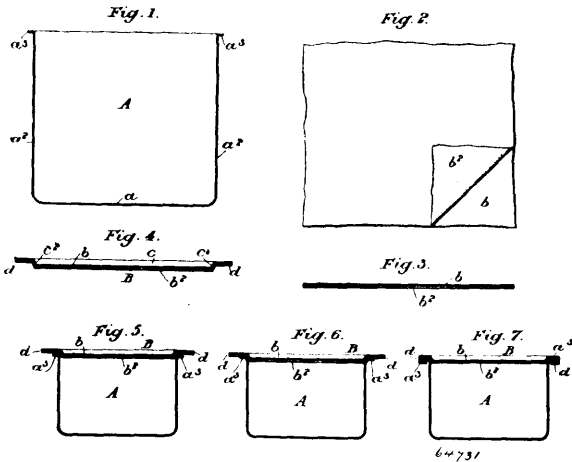


Frank Dutcher, Fostoria, Ohio, U.S.A., 3rd November, 1899; 6 years. (Filed 13th September, 1899.)

Claim.—1st. A torpedo of the class described, having a shell of fibrous material fitted with terminal friable plugs adapted to be disintegrated by the explosion of the contents of the shell, substantially as specified. 2nd. A torpedo of the class described, having a folded shell terminally fitted with plugs of cement, and exterior means for connecting the folded edges of the shell, substantially as specified. 3rd. A torpedo of the class described, having a folded shell constructed of a single blank with its edges overlapped at the under side of the torpedo and a clip engaging said overlapped edges and arranged exteriorly thereof, substantially as specified. 4th. A torpedo of the class described, having its shell constructed of a

blank folded upon itself to form a semi-cylindrical tube fitted with terminal plugs of cement, and a clip arranged exteriorly of the folded extremities of the blank, and terminally engaged with the overlapped portions thereof, substantially as specified. 5th. A torpedo of the class described, having its shell constructed of a blank of pliable material folded upon itself to form a semi-cylindrical tube, and overlapped at the flat side of the tube to approximately co-extensive flaps, and a securing-strap arranged at an intermediate point between, and held in place by said flaps, and extending outwardly through a slit formed in the outer flap, substantially as specified. 6th. A torpedo of the class described, having its shell constructed of a blank folded upon itself to form a semi-cylindrical tube with its contiguous edges overlapping to form approximately co-extensive flaps, a clip disposed longitudinally of the flat side of the shell with its extremities upturned to engage the edges of said flaps, and a leader or tread strap having a terminal hook engaged with one upturned extremity of said clip, and projecting longitudinally from the flat side of the shell, substantially as specified.

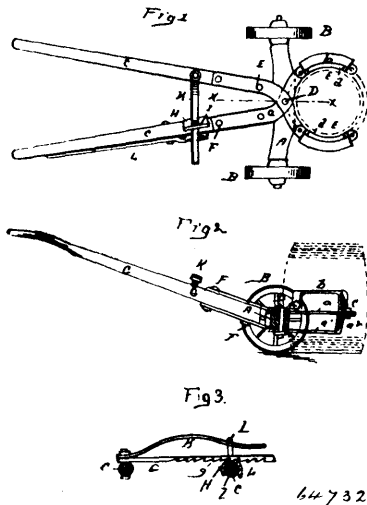
No. 64,731. Tin Can. (Boite en ferblanc.)



Archibald White Macconochie, London, England, 3rd November, 1899; 6 years. (Filed 29th August, 1899.)

Claim.—The manufacture and closing of a tin for foods by making a body part, consisting of a bottom, sides and flange, by stamping one piece of tin plate, and a lid or cover, by cementing a sheet, or sheets, of paper to tin plate and pressing therefrom the lid, or cover, with an inclined part such as to be capable of wedging into the mouth, or upper open side, of the body part, and with a flange wider than that on the body part, and when the lid or cover is pressed into place, securing the parts by pressing and turning one flange under the other, substantially as hereinbefore described.

No. 64,732. Barrel Truck. (Camion pour barils.)

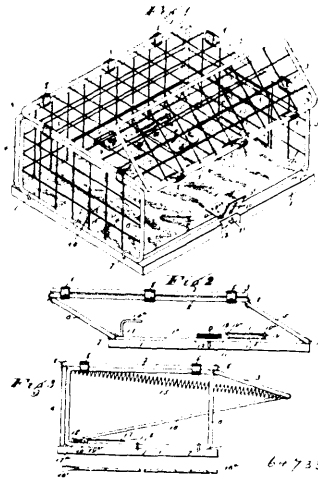


Theodore T. Dickerson, Tremble, Alabama, U.S.A., 3rd November, 1899; 6 years. (Filed 28th June, 1899.)

Claim.—1st. In a barrel truck the combination of the axle A, with the pair of lever arms C having the extended oppositely curved gripping jaws E, composed each of the pair of bars *a, a'*, respectively above and below the axle, and the bolt or pin D serving to

pivot the said lever arms together and also to the axle, substantially as described. 2nd. In a barrel truck, the combination with the lever arms C pivoted together and also to the axle, and having the extended gripping jaws E, of the detent plate H and guide yoke I on one of the said arms, the spring pressed ratchet bar G, secured to the other arm, and having its free end in the guide yoke and adapted to engage the detent plate, and the lever L adapted to unshut the said ratchet bar from the detent plate, substantially as described,

No. 64,733. Coop. (Poulailler.)



William A. Neal, Bungers, West Virginia, U.S.A., 3rd November, 1899; 6 years. (Filed 30th March, 1899.)

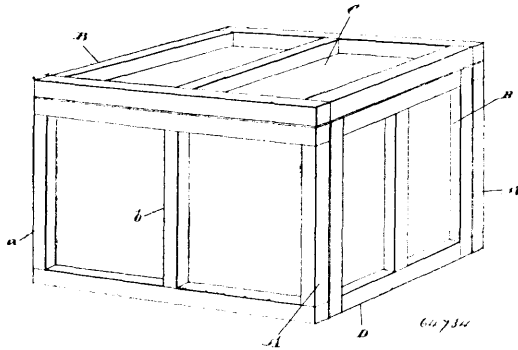
Claim.—1st. In a folding coop, the combination with the rigid base of pivotally secured side, and top sections adapted to fold downward upon said base, substantially as specified and for the purpose set forth. 2nd. The herein described folding coop consisting of a rigid base provided upon its upper side with a recess near its edge, end and side sections pivotally secured in said recess, a top section pivotally secured to the upper edges of the end and side sections, and means, substantially as described, for locking said parts in a folded position upon said base, as set forth. 3rd. The herein described folding crate or coop consisting of the base 1, side and end sections pivotally attached to the outer edge of such base, a top or enclosing section pivotally secured to the upper edges of said end and side sections and suitable means for locking the lower edges of the side sections into engagement with said base, substantially as specified and for the purpose set forth. 4th. The herein described combined coop and trap consisting of the rigid base provided with a recess around its outer edge, end sections pivotally secured to said base, a top section pivotally attached to the upper sides of said end sections, side sections pivoted to the outer edge of said top section, a suitable prop for holding one of said sections in an open position and a suitable trigger mechanism co-operating therewith and suitable means for violently closing said side section when said trigger mechanism has released said prop, all operatively combined in the manner and for the purpose set forth. 5th. The herein described combined folding coop and trap consisting of a folding coop proper, substantially as specified, a trigger secured to the floor of said trap, a door sustaining rod in cooperation with said trigger and a retraction spring so connected to said door that it will be violently closed when the trigger mechanism is actuated, substantially as specified and for the purpose set forth. 6th. In a combined folding coop and trap, the combination with a suitable collapsing frame, of a sustaining rod for engagement with the door, a trigger mechanism consisting of the pivoted platform 17 and the retaining stop 18 and the door prop section 16 in combination with suitable means for violently closing the door when the trigger mechanism is released, substantially as specified and for the purpose set forth. 7th. In a folding crate, the combination with a collapsing frame formed of the members 20 and 22 provided with the collars 8 and further provided with the rigid top and bottom sections 20 and 21 hinged to said side sections, of a folding egg receptacle mounted within said crate and suitable means for locking the top and bottom sections into co-operative relationship with said side sections, all operatively combined in the manner and for the purpose set forth.

No. 64,734. Packing Case. (Boite d'emballage.)

Gordon, Mackay & Co., assignee of Thomas Latham Blacker Hamilton, all of Toronto, Ontario, Canada, 4th November, 1899; 6 years. (Filed 17th August, 1899.)

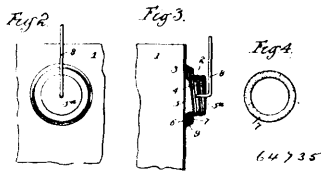
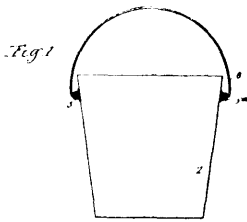
Claim.—1st. A packing case consisting of opposite sides, ends, top and bottom, each consisting of an open framework of suitable material, and a covering of cardboard or similar material secured to the inner side of the frame to close the opening, substantially as

specified. 2nd. A packing case embracing in its construction opposite sides, ends, top and bottom, each embracing in its construction



an open framework, a brace connected to the middle of the sides of the framework to brace it, and a covering of cardboard or millboard fastened to the inner side of the frame to close the opening, substantially as specified.

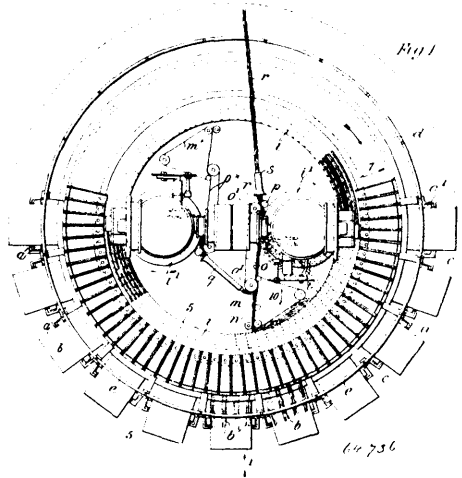
No. 64,735. Bucket Ear. (*Anse de seau.*)



Anster Marr, Griffith, Indiana, Walter Robert Butter, Maywood Illinois, and Bayard A. Conrod, of Maywood, aforesaid, all in the U.S.A., 4th November, 1899; 6 years. (Filed 25th May, 1899.)

Claim.—1st. A bucket ear comprising an opening in the body of the bucket, said opening being countersunk or dished outwardly, a screw lug projecting through said opening, and a screw cap secured to said lug. 2nd. A bucket ear comprising an opening in the body of the bucket countersunk or dished outwardly, a screw lug projecting through said opening and provided with a flange adapted to bear upon the inner side of said countersunk part, and a cap secured to said screw lug. 3rd. A bucket ear comprising an opening in the body of the bucket countersunk or dished outwardly, a screw lug projecting through said opening and provided with a flange adapted to bear upon the inner side of the countersunk part, a cap secured to said screw lug, and a gasket arranged between said flange and said countersunk part around said opening. 4th. A bucket ear comprising an opening in the body of the bucket countersunk or dished outwardly, a screw lug projecting through said opening and provided with a flange adapted to bear upon the inner side of said countersunk part, a cap secured to said screw lug, and a gasket arranged between said flange and said countersunk part around said opening, said cap being provided with a conical bearing upon the outer side of the body of the bucket. 5th. A bucket ear comprising an opening in the bucket, a flanged screw lug arranged to project through said opening, said lug being closed against leakage from the inside of the bucket, and a flanged screw cap engaging said lug, and lug and cap clamping the body of the bucket on opposite sides. 6th. A bucket ear comprising an opening, a flanged screw lug arranged to project through said opening, said lug being closed against leakage from the inside of the bucket by a wall or abutment which is flush with the projecting flanges of the lug, a flanged screw cap engaging said lug, said lug and cap clamping the body of the bucket on both sides, and means for connecting the bucket bail to said flanged screw cap, substantially as described.

No. 64,736. Flax Combing Machine.
(*Machine à peigner.*)



The Flax Combing Syndicate, assignee of Taylor Burrows, all of London, Surrey, England, 4th November, 1899; 6 years. (Filed 19th March, 1898.)

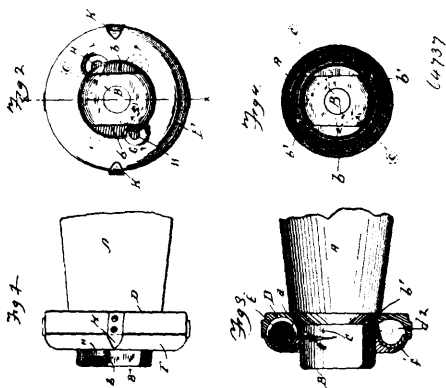
Claim.—1st. In a combing machine the combination of a feed plate, a spool or reel, V-shaped bearings for said reel and means for periodically varying the distance between said plate and reel, substantially as described. 2nd. In a combing machine, the combination of a spool or reel, V-shaped bearings for said reel and means for periodically raising and lowering said bearings and reel, substantially as described. 3rd. In a combing machine, the combination of the frame of the machine provided with one or more cam surfaces, a revoluble plate above said frame, a lever supported by said plate, V-shaped bearings carried by said lever and a spool or reel mounted in said bearings, substantially as described. 4th. In a combing machine, the combination of the frame of the machine provided with one or more cam surfaces, a revoluble plate, a bracket mounted on said plate, a forked lever pivotally mounted on said bracket, V-shaped bearings carried by said lever, and a spool or reel, substantially as described. 5th. In a combing machine, the combination of the frame of the machine provided with one or more cam surfaces, a revoluble plate, a perforated feed plate carried thereby, a bracket depending from said revoluble plate, a forked lever pivoted on said bracket, V-shaped bearings carried by said forked lever and a spool or reel mounted in said bearings, substantially as described. 6th. In a circle comb, the combination of a fixed guiding device provided with perforations and a dabbing device consisting of a series of dabbing plates mounted on a block and means for reciprocating said dabbing devices, substantially as described. 7th. In a circle comb, the combination of the frame of a machine provided with a comb, a fixed guiding device provided with slots, a reciprocating dabbing device consisting of a series of dabbing plates carried by a block and acting rod, guides for said rod and means for reciprocating said acting rod, substantially as described. 8th. In a combing machine, a dabbing device consisting of a series of dabbing plates *h* carried on a block *h*¹, adapted to be reciprocated and a fixed guiding device *j* for said plates *h*, and through which said guiding device said plates *h*, are adapted to be reciprocated in between the teeth or pins of the comb, in combination and acting in conjunction with fixed extension plates or incline *l*¹ in between the comb teeth *i*, substantially in the manner and for the purposes hereinbefore described. 9th. In a combing machine, the combination therewith of a stroking appliance consisting of a finger *t* arranged and operating at the point where the paths of travel of the combs diverge and the fibre is strained between said combs, and pivotally connected to a crank *r* fixed on the crank shaft *r*², journaled on the framing and driven by pulley *v*², substantially in the manner and for the purposes hereinbefore described.

No. 64,737. Hub Attaching Device.
(*Appareil à assujettir les moyeux.*)

James A. Peck, Will T. Smith and Oscar P. Smith, all of West Plains, Missouri, U. S. A., 4th November, 1899; 6 years. (Filed 28th June, 1899.)

Claim.—1st. In a hub attaching device the combination of an axle having a reduced outer portion formed with inclined grooves, of a base washer on the axle, interlocking means between the washer and axle for preventing independent rotation, and a spring actuated

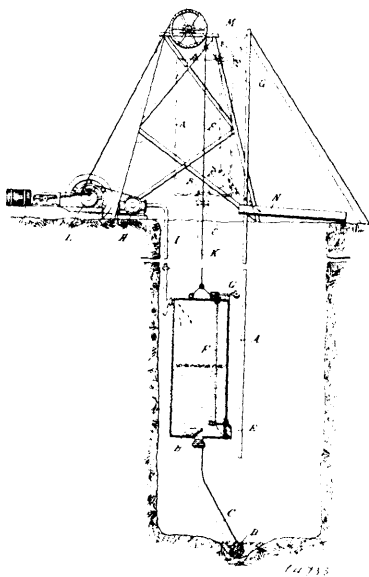
locking plate on the washer having inclined locking shoulders arranged to engage in grooves for preventing the outward movement



64737

of the washer, substantially as described. 2nd. In a hub attaching device the combination with an axle having an extension at its end formed with two flat sides and oppositely arranged grooves, of a base washer on the axle, means for locking the same against rotation, a locking plate having locking shoulders engaging in said grooves and springs interposed between the washer and plate for forcing and retaining the locking shoulders within the grooves, substantially as described. 3rd. In a hub attaching device, the combination with the axle having inclined locking grooves therein, of a base washer fixedly held against rotation on the axle, a locking plate connected with the washer, locking shoulders on the plate arranged to engage the grooves and a spring for holding the shoulders in a locked position within the grooves, substantially as described. 4th. In a hub attaching device, the combination with an axle having locking recesses formed therein and inclined grooves adjacent its outer end, a base washer having projections entering the recesses and having circular channels in its outer face provided with oppositely arranged stops, a locking plate having corresponding channels in its inner face and oppositely arranged stops, springs in the channels between the stops of the washer and plate, and locking shoulders on the locking plate registering with the inclined grooves of the axle for the purpose specified. 5th. In a hub attaching device, the combination with the axle having a reduced portion formed with flat sides and inclined grooves, of a base washer fixedly held against rotation on the axle, a locking plate secured to the washer having locking shoulders formed with flat edges and inclined outer faces and a spring interposed between the washer and plate for holding the locking shoulders within the grooves, substantially as described.

No. 64,738. Water Raising Apparatus.
(Appareil à monter l'eau.)



64738

Fraser & Chalmers, London, England, assignee of Ross Egerton Browne, San Francisco, California, U.S.A., 4th November, 1899; 6 years. (Filed 5th June, 1899.)

Claim.—1st. The improved means of raising water from mine shafts or other places, consisting of a vacuum tank adapted to be

raised and lowered in the shaft, a vacuum producer adapted to create a vacuum in said tank, and means for dumping or discharging the water from the tank when same has been raised, substantially as described. 2nd. In an apparatus for raising water from mines or shafts, the combination of a frame at the head of the shaft, a tank supported upon the frame adapted to be raised and lowered in the shaft and having a suction pipe communicating with the tank and depending therefrom, a vacuum generator at the shaft head, an adjustable pipe connecting the vacuum generator with the tank, hoisting mechanism and a flexible connection between such mechanism and the tank, substantially as described. 3rd. In an apparatus for raising water from mines or shafts, the combination of a frame at the head of a shaft, a tank supported upon the frame adapted to be raised and lowered in the shaft, said tank having a suction pipe, and a valve controlled discharge opening at its lower end, a vacuum generator at the shaft head, an adjustable pipe connecting the generator with the tank, hoisting mechanism for raising and lowering the tank, and means for automatically opening the discharge opening of the tank when the same reaches the discharge point in its upward movement, substantially as described.

No. 64,739. Metal Cover for Square Boxes.
(Couverture métallique pour boîtes carrées.)

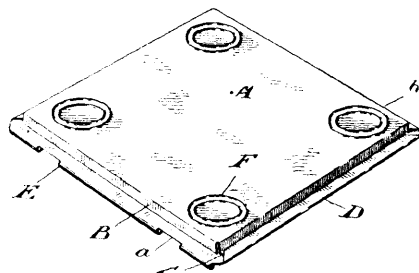


Fig. 1.

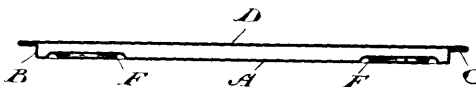
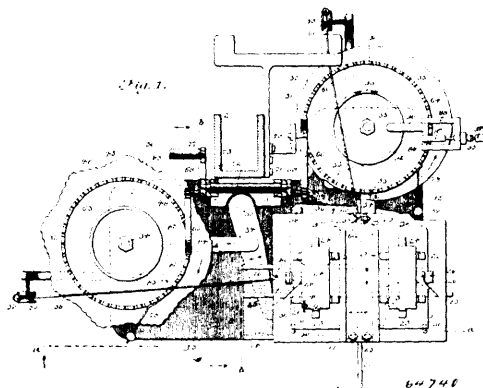


Fig. 2. 64739

William Tassie Tassie, assignee of Walter Ames, both of Toronto, Ontario, Canada, 4th November, 1899; 6 years. (Filed 4th May, 1899.)

Claim.—1st. A box cover comprising a sheet metal plate having stamped therein beads or grooves which cross each diagonal of the plate in two or more places, substantially as and for the purpose specified. 2nd. A box cover comprising a sheet metal plate having stamped therein at or near each corner a bead or groove having in plan the form of a circle or any other closed curved figure, substantially as and for purpose specified.

No. 64,740. Brush Block Feeding Mechanism. (Mécanisme d'alimentation pour machines à fabriquer les brosses.)



64740

The E. B. Eddy Company, Hull, Quebec, Canada, assignee of McClintock Young, Frederick, Maryland, U.S.A., 4th November, 1899; 6 years. (Filed 28th March, 1899.)

Claim.—1st. In a brush block feeding mechanism, the combination with a block supporting frame movable both longitudinally and

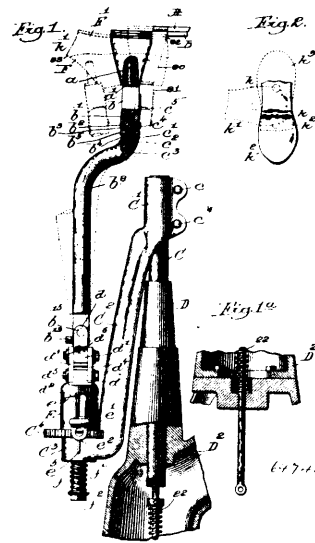
transversely, of means for securing the brush block thereon, mechanism acting on said frame in one direction to move it longitudinally, and mechanism acting also on said frame in another direction to move it transversely. 2nd. In a brush block feeding mechanism, the combination with a block supporting frame movable both longitudinally and transversely, of means for holding the brush block thereon, a rotary cam wheel, intermediate devices operated by the cam wheel and acting on the frame to move it in one direction, a second rotary cam wheel, and intermediate devices operated thereby and acting on the frame to move it in another direction. 3rd. In a brush block feeding mechanism, the combination with a block supporting frame and means for securing the brush block thereon, said frame being movable back and forth, of a rotary cam wheel having its edge extending alternately inward and outward and formed with stepped surfaces comprising surfaces 49 and 50, and intermediate devices acted on by the edge of the cam wheel and engaging the block supporting frame, whereby the frame will be moved alternately back and forth, step by step, and pausing at each step to permit the tool to act. 4th. In a brush block feeding mechanism, the combination with a block support movable transversely and longitudinally, of a rotary cam, intermediate devices operated thereby for moving the support in one direction, a second rotary cam, intermediate devices operated thereby for moving the support in another direction, a series of driving teeth on said cam wheels, a rock shaft and pawls carried by said shaft and engaging the driving teeth. 5th. In a brush block feeding mechanism, the combination with the block supporting frame and means for holding the block thereon, said frame movable on guides, of a rotary cam wheel, a pivoted lever 34 engaging the edge of the frame, a link 41 pivoted to the lever and engaged by the cam wheel, and means acting on the support to yieldingly hold the link 41 in engagement with the cam wheel. 6th. In a brush block feeding mechanism, the combination with the fixed frame provided with guides, of the secondary frame comprising a rail 20 movable in said guides and a rail 21 at right angles, and a block supporting frame formed with guides in which rail 21 extends, whereby the block supporting frame is movable both laterally and longitudinally of the fixed frame. 7th. A brush block feeding mechanism comprising a block support movable longitudinally and transversely means acting on the support to constantly urge the same transversely, and mechanism acting on the support to automatically move the same at intervals in opposition to the constantly acting means. 8th. A brush block feeding mechanism comprising a block support movable longitudinally and transversely, a weight acting on the support and urging it in one direction transversely, a rotary cam wheel and intermediate devices formed to control the movement of the support under the action of the weight and acting on the support to move the same longitudinally, and a cam wheel and intermediate devices to control the movement of the support longitudinally under the action of the weight and acting on the support to move it in opposition to the weight. 9th. In a brush block feeding mechanism, the combination with a fixed guiding frame, of a secondary frame sustained thereby and movable longitudinally thereof, and a block support sustained by the secondary frame and movable with relation thereto transversely of the fixed frame. 10th. The combination with a block support provided with undercut ribs and retaining pins, of a block holder adapted to be inserted between the ribs and sprung in place between the pins. 11th. In a brush machine, the combination with a driving shaft, a driving pulley and clutch, of an operating lever and intermediate connections, a block feeding mechanism, a rotary cam wheel controlling the movement of the same, and adapted to engage the clutch-operating lever and operate the clutch. 12th. In a machine for boring and tufting brush blocks, the combination with a borer and tufter and means for operating the same, of a work support movable thereunder longitudinally and transversely, means for holding the brush blocks on the support respectively beneath the borer and tufter, means for automatically moving the support transversely to present the brush blocks at different predetermined positions beneath the borer and tufter to bore and fill a row of holes, and means for automatically moving the support longitudinally to effect the spacing of the rows.

No. 61,741. Jack for Nailing and Slugging Machines.
(*Crie pour cheviller.*)

The McKay Shoe Machinery Co., Portland, Maine, assignee of William Henry Cuff, Braintree, Massachusetts, both in the U.S.A., 4th November, 1899; 6 years. (Filed 31st July, 1899.)

Claim.—1st. In a jack, a jack-spindle mounted upon a rocking foot, combined with a rocker bed to sustain said foot, substantially as described. 2nd. A rocking foot and a jack-spindle pivotally mounted thereon, combined with a rocker bed to sustain said foot, substantially as described. 3rd. A jack-spindle mounted upon a rocking foot having its underside shaped to present end portions lying in the arc of a circle, the middle portion of the foot being shaped to present a chord to said arc, and a rocker bed to sustain said foot, substantially as described. 4th. A jack-spindle and a rocking foot, carrying it, said foot presenting at its opposite ends blocks of teeth the crowns of which occupy a position in an arc of a circle, the central portion of said foot between said toothed portions presenting a surface occupying the position of a chord intersecting the arc occupied by the crowns of the teeth referred to, and a rocker bed to sustain said rocking foot, substantially as described. 5th.

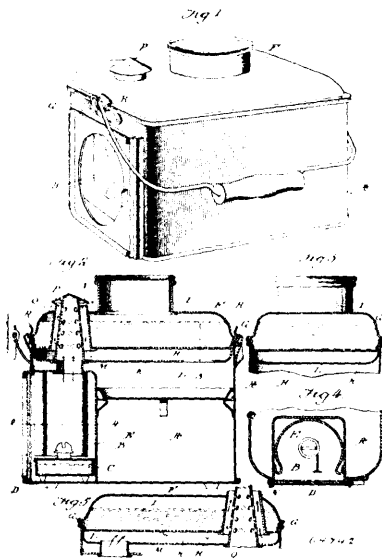
A jack-spindle having a foot toothed at its lower side, combined with a toothed bed to sustain said foot, substantially as described.



6th. A jack-spindle having a foot presenting the opposite ends of its lower side in an arc of a circle and provided with a slot, combined with a rocker bed having side walls, and a bolted inserted through said side walls and the slot of said foot, substantially as described. 7th. A jack-spindle and a connected rocking foot, combined with a rocker bed, and means to adjust said rocking bed, foot, and spindle, vertically, substantially as described. 8th. A jack-spindle bored and split at its lower end, a stud inserted in the bore of said jack-spindle, a clamping device to clamp said stud in said foot, and a locking foot to sustain said stud loosely that it may tip thereon, combined with a rocker bed upon which said foot rests and is free to turn as the spindle is tipped to properly present the last and shoe in position for the shoe to receive nails or slugs, substantially as described. 9th. In a nailing machine, a jack-spindle having an attached curved rocking foot, and a bed on which the foot rests and tips, said spindle being movable transversely to the line of tipping movement of said foot on said bed, substantially as described. 10th. In a nailing machine, a rocking foot, a jack-spindle pivotally mounted on said foot, and a rocker bed to sustain said foot, said spindle being movable to and fro about its pivot on the foot, the foot being free to rock on the bed in the direction of the length of the pivot of the jack-spindle, substantially as described. 11th. A jack-spindle, a foot upon which it is mounted, and a rocker bed on which said foot is free to tip, combined with a last pin and its holder carried by said spindle, and means to clamp and retain the last-pin holder in its adjusted position, substantially as described. 12th. A rocker bed, a rocking foot mounted thereon and carrying a jack-spindle, provided with a tipable last holding pin, substantially as described. 13th. A rocker bed, a rocking foot mounted thereon, and carrying a jack-spindle, a last-pin holder containing a last-pin, and means to adjust said pin, substantially as described. 14th. A jack-spindle and a rocking foot upon which it is pivotally mounted, and a rocker bed to sustain said foot, combined with a last pin having a shank, a last-pin holder pivotally mounted on said jack-spindle, and a locking device co-operating with the shank of the last-pin to retain it in position in said holder, yet leave the pin free to be readily changed and to be rotated in said holder, substantially as described. 15th. In a machine of the class described, a rocker bed, a rocking foot thereon presenting a part of its underside in the arc of a circle, and a part as a chord to said arc combined with a jack-spindle having a tipping last-pin, substantially as described. 16th. In a machine of the class described, a jack-spindle mounted upon a rocking foot having its underside shaped to present end portions lying in the arc of a circle, the middle portion of the foot being shaped to present a chord to said arc, and a rocker bed to sustain said foot, the lower curved side of said foot occupying the arc of a circle struck from the top of the heel end of the last carried by said spindle, substantially as described. 17th. A jack-spindle, and sustaining means therefor whereby the part of the spindle sustaining the last may be moved in a substantially horizontal plane throughout the driving of nails or slugs into the heel of the shoe on the last. 18th. The combination with a jack-spindle, and a last-pin holder pivoted thereon, of a device acting against the lower end of said holder, and means to adjust said device and cause it to take the strain put on the last-pin and its holder, relieving the pivot which sustains the holder. 19th. The combination with a jack-spindle and a last pin holder, pivoted thereon, and locked at its lower end and provided with a last-pin, of an adjusting device to engage the teeth of said holder, means to sustain said adjusting device, and means to adjust said sustaining means to

ensure proper engagement of the adjusting device with the last-pin holder. 20th. A jack having a rocker foot with a portion of its face formed in an arc of a circle and having an adjustable last-pin. 21st. A jack having a rocker foot with a portion of its face formed in an arc of a circle and provided with means to sustain a last. 22nd. A jack having a rocker foot substantially as described, whereby as the jack is tipped its upper end may be maintained in substantially the same horizontal plane. 23rd. In a jack a last-pin, a holder therefor, and a worm screw to change the position of said holder.

No. 61,742. Dinner Pail and Lantern.
(Boîte à lunch et lanterne.)



Rose A. Libby, Marquette, Michigan, U.S.A., 4th November, 1899; 6 years. (Filed 17th April, 1899.)

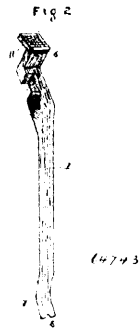
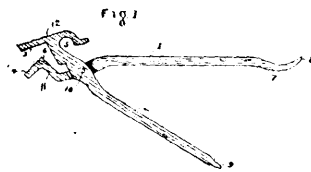
Claim.—1st. A combined dinner pail and lantern, comprising the main receptacle, having a lamp chamber at one end, a top receptacle adapted to fit upon the top of the main receptacle, said compartment being divided horizontally to provide a liquid receptacle and the heating chamber, said receptacle having an opening at one end adapted to receive the flue from the lamp chamber, the opposite end having a chimney flue extending entirely through the said receptacle, substantially as shown and described. 2nd. In a combination dinner pail and lantern, the main receptacle having a lamp chamber and lamp at one end, the top receptacle adapted to fit upon the top of the main receptacle, said top receptacle being divided horizontally into compartments, the upper compartment having a discharge flue extending therethrough, the lower compartment having an opening adapted to receive the flue from the lamp chamber, said opening being arranged at the end of the receptacle opposite the discharge flue, substantially as shown and described. 3rd. In a combination dinner pail and lantern, the main receptacle having a lamp chamber and lamp at one end, the top receptacle divided by a horizontal partition into upper and lower compartments, the upper compartment having a discharge tube extending therethrough, the lower compartment having an opening leading thereto, said opening being arranged at the end opposite the discharge flue, and a perforated chimney flue extending entirely through the top receptacle, and arranged within the discharge flue, substantially as shown and described. 4th. In a device of the kind described, the top receptacle divided horizontally into a receiving compartment and the heating compartment, the discharge flue extending through the receiving compartment, the perforated chimney flue extending entirely through the said receptacle and arranged within the discharge flue, the heating compartment having an opening in the bottom thereof at the end opposite to the discharge and chimney flue, substantially as shown and described.

No. 64,743. Handle for Pans and Vessels.
(Poignée pour ustensils de cuisine.)

August Morganfield, Junction City, Kansas, U.S.A., 4th November, 1899; 6 years. (Filed 21st September, 1899.)

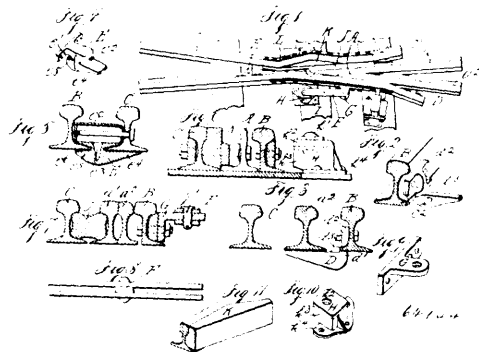
Claim.—1st. In a detachable pan handle, the combination of the corresponding angular shape of the inner parts of the jaws, with corrugated surfaces and the groove 6 substantially as described.

2nd. The combination of the two angular shaped jaws 11 and 12, and the corrugated surfaces 3 and 4, and the groove 6, and the



curved end 7, with the notch 8, and the pointed corresponding end 9, and the hook 5, substantially for and as set forth and described.

No. 64,744. Railway Frog. (Rail de croisement).

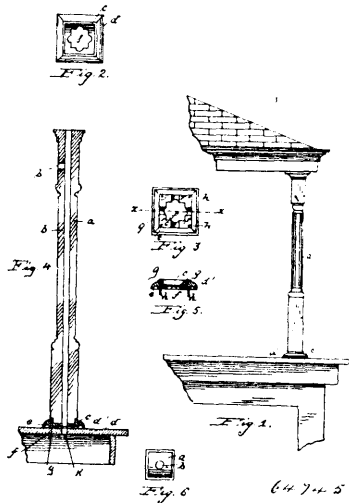


George Wellman Parsons, Shelton, Pennsylvania, U.S.A., 4th November, 1899; 6 years. (Filed 21st September, 1899.)

Claim.—1st. In a movable wing rail frog, the combination of a frog point, a movable wing rail partly aligned thereto and partly flared therefrom, and an arm attached to the flared part of the movable wing rail on side adjacent to the frog point by lugs above the flange of the movable rail, said arm extending beneath the frog point, by which the frog point prevents the flared end of the movable wing rail from rising, substantially as described. 2nd. In a movable wing rail frog, the combination of a frog point, an arm extending below the frog point dependent from the movable wing rail through a slot in flange of flared part of said wing rail, substantially as described. 3rd. In a movable wing rail frog, the arm D, adapted to extend below the point of frog and provided with lugs d^2 , and attached by lugs d^1 , substantially as described. 4th. In a movable wing rail frog, the combination of movable wing rail B, and attached thereto midway between the point of the frog and the toe end of the wing rail, the combination arm E, embodying an arm below the opposite fixed wing rail and unattached thereto, whereby rising of the movable wing rail is prevented, substantially as described. 5th. In a movable wing rail frog, the combination of movable wing rail and combination arm E, embodying arm e^1 and hollow body e^2 , substantially as described. 6th. In a movable wing rail frog, the combination arm E placed between the wing rails, embodying hollow body e^2 with recess for introduction of spring, and lugs e^1 for attaching to rail. 7th. In a movable wing rail frog, the rail frog H, embodying an overhanging top h^2 , closed end h^3 vertically disposed side wall and exterior flanges forming a base, in combination with trussed link F, movable wing rail B and arm G, substantially as described. 8th. The combination of a frog point adjacent to an open flangeway, a fixed wing rail bent out and recessed proximately to end of the frog point, in combination with a hard metal insert reinforcement closing the recess, substantially as described. 9th.

The combination of a frog point adjacent to an open flangeway between the frog point and a wing rail, with a hard metal insert reinforcement supported on a side flange of the wing rail, partially covered by head of the wing rail, and forming part of the side of the flangeway, substantially as described. 10th. The combination of a frog point with a fixed wing rail having a part at one end bent out for a guard end, and the contiguous part thereof aligned parallel to one side of the frog point and having the opposite end thereof with a contiguous part aligned with the opposite side of the frog point, with the intervening part of said wing rail laterally disposed to form a recess of width diminishing toward the ends, substantially as described.

No. 64,745. Column Shoe. (Pied de colonne.)



James M. Hoover, Homestead, Pennsylvania, U.S.A., 4th November, 1899; 6 years. (Filed 23rd September, 1899.)

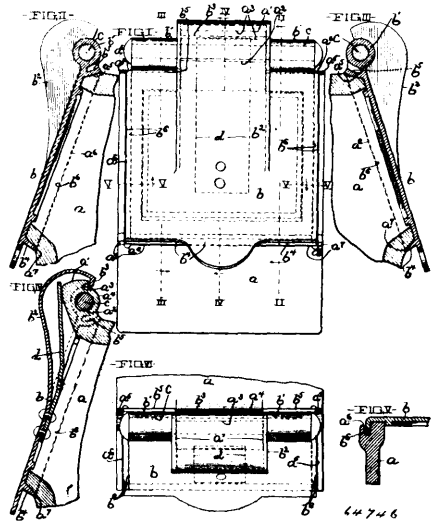
Claim. 1st. In continuation with a hollow supporting column, a shoe having a recess to receive the lower end of the column, said shoe having a central opening registering with the opening in the column and groove communicating with said opening to secure a free circulation of the air around the base, said shoe being further provided with a groove extending around the opening and communicating with the groove leading to the central opening, and means for holding the shoe in position, substantially as shown and described. 2nd. A shoe for supporting columns and the like, having a central opening *f*, a groove *c* extending around the central opening, groove *g* connecting the groove *c* with the central opening *f*, a recess formed in the top of the shoe to receive the column, and lugs *h* formed on the lower face of the shoe whereby the same is held in position, substantially as shown and described. 3rd. In combination with a hollow supporting column, a shoe having a recess to receive the end of the column, and provided with a central opening, a longitudinal opening *b* in said column and registering with the opening in the plate, a vertical opening *b*¹ in said column communicating with said longitudinal opening *b*, whereby a free circulation of air is obtained through said column, and means carried by the shoe, whereby the same is held in position, substantially as shown and described.

No. 64,746. Journal Box. (Coussinet de tourillon.)

Arthur Manning Waitt, New York City, New York, and Herman Frederick Ball, Cleveland, Ohio, U.S.A., 4th November, 1899; 6 years. (Filed 23rd September, 1899.)

Claim.—1st. In a journal box of the character indicated, the combination with the box proper that is open at its outer end has a lug projecting upwardly from the forward extremity of the said end, of the lid for closing the said end, the pivotal connection between the said lid and the aforesaid lug, which pivotal connection has a pivotal pin extending horizontally through the lug, and a flange formed upon and depending from the upper end of the lid rearwardly of the aforesaid lug and extending the full width or approximately the full width of the lug, which flange has the arrangement required to cause it to snugly engage the lug in the closed position of the lid, substantially as and for the purpose specified. 2nd. In a journal box of the character indicated, the combination with the box proper that is open at its outer end and is provided, at the central portion of the top of the said end, with an upwardly projecting lug, of the lid for closing the aforesaid end of the box proper, which lid is

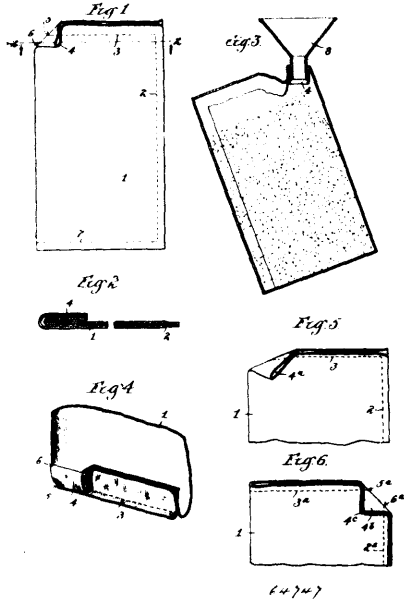
pivoted horizontally to the aforesaid lug and has two rearwardly projecting flanges at opposite sides, respectively, of the said lug,



which flanges have the arrangement required to cause them to snugly overlap the top of the box proper in the lid's closed position, substantially as and for the purpose specified. 3rd. In a journal box of the character indicated, the combination with the box proper that is open at its outer end and has a lug projecting upwardly from the upper extremity of the central portion of the said end, which lug, at the top, has a rearwardly facing shoulder extending the full width of the lug, of the lid for closing the aforesaid end of the box proper, which lid has the shape required to cover the forward portion of the aforesaid lug, the pivotal connection between the lug and the lid's upper end, which pivotal connection comprises a horizontally arranged pin extending through the lug, and two sleeves or ears formed upon the lid at opposite sides, respectively, of the lug, and embracing the pins a flange depending from the upper end of the lid rearwardly of the aforesaid shoulder and having the arrangement required to snugly engage the shoulder in the lid's closed position, and two rearwardly projecting flanges formed upon the lid a suitable distance below the pivotal pin, and at opposite sides, respectively, of the aforesaid lug, which last mentioned flanges have the arrangement required to snugly overlap the box proper in the lid's closed position, substantially as and for the purpose specified. 4th. A journal box of the character indicated, comprising a box proper that is open at its outer end and has a lug projecting upwardly from the central portion of the top of the said end, a lid for closing the said end, a pivotal connection between the lid's upper end and the aforesaid lug, and comprising a pin extending through the lug, and two ears formed upon the lid at opposite sides, respectively, of the lug and embracing the pin, two shoulders formed upon the box proper at opposite sides, respectively, of the aforesaid lug flanges formed upon the lid and arranged to closely overlap the said shoulders in the lid's closed position, and the pin engaging hole in the lug being elongated in the direction of the lid's free end when the lid is in its closed position, substantially as and for the purpose set forth. 5th. A journal box of the character indicated, comprising a box proper that is open at the outer end and has a lug projecting upwardly from the central portion of the top of the said end, a lid for closing the said end, a pivotal connection between the lid's upper end and the aforesaid lug, and comprising a pin extending through the lug, and two ears formed upon the lid at opposite sides, respectively, of the lug and embracing the pin, two shoulders formed upon the box proper at opposite sides, respectively, of the aforesaid lug, which shoulders are arranged concentrically of the axis of the pivotal connection, flanges formed upon the lid and arranged to closely overlap the said shoulder in the lid's closed position, and the pin engaging hole in the lug being elongated in the direction of the lid's free end when the lid is in its closed position, substantially as and for the purpose set forth. 6th. In a journal box of the character indicated, the combination with the box proper that is open at its outer end and provided, at the top of the said end, with the shoulders *a*^b, *a*^c and the lug *a*¹ that has the rearwardly facing shoulder *a*² and the horizontally arranged pin receiving hole *a*² elongated downwardly of the lid *b* extending around the forward portion of the aforesaid lug and having the depending flange *b*³, the inwardly projecting flanges *b*⁴, *b*⁵, the ears *b*¹, *b*², and the pivotal pin *c*, all arranged and operating substantially as shown, for the purpose specified. 7th. In a journal box of the character indicated, the combination with the box proper that is open at its outer end and provided with two grooves that are arranged at opposite sides,

respectively, of the opening in the said end and extend from top to bottom of the said end of the box proper, of the lid pivoted horizontally at its upper end to the box proper and provided with two inwardly projecting flanges having such length and arrangement relative to the aforesaid grooves that the flanges will engage the different grooves, respectively, in the lid's closed position and extend, respectively, from the upper end to the lower end of the engaging groove, substantially as and for the purpose set forth. 8th. In a journal box of the character indicated, the combination with the box proper that is open at its outer end provided with two forwardly opening grooves that are arranged at the opposite sides, respectively, of the opening in the said end, and extend from top to bottom of the said end of the box proper, of the lid pivoted horizontally at its upper end to the box proper and provided with two inwardly projecting flanges having such arrangement relative to the aforesaid grooves that the flanges will engage the different grooves, respectively, in the lid's closed position and extend, respectively, from the upper portion to the lower portion of the engaging groove, which grooves are open at their upper and lower ends, substantially as and for the purpose set forth. 9th. In a journal box of the character indicated, the combination with the box proper that is open at its outer end, and has the said end provided at the bottom and a suitable distance rearwardly of the forward or outer extremity of the said end with a forwardly facing shoulder extending from side to side of the box proper, of the lid for closing the said end of the box proper, which lid is pivoted horizontally to the top of the box proper, and has its free end provided with an inwardly projecting flange that has the arrangement required to cause it to extend in under the box proper in the lid's closed position and have its rear edge overlapped by the aforesaid shoulder. 10th. In a journal box of the character indicated, the combination with the box proper that is open at its outer end and provided with the shoulders a^5 a^6 and a^7 , the grooves a^8 a^9 and the lug a^1 that has shoulder a^{15} , and the elongated pin receiving hole a^2 of the lid b having the ears b^1 b^1 , the flanges b^3 b^5 b^5 b^4 b^6 b^6 and the pivotal pin c , all arranged and operating substantially as shown, for the purpose specified.

No. 61,747. Bag or Sack. (Sac.)

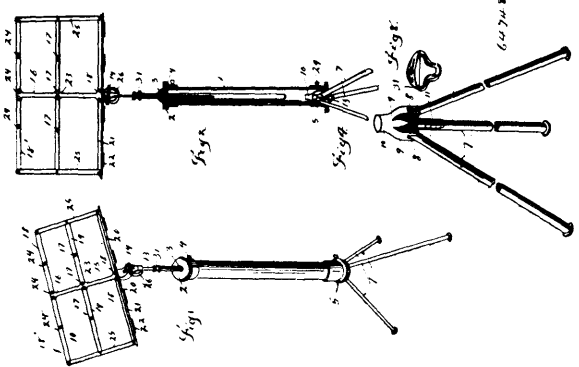


Adelmer M. Bates, Chicago, Illinois, U.S.A., 4th November, 1899; 6 years. (Filed 2nd March, 1899.)

Claim.—1st. As a new and useful article of manufacture, a bag or flexible receptacle having a filling aperture located at the corner thereof, and a valvular fold arranged at and guiding said aperture and forming a closure for preventing the escape of material, substantially as set forth. 2nd. As a new and useful article of manufacture, a bag or sack having a filling aperture located at one corner thereof and a flexible neck surrounding said aperture in said corner and having a closure or valve for said aperture, substantially as set forth. 3rd. As a new and useful article of manufacture, a bag or sack having a filling aperture located at one corner thereof, and a flexible neck or tubular extension arranged around said aperture in said corner and projecting into the bag or sack and forming a closure or valve for said aperture, substantially as set forth. 4th. As a new and useful article of manufacture, a bag or sack having one corner turned down upon itself and being secured to the side of the bag, the sides of the bag at a point between the corners of said turned down corner being left open to form a filling aperture and said turned down corner constituting a valvular fold for closing said aperture, substantially as set forth. 5th. As a new and useful

article of manufacture, a bag or sack having its corner folded upon itself and a line of stitching which closes one side of the bag being carried across said corner, the bag at a point between said line of stitching and the corner of said fold being left unsecured to form a filling aperture, substantially as set forth. 6th. As a new and useful article of manufacture, a bag or sack composed of a piece of material folded upon itself and secured around its free edges and having one corner adjacent to the doubled edge of the material folded down and secured to the side of the bag, said corner being left open for a short distance to form a filling aperture, substantially as set forth.

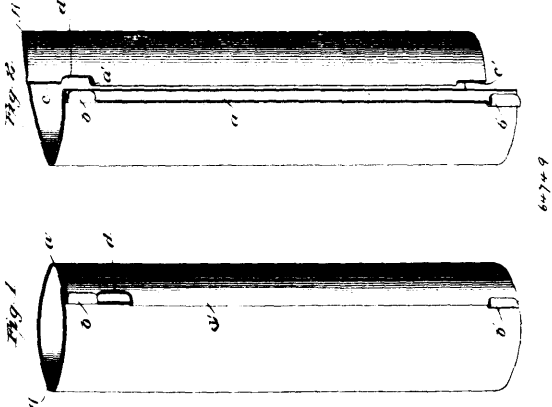
No. 61,748. Music Stand Case and Folio. (Porte-musique, caisse, etc.)



Charles H. Hope, Providence, Rhode Island, U.S.A., 4th November, 1899; 6 years. (Filed 12th July, 1899.)

Claim.—In a device of the character described, the combination of a hollow main body portion, a cap secured to the lower portion thereof and provided with a central opening and concentric oblong openings, an upper removable cap with a central opening therein, a folding music holder adapted to be contained within the said body and having a rod adjustably connected to the lower portion thereof which is movable through the upper cap, a set screw passing through the upper portion of the cap to bind against the rod, a three arm section having legs pivoted thereto and a depending central screw stem, said legs being movable through the concentric openings in the cap, and a screw stem adapted to extend through a central opening in the said lower cap, a button adapted to engage the said screw stem, and a music roll of flexible material attached to the outer portion of the said tubular body at opposite ends of the latter, leaving a space for the insertion of sheet music which may be rolled upon the said tube, substantially as described.

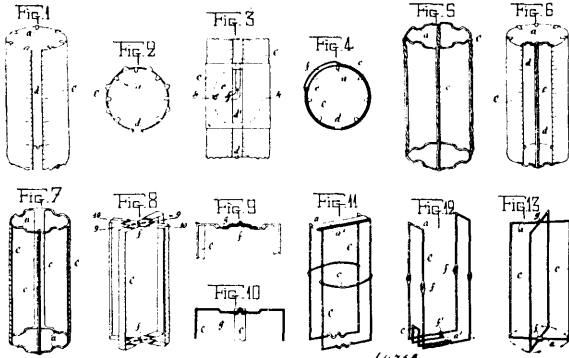
No. 61,749. Stove Pipe. (Tuyau de poêle.)



James Harvey Hill, Belleville, Ontario, Canada, 4th November, 1899; 6 years. (Filed 4th April, 1899.)

Claim.—1st. A pipe section, having an outwardly flanged edge extending the entire length of the pipe, a catch formed on the upper and lower edge of said flange, and an inwardly flanged edge terminating a short distance from the upper and lower edges of the pipe, and provided with a socket for the reception of the upper catch, substantially as described. 2nd. A pipe section having an outwardly flanged edge extending the entire length of the pipe, a catch formed on the upper and lower end of said flange, and an inwardly flanged edge terminating a short distance from the upper and lower edges of the pipe and provided with a socket for the reception of the upper catch, and an offset formed on the upper and lower end of said edge, substantially as described.

No. 64,750. Coin Holding Case. (Caisse à monnaie.)



Johann Pestuka, Budapest, Austria, 4th November, 1899; 6 years. (Filed 2nd March, 1899.)

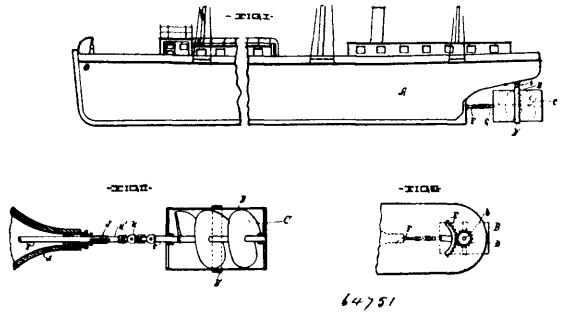
Claim.—1st. A case for receiving a number of coins of even value, its characteristic feature being a casing C, surrounding the pile of coins forming a full or incomplete cylinder, or formed of a sufficient number of constituent parts, the said casing being provided with a graduated scale, having at its ends projections or teeth preventing the coins from falling out of the case or parts a which connect the constituent parts of the casing or cover. 2nd. A constructional form of the coin case, forming the subject of the first claim, in which for the smooth plate or cylindrical casing, a corrugated plate C is substituted, Figure 2. 3rd. A constructional form of the case, forming the subject of the first claim, in which an opening is provided for facilitating the introduction and the withdrawal of the coins, and in which the opening, the slot d and the case C are held in position and closed respectively by a rotary ring, adapted to be fixed in its normal position by a bajonet joint f or its equivalent means, Figures 3 and 4. 4th. A constructional form of the case, forming the subject of the first claim, in which frames C are connected in any suitable manner and are provided above and below with projections a which, being bent down almost rectangularly upon the long sides C, prevent the coins from falling out of the case, Figure 5. 5th. A constructional form of the case forming the subject of the first and second claims, in which an open cylindrical surface is connected, so as to be closed with two frames having inwardly bent prolongations a, which prevent the coins from falling out, the said cylindrical surface being provided with a graduated scale and arranged so that the pile of coins can be seen. 6th. A constructional modification of the case forming the subject of the fifth claim, in which the frame C which constitutes the case is made of a single piece with projections a which prevent the coins from passing out, Figure 7. 7th. A constructional form of the case forming the subject of the first claim, in which two frames C constructed with bands or narrow plates are rotatable at will one within another upon the pivot f and which, when occupying a normal position, are maintained by radial projections upon the inner frame, which engages with radial depressions on the outer frame. 8th. A constructional form of the case forming the subject of the first claim, the characteristic feature being a frame C representing the sides of polyhedron and being held in position at its top and bottom by elastic or rigid parts a, a' and in which are shaped or bent, as represented in Figures 5 and 7, the parts C of the frames admitting also of being provided with movable pieces c in the form of an arc or circle, Figure 11. 9th. A constructional form presenting an improvement on the device, described in the eighth claim, in which the parts C are constructed so as to permit of being bent, thereby facilitating the introduction of coins into the apparatus, the parts C admitting of being constructed in a' in such a manner as to permit of being bent, while moreover the part a may be provided with a prolongation passing beyond the base so as to produce an automatic fixing. 10th. A cross shaped constructional form, in which the parts C form the sides of a polyhedric prism, which are bent toward one another in their connecting parts around the axle and which permit of the introduction of coins, the parts adapted to move within another, Figure 13. 11th. The herein described cases for containing coin constructed and arranged as above described with reference to the accompanying drawings.

No. 64,751. Propelling and Steering Apparatus for Boats. (Appareil de propulsion et à gouverner.)

Isador Lehman, Cleveland, Ohio, U.S.A., 4th November, 1899; 6 years. (Filed 5th July, 1899.)

Claim.—1st. A combined propelling and steering apparatus, comprising a casing which is non-rotatable around its horizontal axis but free to move in a horizontal direction, and means for moving it in said horizontal direction, and a rotating propeller mounted within said casing, said propeller being provided with a universal joint connection whereby the propeller and casing may be moved in a horizontal direction, substantially as set forth. 2nd. A combined propeller and steering apparatus, comprising a revoluble propeller mounted and enclosed within a non-revoluble casing, and means

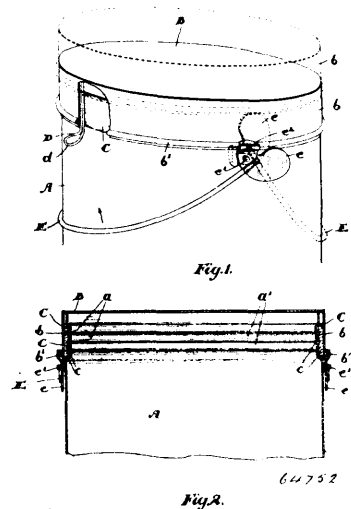
whereby both propeller and casing may be directed or moved in a horizontal direction. 3rd. A combined propeller and steering



apparatus, comprising a revoluble propeller connected by means of a universal joint to the propelling shaft of a boat, and journalled within a non-revoluble casing, and means secured to said casing for moving or directing both propeller and casing horizontally, substantially as set forth. 4th. The combination in a propelling and steering device of the type set forth, of a rotating propeller, a casing within which said propeller is mounted and rotated, universal joint connection between the driving shaft of said propeller and the propeller, and means for horizontally directing or turning both casing and propeller, substantially as set forth.

No. 64,752. Self Sealing Vessel. (Vaseau à cachet automatique.)

(Vaseau à cachet automatique.)



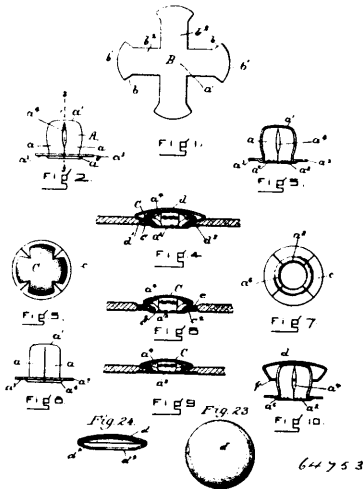
Archibald H. Brintnell, Toronto, Ontario, Canada, 4th November, 1899; 6 years. (Filed 15th May, 1899.)

Claim.—1st. In a self sealing vessel, the combination with the neck formed with a plurality of beads near the top edge thereof, of the cover provided with a downwardly extending flange and the elastic band encompassing the beads, so that when the cover is pushed on over the band the inner side of the band indents itself into the annular grooves between the beads, as and for the purpose specified. 2nd. In a self sealing vessel, the combination with the neck formed with a plurality of beads near the top edge thereof, of the cover provided with a downwardly extending flange and the elastic band encompassing the beads, so that when the cover is pushed on over the band the inner side of the band indents itself into the annular grooves and a wire or strip designed to be held between the elastic band and the flange of the cover as it is being forced down into position, as and for the purpose specified. 3rd. In combination with the top of the vessel and the cover provided with an annular flange, of the bail provided with a cam shaped end suitably pivoted on the body or neck of the vessel and having the edge of the cam designed to extend underneath the edge of the flange of the cover, as and for the purpose specified. 4th. The combination with the top of the vessel and the cover provided with an annular flange and bead thereon, of the bail provided with a cam shaped end suitably pivoted on the body or neck of the vessel and having the edge of the cam designed to extend underneath the edge of the flange of the cover and the gripping spring lip normally straddling the bead on the flange of the cover when the vessel is closed, as and

for the purpose specified. 5th. The combination with the top of the vessel having a plurality of beads surrounding the same, of the cover, the elastic band encompassing the beads and situated between the flange of the cover and such beads and cam shaped removing device or devices suitably pivoted on the outside of the vessel in proximity to the bottom edge of the flange and means for rotating the cam on its pivot, as and for the purpose specified.

No. 64,753. Fastener for Gloves, etc.

(Attache de gants, etc.)



William Steeter Richardson, Boston, Massachusetts, U.S.A., 4th November, 1899; 6 years. (Filed 22nd May, 1899.)

Claim.—1st. As an improved article of manufacture, a ball and socket piece from which a complete socket member of a ball and socket fastener is formed in the act of securing said piece to the glove or other article on or with which the member is used, having a preformed separable flange surrounding a yielding socket entrance, a top section, separate, foldable, resilient sides substantially parallel with each other, integral with the top section and preformed flange, which sides are adapted in the act of setting the piece to be separated in relation to each other, folded outwardly to form a fastening flange, provide a ball holding cavity within the material between the flanges, complete the socket entrance and impart resiliency thereto. 2nd. A socket piece from which a complete socket member of a ball and socket fastener is formed in the act of securing said piece to the glove or other article on or with which said member is used, having a preformed separable flange surrounding a yielding socket entrance, the side edges of which flange abut when in their normal relation to each other, a top section, separate, foldable resilient sides substantially parallel with each other integral with the top section and preformed flange, as and for the purposes set forth. 3rd. A socket piece from which a complete socket member of a ball and socket fastener is formed in the act of securing said socket piece to the glove or other article on or with which the member is used, having a preformed separable flange surrounding a yielding socket entrance, a top section, separate, foldable, resilient sides integral with the top and preformed flange, and shaped to slightly bulge outward, as and for the purposes set forth. 4th. A socket piece from which a complete socket member of a ball and socket fastener is formed in the act of setting said piece to the glove or other article on or with which the member is used, having a preformed separable flange surrounding a yielding socket entrance, a top section, separate, foldable, resilient sides integral with the top section and preformed flange, and an outwardly rounded bead or corrugation in the flange about the socket entrance, all as and for the purposes set forth. 5th. A socket member of a ball and socket fastener made from one piece of metal and having a top, separate arms or sections extending from said top outwardly and then back upon themselves, providing a sectional fastening flange upon one surface of the glove or other article to which the member is secured, the said arms or sections extending through a hole in the said glove or other article at the lower edge of which hole they assemble and form a yielding socket entrance, and from which socket entrance they extend radially and make a fastening flange upon the surface of the material opposite that upon which the said sectional fastening flange bears, and which co-operates with the sectional folded flange in the fastening of the socket member. 6th. A socket member of a ball and socket fastener having a preformed separable flange surrounding a yielding socket entrance upon one surface of the glove or other article to which the socket member is secured,

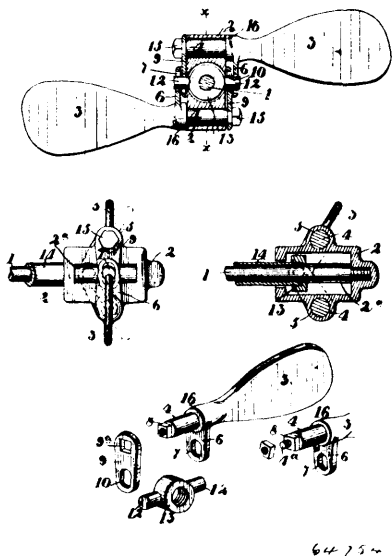
a top section and folded, resilient arms extending from said top section outwardly and inwardly and through a hole in said glove, the said arm being integral with the top section and preformed flange and forming a fastening flange upon the surface of said glove opposite that against which the preformed flange bears, yielding sides and a ball holding cavity. 7th. The combination of a socket member, of a ball and socket fastener made from one piece of metal and having a top, separate arms or sections providing a sectional flange upon one surface of the glove, and a yielding socket entrance and a finishing flange upon the other surface of the glove, and a support or backing *e* upon which said first named sectional fastening flange bears, and having a hole through which said arms extend, and which washer is of a size not to restrict or impede the yielding action of said arms. 8th. A socket piece having sectional sides, a socket entrance, a predetermined sectional flange surrounding the socket entrance, and means, such as a rib or shoulder, in or upon said flange, adapted to co-operate with a holding or setting die, having an opposing rib or shoulder to maintain the predetermined shape of the flange and the bore of the socket during the setting of the socket piece. 9th. The combination of a cap having an inwardly extending flange upon its under side, forming a cavity, and a socket member having a top and resilient folded sides within said cavity, and which folded sides lap upon the inner surface of the flange and sections of which sides extend from said flange towards each other and provide a ball receiving space or cavity. 10th. The combination in a socket member of a fastener, of a cap having a flange extending inwardly from its outer edge, with a socket member formed from a socket piece, having a preformed separable flange surrounding a yielding socket entrance, a top section, separate, foldable, resilient sides integral with the top section and preformed flange, and which cap section is combined with said socket piece in the act of attaching it to a glove or other article by outwardly extended folds of the said resilient sides within the cavity of the cap and upon the surface of the glove opposite that against which the preformed flange bears. 11th. The combination, in a fastener, consisting of a socket member, comprising the angular arms extending outwardly from a connecting portion and returning upon themselves to form an upper flange and a socket entrance, each arm being further extended outwardly at its extremity, to form a finishing flange, between which and said upper flange the material is to be held, and a cap having yielding reinforcing arms located immediately below said upper flange, and held in contact with the yielding arms of the socket member, and adapted to lie on the opposite side of said material from said finishing flange, as and for the purposes set forth. 12th. A socket member, comprising a set socket piece, having, when set, yielding sides, an upper and a lower flange, said upper flange being formed by the upset sections of said yielding sides, and said lower flange by extensions thereof, combined with a cap adapted to enclose said upper flange and yielding sections upon said cap, which reinforce said yielding sides, as and for the purposes set forth. 13th. In a socket member of a ball and socket fastener, a cap having a divergent flange, combined with a socket member having a top section and separate resilient sides folded down or extended laterally against said divergent flange within said cap, said folded sides, when thus extended laterally within said cap, serving to retain the latter in place, and said divergent flange when pressed against the material being fastened against the said folded sides, and serving to form an extended fastening flange upon the upper side of said material. 14th. In a fastener, the combination of a cap having a cavity provided with a conical wall surrounding the entrance thereto, and a closed top, which is above said entrance, with a socket member in one piece, comprising a closed end or top section, which is enclosed within the cavity of the cap and bears against said top part of the cap, and separate arms which extend outwardly from the said top section to bear against the inner surface of said conical wall, and then inward towards each other to form a conical cavity.

No. 64,754. Marine Propeller Wheel. (Roue de propulsion.)

Edward E. Truscott, St. Joseph, Michigan, U.S.A., 4th November, 1899; 6 years. (Filed 2nd August, 1899.)

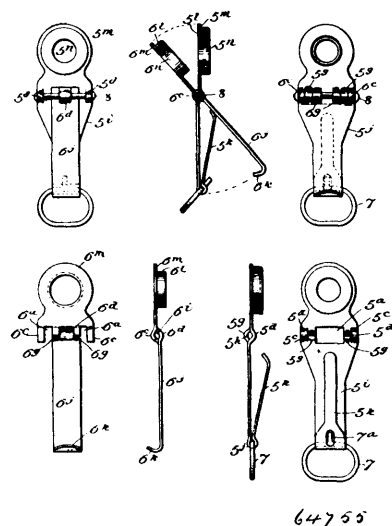
Claim.—1st. The combination with a propeller shaft, a hub secured to said shaft, a plurality of propeller blades journaled in bearings in said hub, a pair of crank arms extending outward from each blade, and an operating device for the blades common to all of said arms. 2nd. The combination with a propeller shaft, a hub secured to said shaft, said hub being provided with a transverse opening, a plurality of propeller blades journaled on said hub, a pair of crank arms extending outward from each blade and each arm provided with a slot, an operating device, a collar fixed to said operating device and adapted to move in the open portion of the hub, and spindles carried by the collar and entering the slots in the arms, substantially as described. 3rd. The combination with a propeller shaft, a hub secured to said shaft, said hub being provided with a transverse opening, a pair of oppositely disposed propeller blades journaled in the hub and each blade provided with a fixed and a removable crank arm each of said arms having a slot therein, an operating sleeve sliding over the propeller shaft and entering the hub, a collar fixed to said sleeve and lying in the transverse opening in the hub, and a pair of oppositely projecting spindles carried by the collar and each spindle entering the slots in two of the crank arms. 4th. The combination with a propeller shaft, a hollow hub secured to said shaft, said hub

having a transverse opening therethrough, a pair of propeller blades journalled upon opposite sides of said opening in the hub, each of



said blades being provided with a circular shank having an angular boss at its end and a slotted crank arm, a removable crank arm having a slot and an angular opening therein, said angular opening being adapted to fit the said angular boss on each blade, an operating sleeve sliding over the propeller shaft and entering the hub, a collar fixed to said sleeve and lying in the opening in the hub, and a pair of oppositely projecting spindles carried by the collar and each spindle entering the slots in two of the crank arms, substantially as described.

No. 64,755. Garment Clasp. (Agrafe de vêtement.)



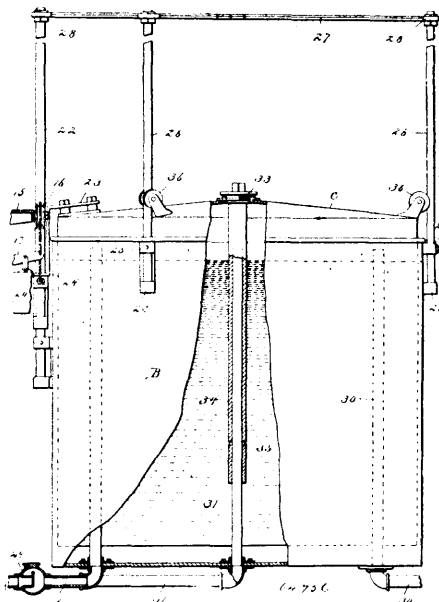
Elisha D. Hinkley, Denver, Colorado, U.S.A., 4th November, 1899; 6 years. (Filed 19th September, 1899.)

Claim.—1st. A garment clasp comprising two hinged members, one having a jaw provided with a circular groove, and the other a co-operating jaw provided an annular flange adapted to engage said groove, which is enclosed by two concentric walls between which the flange of the other jaw passes. 2nd. A garment clasp comprising two hinged members, one having a jaw provided with a central opening and an annular groove, and the other having a jaw provided with a central opening and a flange adapted to enter the said groove of the co-operating jaw. 3rd. A garment clasp comprising two hinged members, one having a jaw provided with an opening and an annular groove surrounding said opening, and a flange extending at right angles to the walls of the said groove, the other member having

a co-operating jaw provided with a flange adapted to enter the groove of the first named jaw, and provided with an exterior flange extending at right angles to the first named flange. 4th. A garment clasp comprising two crossed members, hinged at their intersection, and provided at one extremity with co-operating jaws, the opposite extremity of one member being bent to form a locking hook, adapted to engage the corresponding extremity of the opposite member, one member being provided with a spring adapted to hold the jaws open when unlocked, and means attached to one member adapted to disengage the locking hook of the other member. 5th. A garment clasp comprising two members, hinged at their intersection, and having co-operating jaws located on one side of the hinge, one of the said members being bent to form a spring, adapted to engage the other member, and normally hold the jaw open, and a ring engaging the eye formed by the bend in the said member, and having a tongue adapted to disengage the other member, which is provided with a spring locking hook. 6th. A garment clasp composed of two members, having co-operating jaws, one jaw having two concentric walls and the other a circular flange adapted to pass between said walls, one member having a central opening through which the body portion of the other member is adapted to pass, the two parts being cut and pressed in opposite directions to form hinge pin openings and bearings, and a suitable hinge pin for connecting the two members. 7th. A garment clasp composed of two members having co-operating jaws, one jaw having two concentric walls and the other a circular flange adapted to pass between said walls, the said members being cut, and the metal thereof being pressed in opposite directions to form hinge pin openings and bearings, one of the said members having ears adapted to limit the opening movement of the said members, and a hinge pin connecting the two members. 8th. A garment clasp composed of male and female members having co-operating jaws, one member having a central opening, and cuts formed on opposite sides of said openings, the metal being pressed in opposite directions to form hinge pin openings and bearings, arranged to co-operate with those of the first named member, and a hinge pin connecting the two members. 9th. A garment clasp composed of male and female members, one member having a central opening, and cuts formed on opposite sides of said opening, the metal being pressed in opposite directions to form hinge pin openings and bearings, the body portion of the other member passing through the opening in the first named member, and provided with cuts, the metal being pressed in opposite directions to form hinge pin openings and bearings arranged to co-operate with those of the first named member, the male member having ears overlapping the female member on opposite sides of the opening, said ears forming stops which limit the opening movement of the members, and a hinge pin connecting the two members.

No. 64,756. Acetylene Gas Generator.

(Générateur de gaz acétylène.)

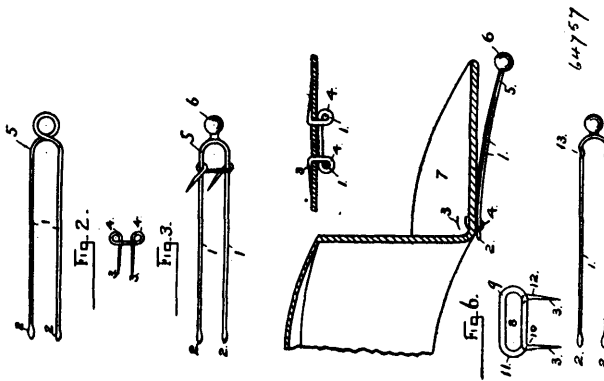


Julius Leede, Minneapolis, Minnesota, U.S.A., 4th November, 1899; 6 years. (Filed 3rd September, 1898.)

Claim.—1st. In a gas generator of the character described, the combination of a generating chamber, a magazine for holding cartridges one above another, a chute leading from the magazine to the generating chamber below the water line and terminating

within the chamber in a spout or trough like extension adapted to conduct cartridges or canisters to the generator, and a hand hole for removing the cartridge cases having a water seal, substantially as described. 2nd. In an acetylene gas generator, the combination of a generating chamber, a magazine for holding cartridges one above another, a chute leading from the magazine to the chamber below the water line adapted to conduct cartridges to the generator, and tripping mechanism for intermittently feeding the cartridges through the chute to the generator, as the bell of the gas holder rises and falls, substantially as described. 3rd. In an acetylene gas generator, the combination of a generating chamber, a magazine, a chute leading from magazine to generating chamber, and a tripping mechanism consisting of reciprocating studs or pins, a lever provided with a cross head, a weight connected with the outer extremity of the lever, a gas holder having a reciprocating bell, and connections between the gas holder and the lever for vibrating said lever as the bell rises and falls, substantially as described. 4th. In an acetylene gas generator, the combination of a generator, a magazine, a chute leading from magazine to generator, a gas holder having a reciprocating or rising and falling bell, reciprocating stops or studs and a magazine, a three armed lever, a weight connected with the outer extremity of the lever for moving it one direction, a chain or cord also connected with said lever leading around a guide pulley, a slide connected with the opposite end of the chain, and a projection from the bell engaging the slide, whereby the lever is operated to disengage a cartridge from the magazine, as the bell descends, substantially as described.

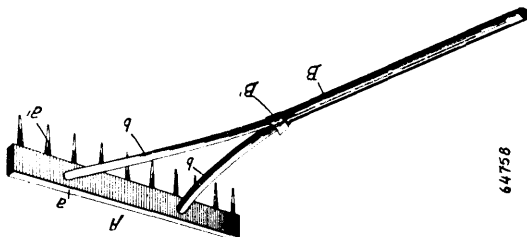
No. 64,757. Hat Fastener. (Attache de chapeau.)



William Andrew Callanan, Manitou, and George W. Walrond Denver, both of Colorado, U.S.A., 6th November, 1899; 6 years. (Filed 4th July, 1899.)

Claim.—1st. In a hat fastener, the combination with a wire holding device formed of a single piece bent to form a loop and two pin points 3 3, adapted to receive a two pronged curved pin with bends 13, substantially as and for the purpose described. 2nd. In a hat fastener, the combination with a holding device formed of a single piece of wire bent into rectangular form with points or sharpened ends and having an eye formed by the looping of the wire at the right angle of the said device, adapted to spread slightly, of a two pronged curved pin having the prongs tapering and adapted to wedge lightly when pushed entirely into the eyes or loops of the holding device, and knobs or enlargements at the extremities of the prongs, substantially as described.

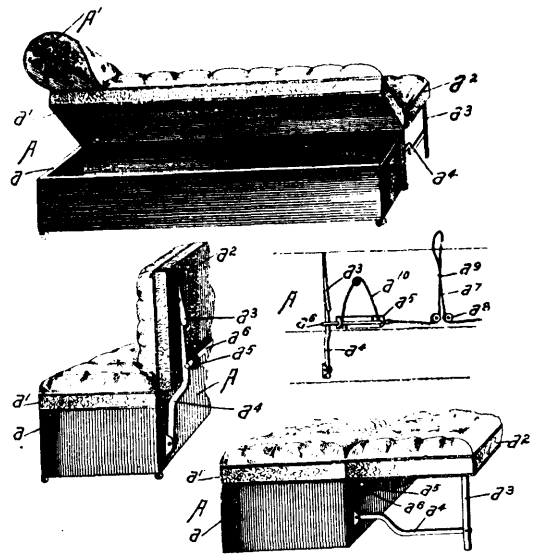
No. 64,758. Rake. (Rateau.)



Joseph Chabot and Alphonse Chabot, both of St. Charles de Bellechasse, assignees of David Roy, Quebec City, all of Quebec, Canada, 6th November, 1899; 6 years. (Filed 25th September, 1899.)

Claim.—1st. A rake, comprising a suitable rake head and a bifurcated handle secured thereto, substantially as described. 2nd. A rake, comprising a suitable rake head having sockets therein, a handle having arms integral therewith, the extremities of which are adapted to be secured in said sockets, substantially as described.

No. 64,759. Sofa. (Canapé.)

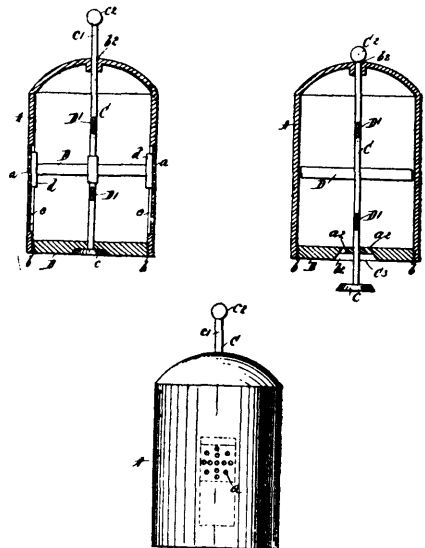


Jean Baptiste Hogue, Montreal, Quebec, Canada, 6th November, 1899; 6 years. (Filed 25th September, 1899.)

Claim.—1st. A sofa, comprising a body portion, a back portion hinged thereto, and a locking mechanism secured upon said back portion, for securing the back portion in its raised position, substantially as described. 2nd. A sofa, comprising a body portion, a top portion hinged thereto, a back portion hinged to said top portion, and a locking mechanism secured upon said back portion, for securing the back portion in its raised position, substantially as described. 3rd. A sofa, comprising a body portion, a back portion hinged thereto, supporting standards pivoted to said back portion, connecting bars connecting said standards to the body portion, spring pressed locking bolts adapted to engage said connecting bars, and an operating cord connected with said locking bolts, substantially as described.

No. 64,760. Salt and Sugar Shakers. (Machine à sou poudrer le sel et sucre.)

(Machine à sou poudrer le sel et sucre.)



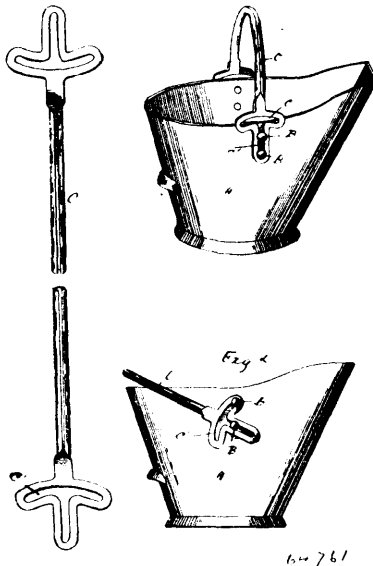
Cecilia Lawton, Charleston, South Carolina, U.S.A., 6th November, 1899; 6 years. (Filed 2nd June, 1899.)

Claim.—1st. A device of the character herein described, comprising a vessel or receptacle having a removable bottom, a cavity or recess formed centrally of said bottom, perforations formed in said bottom and communicating with said cavity or recess and a rod passed longitudinally and centrally through said vessel or receptacle and adapted to move longitudinally therein, said rod being pro-

vided at its lower end with a disc or head which is adapted to fit in and close said cavity or recess, substantially as shown and described. 2nd. A device of the character herein described, comprising a vessel or receptacle having a removable bottom, a cavity or recess formed centrally of said bottom, perforations formed in said bottom and communicating with said cavity or recess and a rod passed longitudinally and centrally through said vessel or receptacle and adapted to move longitudinally therein, said rod being provided at its lower end with a disc or head which is adapted to fit in and close said cavity or recess, and said rod being also provided within said vessel or receptacle with radial arms, substantially as shown and described. 3rd. A device of the character herein described, comprising a vessel or receptacle having a removable bottom, a cavity or recess formed centrally of said bottom, perforations formed in said bottom, and communicating with said cavity or recess, and a rod passing centrally through said bottom and through said cavity or recess, said rod being adapted to move longitudinally in said vessel or receptacle, and through said bottom, and being provided at its lower end with a disc or head which is adapted to fit in and close said cavity or recess, and also to close said perforations, and said rod being also provided within said vessel or receptacle with radial arms, substantially as shown and described. 4th. A vessel of the class described, adapted to normally rest in upright position and provided with outlet openings in its side walls, a stem slidably mounted within said vessel and embodying a lower end portion projecting through the bottom thereof, and cross pieces or radial arms projecting from said stem and carrying heads or plates adapted to close the outlet openings in the walls of the vessel, the relative construction and arrangement being such that when the vessel rests in normal upright position and the projecting bottom portion of the stem is forced upwardly, the plates or heads upon the arm will be in operative position for the closure of the outlet openings, substantially as set forth. 5th. A vessel of the class described, adapted to normally rest in upright position, and provided with outlet openings and vertical grooves in its side walls, and a valve seat in its bottom, a stem slidably mounted in said vessel, and embodying a lower end portion projecting through the bottom thereof, and a valve formed on the said lower end portion of said stem and fitting the valve seat, cross pieces or radial arms projecting from said stem and carrying heads or plates adapted to close the openings in the walls of the vessel, said heads or plates fitting and being adapted to move to the vertical grooves in the inner surface of the walls of the vessel, the relative construction and arrangement being such that when the vessel rests in normal upright position and the valve on the projecting bottom portion of the stem is forced upwardly into the seat, the plates or heads upon the arms will be in operative position for the closure of the outlet openings, and the bottom portion of the vessel sealed, substantially as set forth.

No. 64,761. Ball for Coal Scuttles, etc.

(Anse de sciau à charbon, etc.)



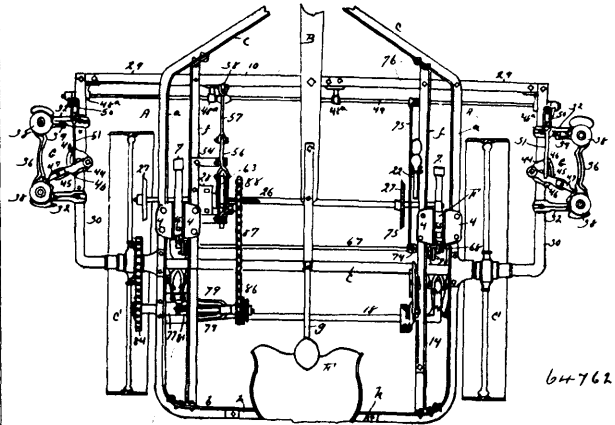
64-761

Bennett F. Seibert, Manfield, Ohio, U.S.A., 6th November, 1899; 6 years. (Filed 26th September, 1899.)

Claim.—1st. A rigid joint for bails for coal scuttles and other receptacles, consisting in combination with the scuttle, of two headed rivets mounted one above the other, and the bail having a longitudinal slot terminating at its inner end in a transversely disposed slotted portion on the arc of a circle, by the outlines of which the slot rivets are guided, as set forth. 2nd. In combination with

a coal scuttle or other receptacle, headed rivets mounted one above the other on said receptacle, a bail having ends which are slotted as described, and adapted to support the scuttle by engagement with the lower of the rivets, and be held rigid by the upper of the said rivets, while the receptacle is being carried, but allowed to tilt when the scuttle is set down, as described.

No 64,762. Corn Planter. (Planteur de blé d'Inde.)



64-762

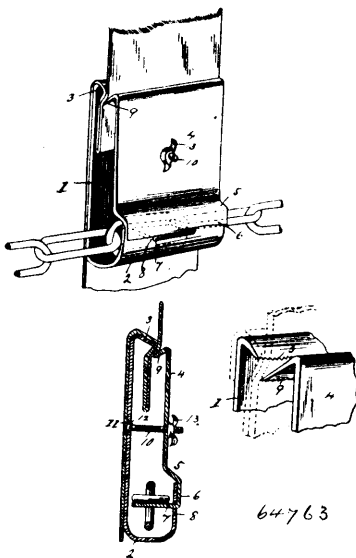
John C. Courtney, Streator, Illinois, U.S.A., 6th November, 1899 6 years. (Filed 26th September, 1899.)

Claim.—1st. In a corn planter, the combination with a frame, an axle secured thereto and wheels on the axle, of a tongue secured to the front end of the frame and to the axle, a driver's seat over the rear end of the frame and standards secured to said seat, the rear of the frame and the axle, substantially as set forth. 2nd. A planting leg consisting of telescoping sections, one section being linged whereby it swings in the arc of a circle when it moves. 3rd. A planting leg consisting of a rigid seed tube and furrow opener or shoe telescoping over said seed tube and a pivotal connection between said seed tube and furrow opener or shoe, substantially as set forth. 4th. A planting leg consisting of a fixed seed tube, and an arm projecting forwardly therefrom, a furrow opener or shoe adapted to telescope over said seed tube, and an extension on said furrow opener or shoe pivotally connected to said forwardly projecting arm, substantially as set forth. 5th. In a planter, the combination with a frame, of a planting leg consisting of a rigid seed tube, a shoe telescoping over the lower end thereof, a forwardly projecting arm on the seed tube pivoted to an extension of the shoe, and a brace extending from the free end of said arm and the frame, substantially as set forth. 6th. In a corn planter, the combination with a frame, of a planting leg consisting of a rigid section and a telescoping section, a rock shaft mounted on the frame and having a crank arm, a connection between said crank arm and the telescopic section of the leg, an operating lever secured to said rock shaft and a locking device for said operating lever, substantially as set forth. 7th. In a corn planter, the combination with a planting leg comprising a rigid and a telescoping section, of brackets secured to the telescopic section, an arm pivoted between said brackets, pintles at the free end of said arm, covering discs on said pintles, and slotted bars connecting said pintle with the telescopic section, substantially as set forth. 8th. In a corn planter, the combination with a planting leg comprising a rigid and a telescopic section, of an arm adjustably connected with the telescopic section and having inclined pintles, and inclined covering discs mounted on said pintles, substantially as set forth. 9th. In a corn planter, the combination with a frame, feed mechanism, and a shaft adapted to transmit motion to said feed mechanism, of a check rower lever, a ratchet wheel on said shaft, a sliding bar, a dog on said sliding bar adapted to engage the ratchet wheel, and connections between said sliding bar and the check rower lever, substantially as set forth. 10th. In a corn planter, the combination with a frame, feed mechanism, a shaft adapted to transmit motion to the feed mechanism and a pivoted check rower lever, of a ratchet wheel on said shaft, a sliding bar, connections between said sliding bar and said check rower lever, a dog pivoted to the sliding bar for transmitting motion to the ratchet wheel, and another dog pivoted to the frame and adapted to prevent retrograde movement of the ratchet wheel and shaft, substantially as set forth. 11th. In a corn planter, the combination with a frame, feed mechanism, a shaft to transmit motion to the feed mechanism, and a check rower lever, of a ratchet wheel on the shaft, a sliding bar, a dog attached to the sliding bar and adapted to propel the ratchet wheel, and a plate or arm on the sling bar adapted to engage the ratchet wheel and prevent it from being turned too far, substantially as set forth. 12th. In a corn planter, the combination with a frame, feed mechanism, a shaft for transmitting motion to said feed mechanism, and a check rower lever, of a ratchet wheel on said shaft and having peripheral teeth on one face, a sliding bar, connections between said sliding

bar and the check rower lever, a dog attached to the sliding bar and adapted to engage the peripheral teeth of the ratchet wheel, to propel it, a dog pivoted to the frame and adapted to engage the side teeth of the ratchet wheel to prevent retrograde movement thereof, and a plate or arm secured to the sliding bar and adapted to engage said side teeth of the ratchet wheel to prevent the same from being turned too far, substantially as set forth. 13th. In a corn planter, the combination with a frame, feed mechanism, a shaft to transmit motion to the feed mechanism, and a pivoted check rower lever, of a ratchet wheel on said shaft, a sliding bar, a dog pivoted to the sliding bar and engaging the ratchet wheel, a crank shaft mounted on the frame, a pitman between the crank shaft and the sliding bar, and a pitman between the crank shaft and the check rower lever, substantially as set forth. 14th. The combination with a frame, an axle, wheel on the axle, grain feeding mechanism, and a feed shaft, of a counter shaft made in sections, a clutch between said sections, gearing between one section of the shaft and one of the wheels, a cone of gears on the other section of the counter shaft, an adjustable gear on the feed shaft and a chain passing over said adjustable gear and one of the gears of the cone, substantially as set forth. 15th. In a planter, the combination with a frame, an axle, wheels on the axle, a seed hopper, feed mechanism and a feed shaft, of a plate secured to the frame and having arms provided with bearings, a two part counter shaft mounted in said bearings, a clutch between the sections of the counter shaft and adapted to yield when retrograde motion is transmitted to one section of the shaft, a spring bearing against one section of the clutch, a lever attached to said clutch, gearing between one section of the counter shaft and one of the wheels and gearing between the other section of the counter shaft and the feed shaft, substantially as set forth. 16th. In a planter, the combination with a hopper and feeding mechanism under the same, of a concave false bottom having a hole in its centre, in said hopper above the feed mechanism, substantially as set forth.

No. 64,763. Back Band and Trace Connector.

(*Bande et attache de traits.*)



George W. Eppes, Lawrenceville, Virginia, U.S.A., 6th November, 1899; 6 years. (Filed 26th September, 1899.)

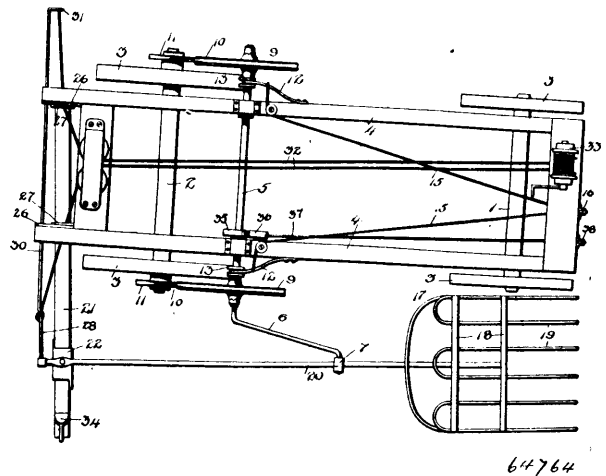
Claim.—A back band hook, comprising the body portion having its lower end curved outwardly and upwardly to form a trace support, which is formed with a slit or aperture, said body portion having its upper end bent outwardly and slightly downwardly and provided with teeth, a face plate, the lower end of which is bent outwardly, and thence downwardly to form a flange, which is provided with a tongue that extends through the slit or aperture in the trace support, the upper end of said face plate being bent inwardly and downwardly and formed with a row of teeth arranged in the plane below the teeth of the body portion, a bolt, and a thumb screw for connecting the face plate with the body portion, substantially as set forth.

No. 64,764. Hay Loader. (*Monte-foin.*)

James Wilson, Glen Cross, Manitoba, Canada, 6th November, 1899; 6 years. (Filed 14th April, 1899.)

Claim.—1st. The combination with a hay waggon, of a hay loader mounted thereon, means for imparting a vertical movement to said loader, means for adjustingly varying the lateral position of said

loader, and means for automatically tilting said loader at a predetermined point in its lateral movement. 2nd. The combination



with a hay waggon, of a hay loader mounted thereon, means for imparting a vertical movement to said loader, means for varying the lateral position of said loader, and means for automatically tilting said loader at a predetermined point in its lateral movement. 3rd. The combination with hay waggon, of a hay loader mounted thereon, means for imparting a vertical movement to said hay loader, means for varying the lateral position of said loader, and means for tilting said loader at a predetermined point in its lateral movement, substantially as described. 4th. The combination with a hay waggon, of a loader connected thereto, means for imparting a vertical movement to said loader, means for varying the lateral position of said loader, said loader being normally held in a horizontal plane, and means, for moving said loader from its horizontal plane at a predetermined period of its lateral movement, substantially as described. 5th. The combination with a hay waggon, of a track secured thereto, a carriage mounted on said track, means for imparting a lateral movement to said carriage, a hay loader operatively connected to said carriage, and means, operated by the movement of said waggon, for imparting a vertical movement to said loader, substantially as described. 6th. The combination with a hay waggon, of a track pivotally connected thereto, a carriage mounted on said track, said carriage having a lateral movement relative to said waggon body, means for adjustingly varying the position of said carriage on said track, a hay loader connected to said carriage and extending forwardly therefrom, and a support, operatively connected to the wheels of said waggon, and receiving a circular movement therefrom, said support being adapted to impart a vertical movement to said loader, substantially as described. 7th. The combination with a hay waggon, of a truck connected thereto, a carriage movable longitudinally of said track, means for imparting a longitudinal movement to said carriage, a hay loader connected to said carriage and extending forwardly therefrom, a shaft mounted in said waggon, said shaft having a support for said loader, means operated by the forward movement of the waggon for imparting a rotary movement to said shaft, whereby said loader will be given a vertical movement, and means for controlling the movement of said shaft, substantially as described. 8th. The combination with a hay waggon, of a track secured thereto, said track having a curved portion at one end thereof, a carriage movable longitudinally of said track, means for imparting a regulated longitudinal movement to said carriage, a hay loader operatively connected to said carriage and extending forwardly therefrom, a shaft mounted within said waggon, a support connected with said shaft, said support serving to regulate the vertical movement of said loader, means, operated by the forward movement of the waggon, for imparting a rotary movement to said shaft, said movement serving to move said loader vertically, and means for controlling the movement of said shaft, substantially as described.

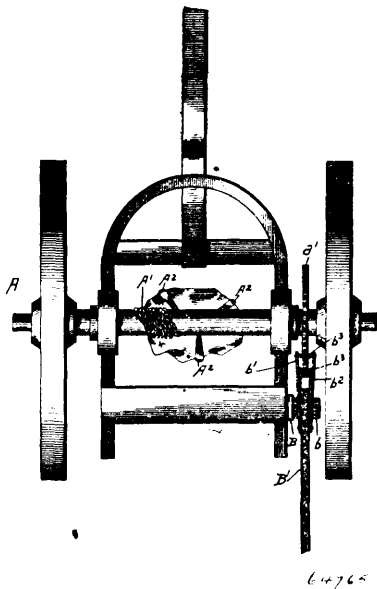
No. 64,765. Stone Removing Apparatus.

(*Appareil à enlever les pierres.*)

Joseph Victor Monfette, St. Sophie de Lévis, Quebec, Canada, 6th November, 1899; 6 years. (Filed 25th September, 1899.)

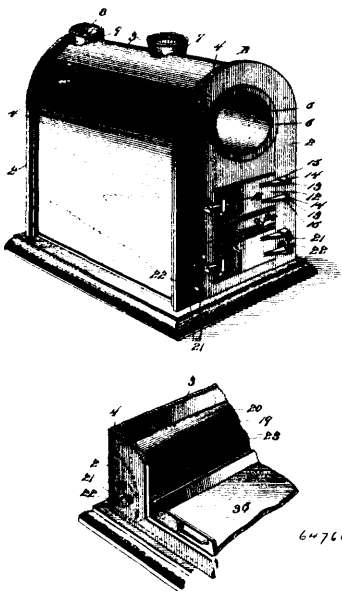
Claim.—1st. A mechanism for handling heavy objects, comprising a suitable support, an axle rotatably mounted thereon, an operating lever, a pawl and ratchet connecting said axle with said lever and a hoisting chain connected with said axle and adapted to be wound thereon, substantially as described. 2nd. A mechanism for handling heavy objects, comprising a suitable vehicle, a ratchet wheel fixed upon the axle of said vehicle, a lever pivoted to said vehicle, pawls pivoted to said lever and engaging said ratchet wheel, and a hoisting chain connected to said axle and adapted to be wound thereon by the operation of said lever, substantially as de-

scribed. 3rd. A mechanism for handling heavy objects, comprising a suitable support, an operating lever pivoted to said support, a



ratchet wheel fixed upon the axle of said vehicle, pawls pivoted to said lever, one on each side of the pivot point thereof and adapted to engage the said ratchet wheel, and a hoisting chain connecting with said axle, and adapted to be wound thereon by the operation of the said lever, substantially as described.

No. 64,766. Stove. (Poêle.)

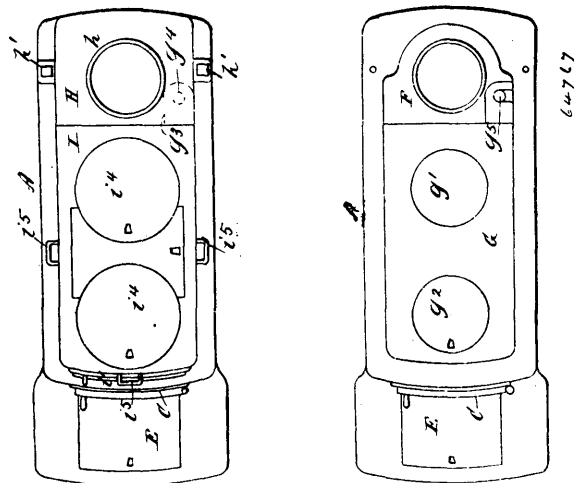


Hiram Q. Hood, Carthage, Missouri, U.S.A., 6th November, 1899; 6 years. (Filed 25th September, 1899.)

Claim.—1st. In a stove, the combination with a base and end plates supported thereby, of a continuous shell secured to the base and end pieces, an air drum passed through the enclosure of the shell and opening through the ends, a fire pot beneath the drum, an air chamber below and at each side of a vertical central plane of the fire pot, openings through the walls of said chambers and adapted to deliver air through and around the fire pot, and means for regulating the supply of air. 2nd. In a stove, the combination with a base having ends secured thereto, of a continuous shell fixed to the base and ends, an air drum passed through the enclosure of the shell and opening through the ends, flanges carried by the ends, a fire pot supported by said flanges and separated from the sides of the shell by interspaces, an air chamber at each side of the vertical central diameter of the fire pot and below said pot, openings in the walls of said chambers adapted to direct air to and around the fire pot and through said interspaces, and means for regulating the

supply of air. 3rd. In a stove, the combination with a base and ends supported thereby, of a continuous shell secured to said base and ends, an air drum passed through the enclosure of the shell and opening through the ends, flanges carried by the ends, a fire pot supported upon said flanges and separated from the shell by interspaces, an air chamber below the fire pot and at each side of a central vertical diameter thereof, openings in the walls of said chambers adapted to deliver air to and around the fire pot and through said interspaces, means for regulating the supply of air, and a deflector plate intermediate the fire pot and the air drum.

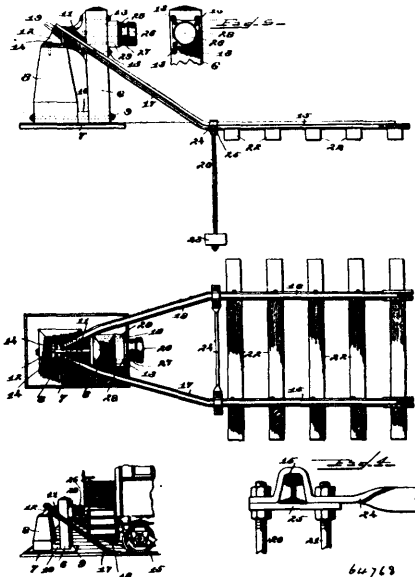
No. 64,767. Stove. (Poêle.)



Abbott Augustus Low, New York City, New York, U.S.A., 6th November, 1899; 6 years. (Filed 25th September, 1899.)

Claim.—In a box stove, the combination of the stove body A, formed with the smoke opening F, the cover f, for closing said smoke opening F, the pipe thimble plate H, rigidly attached to the stove body, the primary swinging top plate G, provided with holes g¹, g², and covers g³, the auxiliary flue plate I, upon the top plate G, fitting to the open side of the thimble plate H, and formed with openings i², i³, and damper i for admitting air to support combustion, and the covers i⁴, i⁵, the whole arranged and operating substantially in the manner and for the purpose described.

No. 64,768. Bumping Post for Railways. (Pièce de choc pour chemins de fer.)

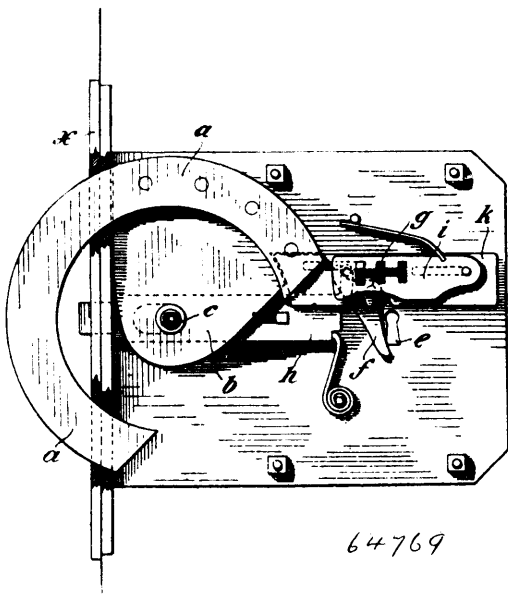


Elisha Winslow Ellis, Plymouth, Massachusetts, U.S.A., 6th November, 1899; 6 years. (Filed 23rd September, 1899.)

Claim.—1st. A bumping post for railways, consisting of an upright post adapted to receive the impact of a car, a block arranged back of said post and connected thereto, means for transmitting strain applied to said post to said block in a downward direction, said post and block being movable on their base, and braces con-

nected with the rails of the track and supporting said post, substantially as described. 2nd. A bumping post for railways, consisting of an upright post adapted to receive the impact of a car, a block arranged back of said post, means for transmitting strain applied to said post to said block in a downward direction, braces connected with the rails of the track and supporting said post, and anchoring devices extending into the earth for the rails of the track, substantially as described. 3rd. The combination of an upright post adapted to receive the impact of a car, a block arranged back of said post, a casting secured to the back side of said post near its upper end and resting upon the upper end of said block, said post and block being movable on their base, and braces connecting said casting with the rails of the track, substantially as described. 4th. The combination of an upright post, a block adapted to receive the impact of a car, a block arranged back of said post, a casting secured to the back side of said post near its upper end and resting upon the upper end of said block, braces connecting said casting with the rails of the track, and means connecting the lower ends of said post and block, substantially as described. 5th. The combination of an upright post, a block adapted to receive the impact of a car, a block arranged back of said post, a casting secured to the back side of said post near its upper end and resting upon the upper end of said block, braces connecting said casting with the rails of the track, means connecting the lower ends of said post and block, substantially as described. 6th. The combination of the rails of a track, a bumping post, the ends of the rails extending upward and connected to the upper portion of the bumping post for the purpose of bracing said post, anchor rods 20 21 arranged at opposite sides of each rail, and a bar passing over each rail and connected to the upper ends of said anchor rods, substantially as described. 7th. The combination of the rails of a track, a bumping post, the ends of the rails extending upward and connected to the upper portion of the bumping post for the purpose of bracing said post, anchor rods 20, 21 arranged at the opposite sides of each rail, and a bar passing over each rail and connected to the upper ends of said anchor rods, said bar extending from one rail to the other and serving as a tie-rod to prevent the rails from spreading, substantially as described. 8th. In a bumping post, the combination of an upright post, a block arranged back of said post, a casting secured to said post and resting upon said block, and a track having its rails inclined upward at their ends and secured to said casting, said post and block resting loosely on their base so as to be movable, substantially as described.

No. 64,769. Lock for Safes, etc. (Serrure pour coffres-fort.)



Georg Heinrich Steinforth, Bremen, Germany, 6th November, 1899; 6 years. (Filed 23rd September, 1899.)

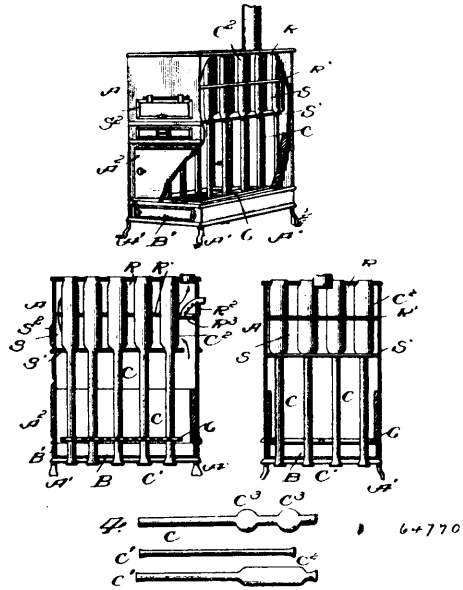
Claim.—The lock for safes and the like, consisting of a circular bolt *a*, secured in its position when locked by the bolt of another lock of any ordinary construction, substantially as described and as illustrated.

No. 64,770. Stove or Heater. (Poêle ou chauffeur.)

William W. Rossman, Detroit City, Minnesota, U.S.A., 6th November, 1899; 6 years. (Filed 26th September, 1899.)

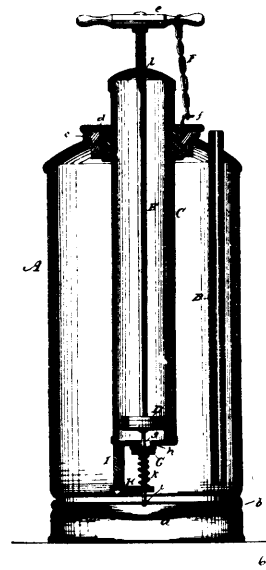
Claim.—1st. In a stove or heater of the character described, the combination of the fire-box and the combustion chambers R and S, and a tilting plate or portion R³ between the chambers R and S, of

air tubes or conduits leading from the outside, near the bottom of the stove or heater, and passing up through the fire-box and cham-



bers S and R, said tubes or conduits being enlarged in said chambers, whereby the products of combustion are retarded in their passage through said chambers, and the air in passing through the tubes is highly heated, as set forth. 2nd. The combination with the fire-box and the chambers R and S, of the air tubes passing through the ash-chamber, the fire box and the chambers R and S, said tubes or conduits being enlarged in the chambers S and R and having contracted outlets, whereby the cold air taken in at or near the bottom of the stove or heater is delivered into the room in a highly heated state, and a tilting portion R³ adapted to close the opening into the chamber S and pass the products of combustion directly to the chimney, as set forth. 3rd. In a stove or heater of the character described the combination of the fire box, the combustion chambers R and S, one above the other, the partition R¹ between the chambers, and tilting plate R³ hinged to the rear end of said plate or partition R¹ and adapted to be tilted to close the opening into the chamber S, and to open a direct passage from the fire-box to the chimney, as set forth.

No. 64,771. Spraying Machine. (Pulvérisateur.)

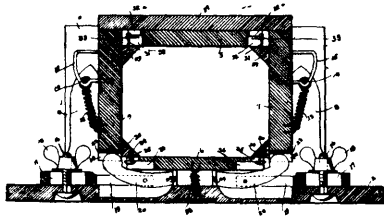
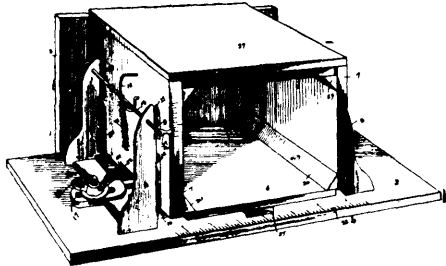


Mott B. Brooks, Rochester, New York, U.S.A., 6th November, 1899; 6 years. (Filed 19th September, 1899.)

Claim.—1st. A spraying device or machine, consisting of a suitable tank, a discharge pipe communicating with the interior thereof, a pump cylinder located in the tank, a check valve and opening at the bottom thereof, a piston operating within the cylinder, and

means for locking the piston stationary when not in operation, consisting of a flexible connection secured at one end to the handle of the piston at the opposite end adapted to engage a hook upon the upper end of the machine, substantially as and for the purpose set forth. 2nd. A spraying device or machine, consisting of a suitable tank, a discharge pipe communicating with the interior thereof, a pump cylinder located in the tank, a suitable piston adapted to work in the cylinder, an opening and valve seat at the lower end of the cylinder, an adjustable guide, a spring actuated valve and a valve stem extending through the guide, substantially as and for the purpose described.

No. 64,772. Cigar Bundler. (*Appareil à botteler les cigares.*)



64772

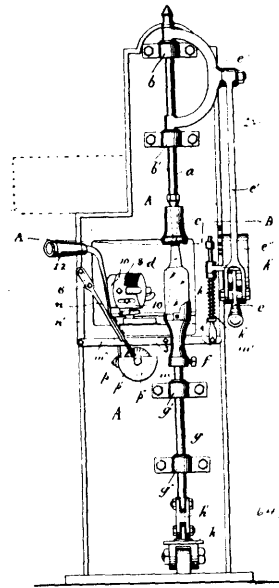
Duncan Albert Davidson, Kingston, Ontario, Canada, 6th November, 1899; 6 years. (Filed 30th January, 1899.)

Claim.—1st. A device of the class described, comprising a series of followers arranged to engage the sides of a bundle, and means for forcing the entire series of followers inward simultaneously when pressure is applied to one of them, substantially as described. 2nd. A device of the class described, comprising a bottom follower, side followers, a removable top follower, and means for forcing the entire series of followers inward simultaneously when pressure is applied to the top one, substantially as described. 3rd. A device of the class described, comprising a bottom follower, side followers, a top follower, corner strips or pieces slidably connected with top and bottom followers and projecting beyond the same and arranged to be engaged by the side followers when the same move inward, and means for moving all the followers inward, substantially as and for the purpose described. 4th. A device of the class described, comprising side followers, a bottom follower, a top follower, wedged shaped lugs or projections arranged to engage the side followers to force the same inward when they are moved downward, levers engaging the bottom follower and arranged to be operated by the downward movement of the side followers, and means for returning the side and bottom followers to their normal position, substantially as described. 5th. A device of the class described, comprising the top, bottom and side followers, uprights located at the outer faces of the side followers and provided with inclined edges or faces arranged to be engaged by the same, and bell crank levers engaging the bottom follower and arranged to be operated by the side followers, substantially as described. 6th. A device of the class described, comprising the followers arranged to engage the top, bottom and sides of a bundle, the uprights located at the outer faces of the side followers and having wedge shaped lugs for engaging the same, and the T shaped levers engaging the bottom follower and having bell crank shanks arranged to be operated by the side followers, substantially as described. 7th. A device of the class described, comprising followers arranged to engage the top, bottom and sides of a bundle, uprights provided with inclined edges engaging the side followers to force the same inward, and levers arranged to force the bottom upward when the sides are moved downward, substantially as described. 8th. A device of the class described, comprising followers arranged to engage the top, bottom and sides of a bundle, uprights provided with inclined edges engaging the side followers to force the same inward, levers arranged to force the bottom upward when the sides are moved downward, and springs connected with side and bottom followers to return the parts to their initial position, substantially as described. 9th. A device of the class described, comprising a base provided with sockets, followers arranged to engage the top, bottom and sides of a bundle, pins

depending from the bottom follower and fitting in the said sockets, wedge shaped devices engaging recesses of the side followers to force the latter inward, and connections between the side followers and the bottom follower, whereby the latter will be forced upward as the former move downward, substantially as described. 10th. In a device of the class described, comprising a supporting frame, brackets adjustably mounted on the supporting frame and provided with uprights and having inwardly extending arms arranged in pairs, followers arranged to engage the top, bottom and sides of a bundle, levers fulcrumed between the said arms, engaging the bottom follower and arranged to be operated by the side followers, rods connecting the uprights and located at the top thereof, hooks mounted on the side followers and engaging the rods to limit the upward movement thereof, and springs connected with the side and bottom followers to return the same to their normal position, measurement scales to regulate the width and thickness of the bundle, substantially as described.

No. 64,773. Bottle Corking and Labelling Machine.

(*Machine à boucher et étiquetter les bouteilles.*)



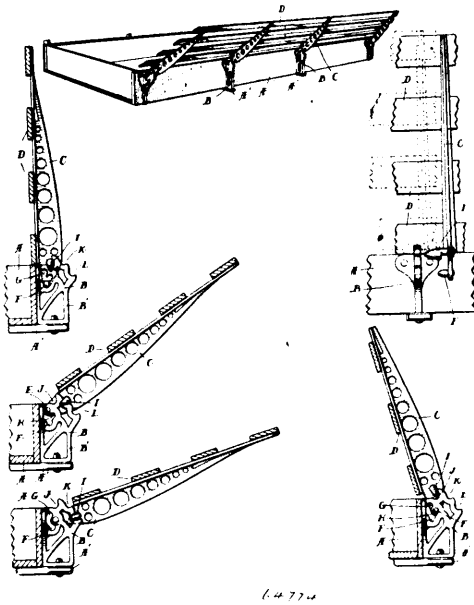
64773

George Bowen, Bolton, Lancaster, England, 6th November, 1899; 6 years. (Filed 21st January, 1899.)

Claim.—1st. In mechanism of the class described, the combination with a frame having a support designed to receive and hold a bottle, a plunger designed to force corks into said bottle, and an arm or lever designed to operate said plunger, of a pivotally mounted brush adapted to contact with said bottle, a lever connected thereto and having an arm designed to be engaged by said former arm or lever, a label carrier, and means for causing said label carrier to contact with said bottle, substantially as set forth. 2nd. In mechanism of the class described, the combination with a frame having a support designed to receive and hold a bottle, a plunger designed to force corks into said bottle, and an arm or lever designed to operate said plunger, of a pivotally mounted brush adapted to contact with said bottle, a lever connected thereto having a spring pressed vertical arm provided with a lateral projection designed to engage the operating lever of said plunger, a label carrier, and means for causing said label carrier to contact with said bottle, substantially as set forth. 3rd. In mechanism of the class described, the combination with a support designed to receive and hold a bottle, a plunger designed to force corks into said bottle, and an arm or lever designed to operate said plunger, of a pivotally mounted brush adapted to contact with said bottle, a lever connected thereto and operated by said former arm or lever, a receptacle for an adhesive substance, a grooved or furrowed roller mounted in said receptacle and designed to contact with said brush, a label carrier, and means for causing said label carrier to contact with said bottle, substantially as set forth. 4th. The herein described label affixing mechanism, comprising a frame having a support designed to receive and hold a bottle, means for applying paste to said bottle, a tubular holder having a forward tray-like portion designed to carry the labels, a carrier for said holder comprising a block or member fitting within the tubular portion thereof and supporting the same, and means for causing said carrier to move horizontally into engagement with said bottle, whereby the former is caused to gradually move backward upon said block or member, substantially as set forth. 5th. The herein described label affixing mechanism, comprising a frame having a support designed to receive and hold a bottle, means for applying paste to said bottle, a tubular holder designed to carry the labels to

be applied to said bottle and provided with forwardly projecting spring retaining arms, a carrier for said holder, a lever pivotted to said frame and designed to force said holder against said bottle, whereby said holder is moved slightly backward upon said carrier, and means for increasing the speed of said carrier as it approaches said bottle, substantially as set forth. 6th. The herein described label affixing mechanism, comprising a frame having a support designed to receive and hold a bottle, means for applying paste to said bottle, a tubular holder designed to carry the labels to be applied to said bottle, a carrier for said holder having a member fitting within the latter, an arm or member carried by said frame and having a cam groove therein in which said carrier is mounted, and a lever designed to move said carrier, whereby said holder is caused to contact with said bottle and simultaneously move slightly backward upon said carrier, substantially as set forth. 7th. The herein described label affixing mechanism, comprising a frame having a support designed to receive and hold a bottle, means for applying paste to said bottle, a tubular holder designed to carry the labels to be applied to said bottle, a carrier for said holder having a member fitting within the latter, an arm or member carried by said frame and having a curved cam groove therein, a lever pivoted to said frame and having pivotal connection with an arm of said carrier, and a lug or projection secured to said latter arm and fitting in said cam groove, substantially as set forth.

No. 64,774. Wagon Rack. (Chèvre de wagon.)



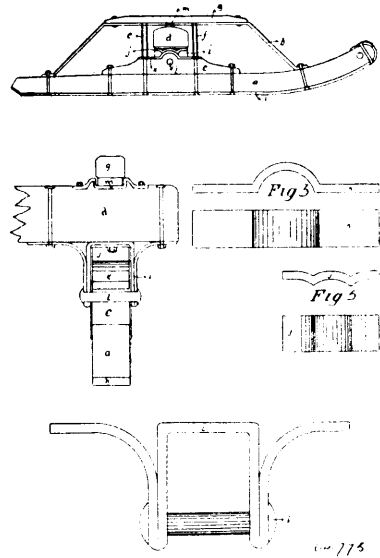
Thomas Blair True, Rives Junction, Michigan, U.S.A., 6th November, 1899; 6 years. (Filed 12th July, 1899.)

Claim.—1st. In combination with a wagon box and side board, an iron having an opening provided with a series of marginal recesses, said iron also having a corresponding series of recesses in its outer edge, and an arm having a lug to engage one series of said recesses, and a hook to engage the other series of said recesses, substantially as described. 2nd. In combination with a wagon box and side boards, irons attached to the wagon box, each iron having an internal opening provided with a series of marginal recesses and a corresponding series of recesses in its outer edge, and arms attached to the side board, each arm provided with a lug to engage the recesses of the opening and a hook to engage the recesses in the edge of the iron, said hook also having an inclined end and a shoulder, substantially as described. 3rd. As an article of manufacture, an iron adapted to attach to the side of a wagon box and having an opening provided with a series of marginal recesses, said iron also having a corresponding series of recesses in its edge, and an arm having a lug to engage one series of said recesses and a hook to engage the other series of said recesses, substantially as described. 4th. As an article of manufacture, an iron having a rectangular extension and adapted to be attached to the side and transverse strip of a wagon box, and also having a series of concave inner recesses and a corresponding series of concave outer recesses, and an arm having a lug to engage said inner recesses and a hook having an inclined end and adapted to engage said outer recesses, substantially as described.

No. 64,775. Bob Sleigh. (Traineau-jumEAU.)

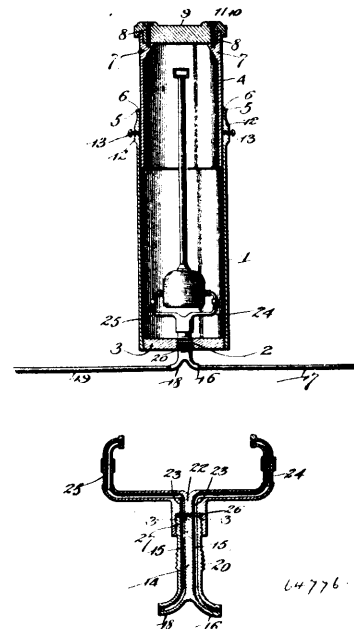
William Ferguson, Owen Sound, Ontario, Canada, 6th November, 1899; 6 years. (Filed 2nd February, 1899.)

Claim.—The combination in a bob sleigh of frame *d* with braces *e, f, f*, a movable bench *d* with movable steel knee *i* revolving



around steel rivet *l*, on steel bearings *j* and *k*, substantially as and for the purpose hereinbefore set forth.

No. 64,776. Meter Box. (Boîte de métr.)

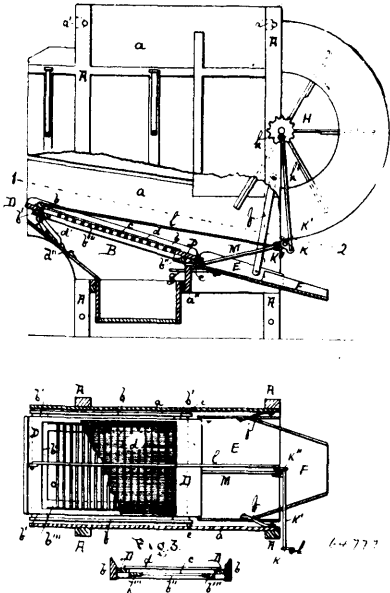


Harry V. Estill, Moberly, Missouri, U.S.A., 6th November, 1899; 6 years. (Filed 27th June, 1899.)

Claim.—1st. In a device of the character described, a meter casing consisting of an upper and lower telescopic section, means for binding the sections together, a cover for the upper sections, a double pipe threaded in the bottom of the casing, branches connecting the double pipe and meter, and supply and service pipes, substantially as described. 2nd. In a device of the character described, a meter casing consisting of an upper and lower telescopic section, means for securing the sections together, the upper end of the lower section being flared and provided with calking, substantially as described. 3rd. In a device of the character described, a casing comprising two telescopic sections, the lower section having a bottom provided with a central threaded aperture, a double pipe threaded in the bottom and projecting within the casing, a meter connection, a gasket fitting in an elliptical opening of the meter connection and having holes adapted to connect with the double pipe and meter connection, substantially as described. 4th. In combination with a double pipe for a meter connection, a cap adapted to form a connection between the passages of the pipe when the matter is removed, substantially

as described. 5th. In combination, an upper and lower telescopic section forming a meter casing, the lower section having a flared upper end, a calking lying between the flared end and the upper section, and a cover for the casing fitted to exclude water, substantially as described. 6th. In combination with a meter, a double pipe, a meter connection fitting on the double pipe and having branches communicating with the opposite sides of the meter, substantially as described. 7th. In combination with a meter and its connections, a double pipe to which the meter connection is threaded, substantially as described.

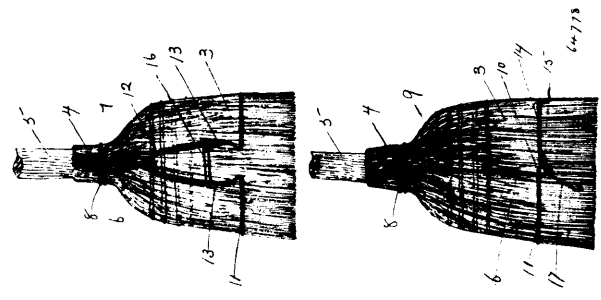
No. 64,777. Fanning Mill. (*Tarare cribleur.*)



The M. Campbell Fanning Mill Company, Chatham, Ontario, Canada, 7th November, 1899; 6 years. (Filed 14th July, 1899.)

Claim.—1st. The combination in a fanning mill of the lower stationary shoe B, having the stationary scrubbing bars c, communicating with the under side of the sieve d, of the shaking screen D, all substantially as and for the purpose specified. 2nd. In a fanning mill the combination of a stationary shoe B, having the hinged engagement on the pins e e, and the dog d', engaging with the ratchet plate d'', substantially as and for the purposes hereinbefore set forth. 3rd. In a fanning mill the combination of the stationary shoe B, engaging the shaking screen D, and the shaking grain board E, which is suspended on the strap hangers f, and supported on the guide pin g, which engages in a suitable hole in the girt a'', substantially as shown and for the purpose specified. 4th. The combination in a fanning mill of the shaking screen D, the grain board E, being operated in conjunction with the shaking rods l and m, that engage with the arm k'', the rocking shaft k', the arm k, and the connecting rod h', engaging with the crank pin h, on the sprocket H, all substantially as set forth and specified.

No. 64,778. Broom or Brush Protector.
(*Protecteur de balai et brosse.*)

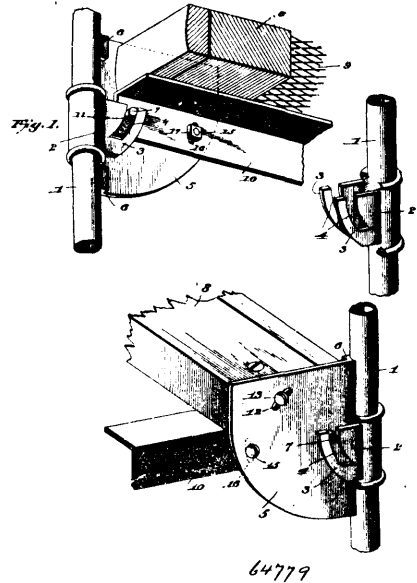


The Canadian Broom Protector Company, assignee of Samuel L. Fader, all of Bayside, Nova Scotia, Canada, 7th November, 1899; 6 years. (Filed 21st September, 1899.)

Claim.—1st. A protector for brooms or similar brushes comprising devices secured about the straws or brush portion proper thereof, and connected with the handle thereof, substantially as shown and described. 2nd. A protector for brooms and similar brushes comprising devices secured about the straws or brush portion thereof,

and connected with the handle thereof and devices as means for adjusting the tensions of said devices, substantially as shown and described. 3rd. A protector for brooms and similar brushes comprising a single length of spring wire (size 14 or 16 gauge) coiled once around the handle and about the straws or brush portion thereof, and devices for adjusting the tension of the part of said wire which is coiled about the straws, substantially as described. 4th. A protector for brooms and similar brushes comprising a single length of spring wire (size 14 or 16 gauge) coiled about the handle forming an expanding loop and formed into 2 connected loops which pass about the edges of the straws or brush portion thereof, said 2 loops being also connected by a third loop upon which is mounted an adjustable clasp and which is connected with that portion of wire which is coiled about the handle, also a hook of which is connected to 2 loops and passes through brush portion of broom and hooks over adjustable clasp which is mounted on a third loop when pulled down in its place at the bottom of serrations upon third loop, substantially as shown and described.

No. 64,779. Iron Bedstead. (*Lit en fer.*)

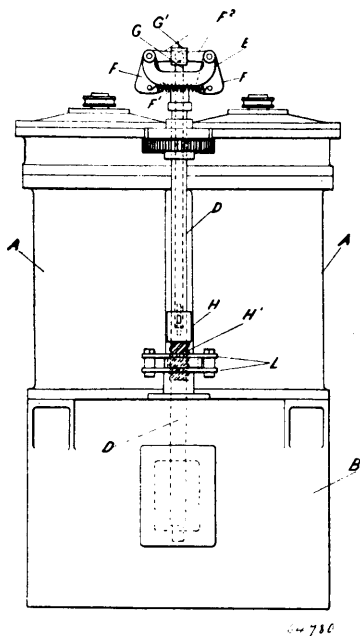


George Elmer Pack and Amos Phillippi, both of Philadelphia, Pennsylvania, U.S.A., 7th November, 1899; 6 years. (Filed 21st September, 1899.)

Claim.—1st. The combination of the bed posts provided with outwardly projecting brackets, of a pair of side rails, adjustable plates on the ends of the side rails and pin and slot connections between the said plates and the said brackets, the slots being curved or inclined. 2nd. The combination in an iron or metal bed, of the bed posts, a pair of terminals extending parallel from each of the same and provided in their upper edges with slots directed towards said posts, of opposite longitudinal side rails adapted to take between the terminals, adjustable plates in each of the side rails and studs extending from opposite sides of the said plates and adapted to engage the slots, these parts being so relatively located as to cause the ends of the side rails and plates to be drawn toward the posts when the studs are forced into the slots. 3rd. The combination in an iron or metal bed, of the posts, a bracket terminal extending from each of the same and having a slot, of longitudinal side rails, a connecting plate at each end of the same, said plate being adjustably connected to the side rails and each plate having a laterally disposed stud for engaging the slot of the adjacent bracket. 4th. The combination in an iron or metal bed, of the posts, a bracket extending from each of the same and provided with an inwardly disposed slot, of opposite longitudinal side rails, a connecting plate pivotally connected to each end of each of the side rails, means for securing the plates at any point of their adjustment, and studs extending from opposite sides of the plate and adapted to engage the slots of the bracket and so relatively arranged with the latter and the edge of the plate as to draw said edge against the post when forced into the slots. 5th. The combination in an iron or metal bed, of the posts, a bracket extending from each of the same and provided in its upper side with an inwardly disposed slot, of the side rails, the connecting plates having studs extending inwardly therefrom through the side rails, by which they are pivotally connected, and inwardly into the slots, concave bearing studs located at the outer edges of the plates, and means for securing the side rails and plates in their pivotal adjustment. 6th. In an iron or metal bed, the combination with the corner posts, each provided with an inwardly disposed bracket, of the side rails, plates pivotally connected to the side rails and provided with means for

engaging the brackets, and means for securing the plates and side rails in their pivotal adjustment. 7th. In an iron or metal bed, the combination with the corner posts and brackets extending therefrom, of side rails having their vertical portions provided with an opening and in advance of the same with a slot, connecting plates at each end of each side rail, a stud extending inwardly from each connecting plate through the opening in the side rail and engaging the bracket adjacent thereto, and an adjusting bolt passed through the said plate and through the slot of the side rail. 8th. In an iron or metal bed, the combination with the bed posts and the parallel brackets extending from each of the same and provided with slots inwardly curved towards the posts, of side rails formed of angle iron and provided near each end with a hole and beyond the same with a slot, connecting plates located at each end of each side rail and having opposite studs projecting therefrom and engaging the slots of the brackets and having holes agreeing with the slots in the side rails, and above the same with curved slots, adjusting bolts passed through the lower holes in the connecting plates and the slots in the side rails, cross pieces connecting the side rails, and screws passed through the upper holes of the connecting plates and into the ends of the said side rails.

No. 64,780. Explosive Engine. (Machine explosive.)

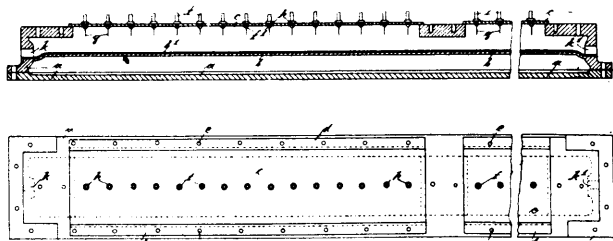


Charles M. Johnson, London, England, 7th November, 1899; 6 years. (Filed 27th October, 1898.)

Claim.—1st. In an explosive engine, a pivoted lever, an igniting device operated by said lever, a rod hinged to said lever, a hollow spindle, means for rotating said spindle, governor mechanism carried by said spindle, a shaft mounted in said spindle and connected to said governor mechanism, a sleeve having a screw threaded extension movable on said spindle and connected to said shaft, an eccentric carried by said spindle and engaged by said screw threaded extension of the sleeve, and means for limiting the movement of said eccentric lengthways of said spindle, as set forth. 2nd. In an explosive engine, the electrodes of an electric circuit, a pivoted lever carrying one of said electrodes, a rod hinged to said lever, a rotatable eccentric connected to said rod, means for limiting the movement of said eccentric lengthways of its axle, a screw engaging said eccentric for moving the same relatively to the rod, and a governor for moving said screw, as set forth. 3rd. In an explosive engine, two chambers to contain the explosive compound, electrodes of an electric circuit for each of said chambers, an eccentric connected to an electrode of each circuit for closing and opening one circuit and then the other, means for rotating said eccentric, a screw connected to said eccentric for adjusting the same, and a governor connected to said screw for moving the same, as set forth. 4th. In an explosive engine, two chambers to contain the explosive compound, electrodes of an electric circuit for each of said chambers, a pivoted lever carrying an electrode of each circuit, and means for vibrating said lever for closing and opening one of said circuits and the other, consisting of a rotatable eccentric, a rod connecting said lever to said eccentric, means for limiting the movement of said eccentric lengthways of its axis, a screw engaging said eccentric to adjust the same, and a governor connected to said screw, as set forth. 5th. In an explosive engine, two chambers to contain the explosive compound, electrodes of an electric circuit for each of said chambers, a pivoted lever carrying an electrode of each circuit, a rod hinged to said lever, a hollow spindle, means for rotating said spindle, governor mechanism

carried by said spindle, a shaft mounted in said spindle and connected to said governor mechanism, a sleeve having a screw threaded extension movable on said spindle and connected to said shaft, an eccentric carried on said spindle and engaged by said screw threaded extension of the sleeve, and means for limiting the movement of said eccentric lengthways of its spindle, as set forth.

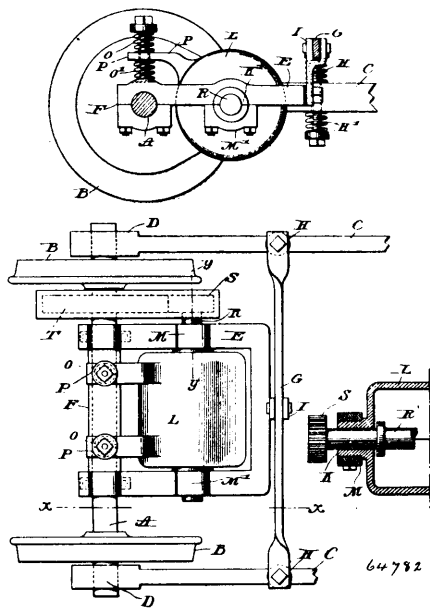
No. 64,781. Ozone Generating Apparatus. (Appareil générateur à ozone.)



Henry Tindel, Amsterdam, Holland, 7th November, 1899; 18 years. (Filed 17th April, 1899.)

Claim.—In an apparatus for the generation of ozone by means of dark electric discharges acting upon gas mixtures or gassy compounds, the discharging pole *b*, having a glass plate *c*, simultaneously serving as carrier for the semicircular metal discs *d*, said metal discs being arranged concentrically to the channel *b*, and constituting the second discharging pole, the said channel *b*, with the glass plate *c*, forming the conduit for the gas to be ozonized, all substantially as set forth.

No. 64,782. Means for Suspending Motors. (Moyen de suspension des moteurs.)

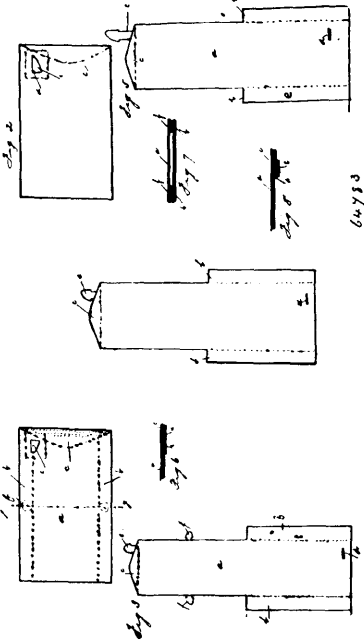


Sydney Howe Short, Cleveland, Ohio, U.S.A., 7th November, 1899; 6 years. (Filed 17th November, 1898.)

Claim.—1st. In an electrically propelled vehicle, the combination of a driven axle, a supporting frame at one end journaled thereon, and at the other spring supported from an independent support, a motor having trunnions journaled in said frame and springs limiting the movement of said motor relatively to said supporting frame, substantially as described. 2nd. In an electrically propelled vehicle, the combination of a driven axle, a supporting frame at one end journaled thereon and at the other spring supported from the frame of the vehicle, and a motor having trunnions journaled in said supporting frame and springs limiting the movement of the motor relatively to said supporting frame, substantially as described. 3rd. In an electrically propelled vehicle, the combination of a driven axle, a supporting frame at one end journaled on said axle and having its end remote from the axle supported from the frame of the vehicle, a spring interposed between said remote end and the vehicle frame, a motor having trunnions journaled in said supporting frame and having rearward projections, and springs interposed between said rearward projections and said supporting frame, sub-

stantially as described. 4th. In a wheeled vehicle, in combination, a frame journaled upon the driven axle and spring supported at a distance therefrom from an independent support, a motor casing attached thereto, and supporting the armature, said armature connected by gearing to the driven axle, said frame being located with reference to said motor so that the same can be removed as a whole from one side of said frame, substantially as described.

No. 64,783. Method of Manufacturing Envelopes.
(*Méthode de fabrication des enveloppes.*)



Charles Magnuson, St. John, New Brunswick, Canada, 7th November, 1899; 6 years. (Filed 25th January, 1899.)

Claim.—1st. An envelope, comprising a blank adapted to be folded upon itself, extensions formed on one half of said blank, said extensions extending laterally on opposite sides of said end or half of said blank, said extensions being adapted to be secured to the portion of said envelope doubled upon itself, an opening formed in said blank at one end thereof, a flap formed at the opposite end of said blank, said flap being adapted to be secured between the end portions of said blank, and a tab secured to said flap, said tab being adapted to pass through said opening and be secured to the face of said envelope, said tab being also covered by the postage stamp affixed to said envelope, substantially as described, and the same without the said tab. 2nd. An envelope, comprising a blank adapted to be folded upon itself, extensions formed on one half of said blank, said extensions being adapted to be folded upon said blank between the folded portions of said blank, openings formed within said extensions, and tabs secured to the sides of the opposite end of said blank, said tabs being adapted to pass through said openings and adapted to be secured to said extensions when said envelope is in its closed position, substantially as described, and the same without the said tab.

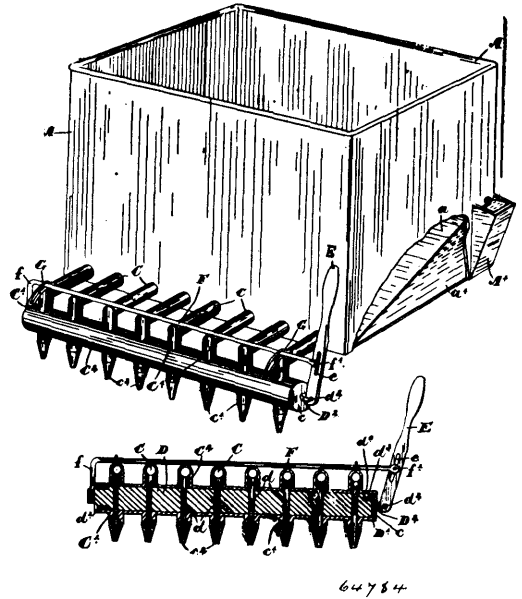
No. 64,784. Bottle Filling Machine.

(*Machine à remplir les bouteilles.*)

William Murchison, Toronto, Ontario, Canada, 7th November, 1899; 6 years. (Filed 8th February, 1899.)

Claim.—1st. In a bottle filling machine, in combination a tank, a series of faucets having independent connections with the tank, and arranged along the full length of the same, a single tube extending transversely of the faucets and forming an intermediate portion thereof, and a valve arranged in said tube and means for rotating or sliding said valve in said tube, substantially as described. 2nd. In a bottle filling machine, the combination with the tank and row of faucets, of the tube attached to or forming part of the depending portion of the faucets, the bar extending therethrough and a handle pivotally connected to the bar, a rod provided with a forked end and having a pin extending through a slot in the handle, and the opposite end secured to the opposite end of the bar, as and for the purpose specified. 3rd. In a bottle filling machine, the combination with the tank and row of faucets, of the tube attached to or forming part of the depending portion of the faucets, the bar extending therethrough, a handle pivotally connected to the bar, a rod provided with a forked end having a pin extending through the slot in the handle, and the opposite end secured to the opposite end of the bar, and the guiding brackets for the rod, as and for the purpose

specified. 4th. The combination with a series of faucets, the tube attached to or forming part of the depending portion thereof, the



bar extending through the tube and provided with a series of holes corresponding in size to the orifices of the faucets, the plate located at the inner end of the tube, and provided with a pin extending into a hole in the bar and a fork, the handle pivoted in such fork and the rod connecting the handle to the opposite end of the bar, as and for the purpose specified.

No. 64,785. Lightning Rod. (*Paratonnerre.*)



Samuel O. Greening, Hamilton, Ontario, Canada, 7th November, 1899; 6 years. (Filed 13th February, 1899.)

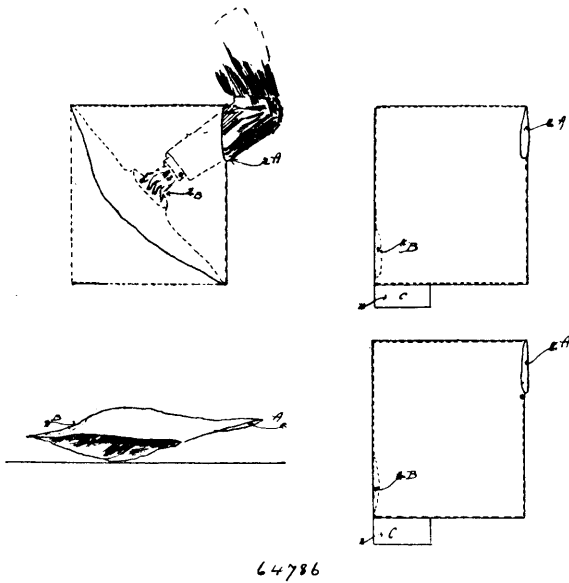
Claim.—A lightning rod consisting of a central steel wire core, a number of suitable metallic wires, with continuous and jointless sheet copper coverings around said wires, said wires with their said coverings twisted continuously together around and contiguous with said core to fasten said copper coverings around and between said twisted wires to form a continuous jointless rod or strand, as set forth.

No. 64,786. Double Sack for Washing Delicate Fabrics.
(*Sac double pour laver les étoffes.*)

Henry Joseph Nicholls, Hamilton, Ontario, Canada, 7th November, 1899; 6 years. (Filed 9th March, 1899.)

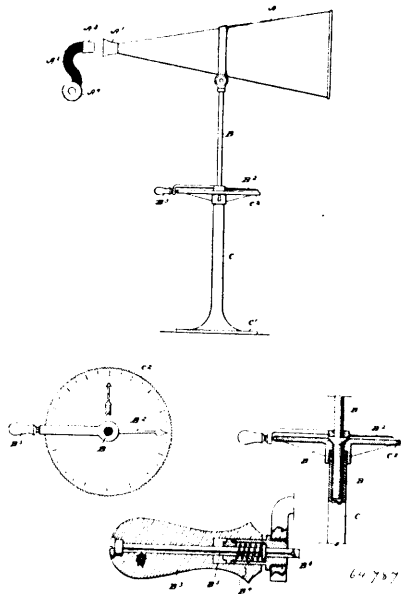
Claim.—A double washing sack consisting of an outer and an inner sack each provided with an opening, said sacks being attached

to each other around their edges and arranged one within the other, so that the opening in each sack is covered by the outer sack, said



openings being adapted to be brought near each other for the insertion and removal of the articles to be washed, substantially as shown and described.

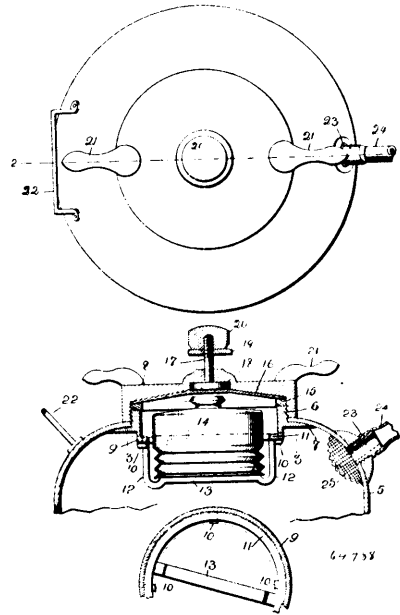
No. 64,787. Sound Indicator. (*Indicateur du son.*)



Colin Salmond, San Francisco, California, U.S.A., 7th November, 1899; 6 years. (Filed 15th October, 1898.)

Claim.—1st. A sound indicator, comprising a hollow standard C, a graduated disc C² secured upon the end thereof, a shaft B passing through an opening in the disc and entering the standard C, said shaft being rotatable in said disc and standard, a sound receiving instrument A mounted upon said shaft, and a member having an opening therein through which the shaft passes, said member being fixed to the shaft to turn therewith and having upon one end a pointer B² co-operating with the disc and upon its other end a handle B³ for operating the shaft B, substantially as described. 2nd. In a sound indicator, a trumpet like sound receiving and transmitting member A provided with a mouthpiece A¹, an ear piece A², a flexible tube A² upon said ear piece, and a tapering plug A³ upon said tube adapted to detachably fit the mouthpiece of the trumpet like member, substantially as described.

No. 64,788. Fire Extinguisher. (*Extincteur d'incendie.*)

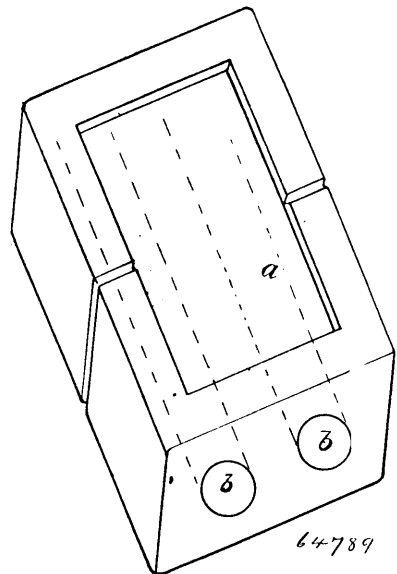


William H. Robinson, St. Louis, Missouri, U.S.A., 7th November, 1899; 6 years. (Filed 11th March, 1899.)

Claim.—A fire extinguisher, constructed with a suitable tank, a ring located in the upper end of said tank, a flange integral with and projecting downwardly from said ring, integral lugs projecting toward one another from the under side of said flange, a removable ring resting upon said lugs, arms integral with and extending downwardly from said last-mentioned ring, a bar connecting the lower end of said downwardly pending arms, a cap located upon the first-mentioned ring for closing the tank, a yielding plate carried by the under side of the cap, a bolt operating through said cap above said plate, and a bottle sustained by the transverse bar that connects the downwardly pending arms, substantially as specified.

No. 64,789. Laundry Compound.

(*Composé pour blanchissage.*)

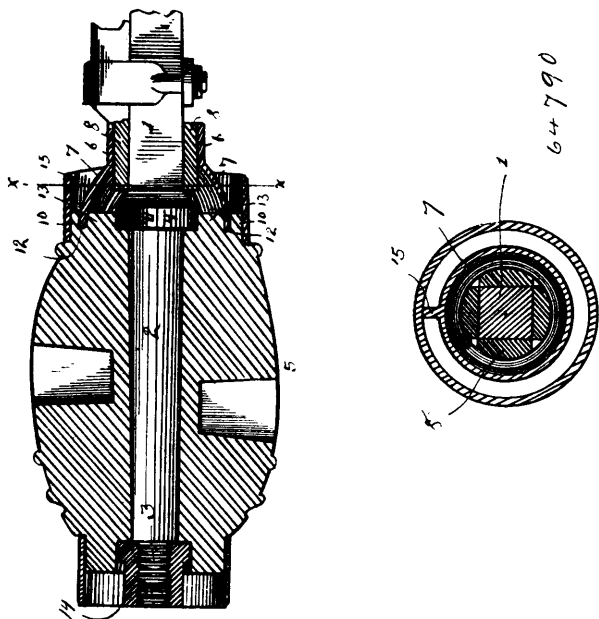


Lemuel B. Felcher, Peterborough, Ontario, Canada, 7th November, 1899; 6 years. (Filed 26th May, 1899.)

Claim.—The art or method of combining improved miracle washing compound or any other non-amalgamating compound with laundry soap, by moulding soap with any number of cavities passing through the same, circular square, octagonal or other shape, and filling the same with the compound after the soap has set, substantially as described.

No. 64,790. Vehicle Sand Band.

(*Garde-sable pour véhicules.*)

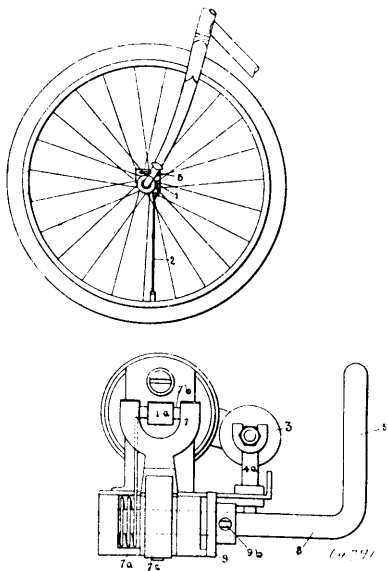


Augustus Lachapelle, Hicksville, Ohio, U.S.A., 7th November, 1899; 6 years. (Filed 22nd June, 1899.)

Claim.—1st. The combination with a vehicle axle provided with a shoulder, of a sand band comprising a ring fitting upon the axle, and an integral annular flaring collar provided on its outer side with a radially projecting scraper, and a hub, the inner end of which is provided with a central recess for said shoulder, an annular recess for the edge of the collar and scraper, and a flange to overlap said collar. 2nd. The combination with a vehicle axle provided with an annular shoulder, of a sand band comprising a ring fitting upon said axle on the inner side of said shoulder and an integral flaring collar, provided with a wing or scraper, keys for securing said ring upon the axle, and a hub the inner end of which is provided with a central recess to receive said shoulder, an annular recess to receive the edge of the collar and a flange projecting inwardly over the sand band.

No. 64,791. Pneumatic Tire Inflator.

(*Appareil pneumatique à gonfler les bandages.*)

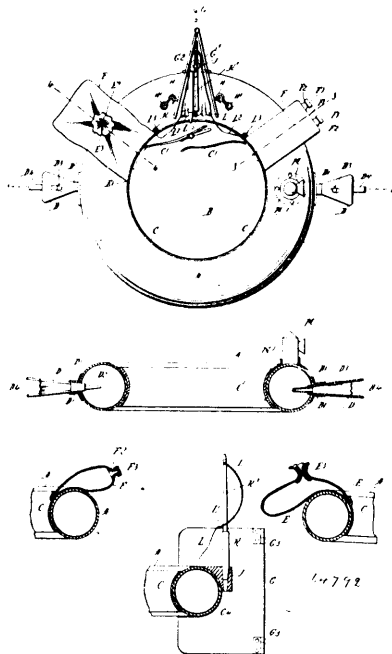


Albert Fisher, Bay City, Michigan, U.S.A., 7th November, 1899; 6 years. (Filed 16th June, 1899.)

Claim.—1st. In an automatic tire inflator for vehicle wheels, the combination of an air pump fixed to the hub of the wheel and rota-

table therewith, a radially extending tube connecting the air pump and the tire, of a pressure cylinder containing a plunger which is pressed downward by an adjustable pressure regulating spring, and an expansible air cell below the plunger and communicating with the tire, of a pivoted lever supported by the air pump cylinder and adapted to operate the air pump piston, a second lever for imparting motion to the first lever, a wiper attached to the frame of the vehicle and arranged to engage the second lever, and means, substantially as described, for retaining the second lever in inoperative position when the pressure of air in the pressure cylinder overcomes the resistance of the pressure regulating spring, for the purpose described. 2nd. In an automatic inflator for the vehicle tires, the combination with an air pump attached to the hub of the vehicle and communicating with the tire, said pump being adapted to be operated by a lever, of a wiper attached to the vehicle frame and adapted to engage the pump lever, a pressure chamber communicating with the tire, said chamber having a spring pressed piston, a collar mounted on the air pump lever and having one or more notches in its periphery, a movable spring pressed bolt adapted to engage said notches and to thereby hold said lever from engagement with the wiper, a projecting hook fixed to said bolt, a horizontal arm carried by the rod of the spring pressed piston and adapted to engage said hook, a bell crank lever adapted to engage a notch in said spring pressed bolt, an upwardly projecting arm carried by the said piston rod for operating the bell crank lever, substantially as described. 3rd. In combination with an automatic tire inflator a pressure regulating chamber comprising a cylinder, a spring pressed plunger within the cylinder, and a flexible air tight sack below said plunger, said sack being in communication with the tire.

No. 64,792. Life Preserver. (*Appareil de sauvetage.*)



Katharin Eliza Landau, New York City, New York, U.S.A., 7th November, 1899; 6 years. (Filed 9th August, 1899.)

Claim.—1st. A pneumatic life preserver, comprising an annular tubular waterproof body, means for inflating the same attached thereto and means consisting of vertical wings or plates for deflecting the waves from the said life preserver, substantially as shown and described. 2nd. A pneumatic life preserver, comprising an annular tubular waterproof body, bellows approximately diametrically opposite, connected with said body and communicating with the interior thereof, a line connecting them dividing the said body into approximately two equal segmental parts, means for securing said life preserver about the body, consisting of tapes terminating on one side of said diametrically connecting line and on the same side of said line, a food receptacle, a liquid receptacle and means for deflecting the waves from the face and body of the wearer of the life preserver, substantially as shown and described. 3rd. The combination with a life preserver, constructed as herein described, of vertically projecting wings arranged to deflect the waves, substantially as shown and described. 4th. A pneumatic life preserver, comprising an annular tubular waterproof body, means for inflating the same attached thereto, and means consisting of vertical hinged wings extending below and above said life preserver for deflecting the waves from the said life preserver, substantially as shown and described. 5th. The combination with a life preserver, provided with a tubular body portion, of a wave deflector comprising two hinged plates, the free edges of which are cut away to fit said body

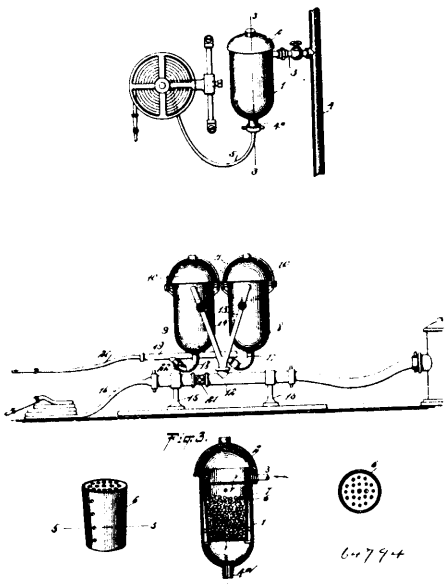
portion, and devices secured to said body portion and said plates for removably attaching said wave deflector to said body portion, substantially as shown and described. 6th. The combination with a life preserver of the class described, provided with a body portion having a socket piece, of a collapsible mast adapted to fit said socket piece, a triangular sail secured at the upper corner to said mast, the lower corners being provided with sheets or cords, and devices secured to said life preserver, and to which said cords are adapted to be secured, substantially as shown and described.

No. 61,793. Disinfecting Composition.
(*Composition désinfectante.*)

James W. Sallade, Pottsville, Pennsylvania, U.S.A., 7th November, 1899; 6 years. (Filed 3rd May, 1899.)

Claim.—1st. The herein described disinfecting and detergent composition consisting of Labarraque's solution of chlorinated soda, bichlorate of soda and ammonia in substantially the proportions specified. 2nd. The process of making a detergent and disinfecting solution which consists in mixing a solution of borax and ammonia finally adding Labarraque's solution of chlorinated soda, substantially as described.

No. 61,794. Chemical Fire Extinguisher.
(*Extincteur d'incendie chimique.*)



Abram Harvey Van Riper and Patrick Francis Guthrie, both of Nutley, New Jersey, U.S.A., 7th November, 1899; 6 years. (Filed 15th April, 1899.)

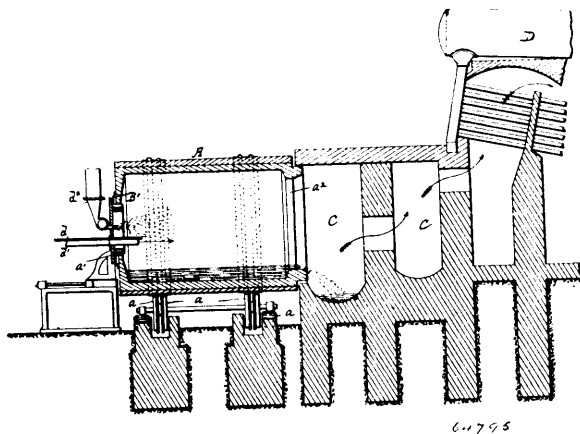
Claim.—1st. A fire extinguishing apparatus, comprising a cylinder adapted for connection with a water supply, a shell removably placed in said cylinder, the said shell being tapered throughout its entire length and provided with perforations in its sides and perforations in its top and bottom, the bottom perforations being smaller than those at the top, whereby the water flowing through the shell will be regulated or retarded, means for centreing said shell in the cylinder, and a removable cap for the cylinder, substantially as specified. 2nd. In a fire extinguishing apparatus, the combination with a water supply pipe adapted for connection with a hydrant and also for connection with a hose, of a battery of cylinders, each cylinder having connection with said supply pipe, the said connections being each provided with a valve, a valve in the supply pipe, a discharge pipe for the cylinders, a pipe leading from each cylinder into said discharge pipe, and an automatic valve in each of the said connecting pipes, the said supply pipe and discharge pipes being independent, one from the other, whereby by hose connections, water may be discharged from both simultaneously in different directions, substantially as specified.

No. 61,795. Apparatus for Treating the Waste Liquors from Wood Pulp and Utilizing them as Fuel.
(*Appareil pour traiter les rebuts de pulpe et les utiliser comme combustible.*)

Lauritz J. Dorenfeldt, Reindürkheim on the Rhine, Germany, 7th November, 1899; 6 years. (Filed 1st April, 1899.)

Claim. An apparatus for burning the concentrated waste liquors of sulfite wood pulp and other cellulose mills, which consists of a rotary furnace provided with an opening in its front wall, a suitably supported and stationary plate having an annular flange and extend-

ing into said opening, an elastic gasket arranged upon the flanged the plate forming an air tight joint between the same and the end of



furnace, and pipes passing through said stationary plate for conducting the concentrated waste liquors, air and fuel into the furnace substantially as set forth.

No. 61,796. Process of Utilizing the Waste Liquors from Sulfite Pulp Mills.
(*Procédé pour utiliser les rebuts des moulins à pulpe.*)

Viggo Drewsen, New York City, New York, U.S.A., and Lauritz J. Dorenfeldt, Rheindürkheim, on the Rhine, Germany, 7th November, 1899; 6 years. (Filed 1st April, 1899.)

Claim.—The process herein described of utilizing the waste liquors of sulfite pulp mills which consists in the following steps: first, neutralizing the waste liquor with sodium carbonate, evaporating the so neutralized liquor under addition of calcium carbonate, burning the residuum obtained, separating the sodium carbonate contained in the residuum by leaching, treating the insoluble calcium sulfide with carbonic acid so as to transform the calcium sulfide into sulfuretted hydrogen and precipitated calcium carbonate and converting the sulfuretted hydrogen into sulfurous acid or sulfur, substantially as set forth.

No. 61,797. Processes of Utilizing the Waste Liquors from Sulfite Wood Pulp and Other Cellulose Mills as Fuel.
(*Procédé pour utiliser les rebuts de pulpe, etc., comme combustible.*)

Lauritz J. Dorenfeldt, Rheindürkheim, on the Rhine, Germany, 7th November, 1899; 6 years. (Filed 1st April, 1899.)

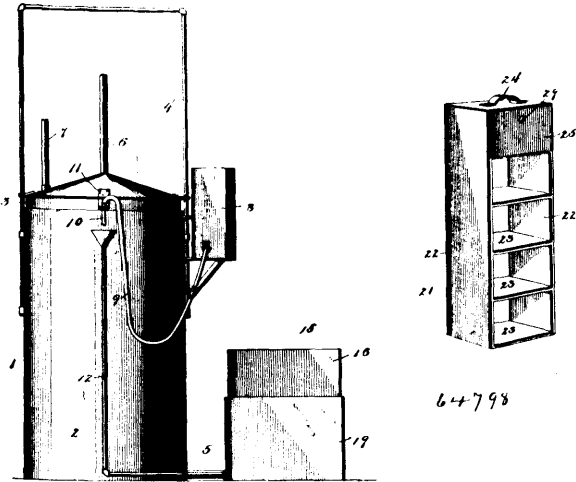
Claim.—The process herein described of utilizing the concentrated waste liquors of sulfite wood pulp and other cellulose mills as fuel, which consists in subjecting the concentrated waste liquors to heat so as to liquify the same, then subjecting them in heated state to filtration under pressure, and lastly spraying the thus liquified and purified liquors, whereby they are adapted to be burnt as fuel, substantially as set forth.

No. 61,798. Acetylene Gas Generator.
(*Générateur à gaz acétylène.*)

Venant Libeault and Alexander Dorais, both of St. Laurent, Quebec, Canada, 7th November, 1899; 6 years. (Filed 13th October, 1899.)

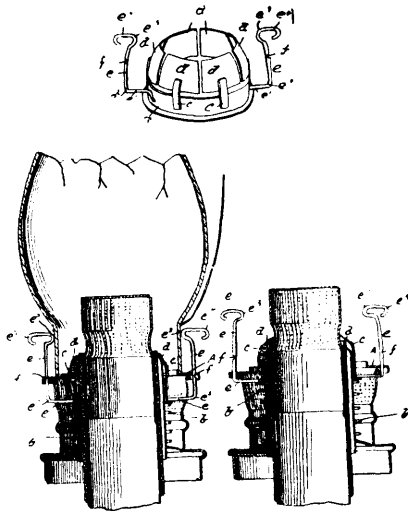
Claim.—1st. An acetylene gas generator, comprising a gas holder, a water supply connected to and operated by the movement of said gas holder, a generating chamber operatively connected to said gas holder and to said water supply, and a series of independent carbide cartridge mounted within said generating chamber, each of said cartridges being provided with a water inlet and a gas outlet, whereby said cartridges are acted upon by the water successively, substantially as described. 2nd. An acetylene gas generator, comprising a generating chamber normally closed, an inner receptacle removably located within said chamber, said receptacle having a series of compartments, a series of independent carbide cartridges located in each of said compartments, each of said cartridges being provided with a water inlet and a gas outlet, whereby said cartridges are acted upon by the water successively, a water inlet for introducing water to said compartments intermittently, and a gas outlet from said generator for the formed gas, substantially as described. 3rd. An acetylene gas generator, comprising a generating chamber normally closed, an inner receptacle removably located within said chamber, said receptacle having a series of compartments, a series of independent carbide cartridges located in each of said compartments, each of said cartridges being provided with a water inlet and a gas outlet, whereby said cartridges are acted upon by the water successively, the carbide in the cartridges located in one compartment being entirely used before the carbide in the

cartridge located within the remaining compartments is operated upon by the water, a water inlet communication with said com-



partments for admitting the water intermittently, and a gas outlet from said generator for the formed gas, substantially as described. 4th. The combination with an acetylene gas generator having an inner receptacle, of a series of carbide cartridges holders removably located within said receptacle, each having a series of independent carbide cartridges removably mounted therein, each of said cartridges being provided with a water inlet and a gas outlet, whereby said cartridges are acted upon successively, substantially as described. 5th. A carbide cartridge, comprising removable telescoping sections forming a closed chamber for the carbide, an inlet for the water formed near the lower end of said chamber, and an outlet for the gas located near the upper end of said chamber, substantially as described.

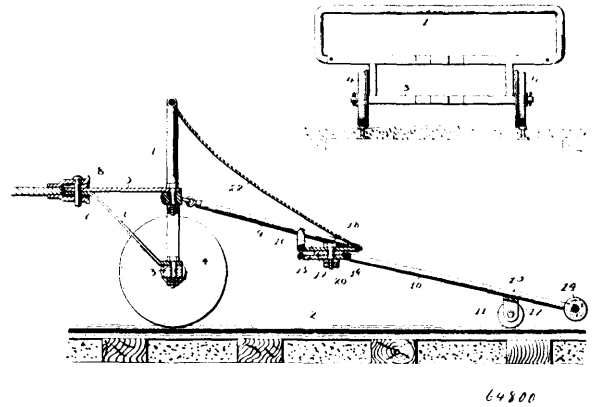
No. 64,799. Lamp Extinguisher. (*Extincteur de lampes.*)



Max Goetze and William C. Bawderus, both of Sturgis, South Dakota, U.S.A., 7th November, 1899; 6 years. (Filed 13th September, 1899.)

Claim.—In combination with the outer part of a lamp burner and the wick tube within the same, an extinguisher consisting of a ring adapted to slip up and down on the said wick tube and the upwardly and inwardly curving springs *c* and gates *d* supported by the said tube, a spring supporting the said extinguisher, chimney holding springs *e* attached to the said ring, and provided with notches adapted to engage the burner when the chimney is in place, the dislodgement of the said chimney by the upsetting of the lamp leaving the said springs free to move inward, disengaging themselves from the said burner and allowing the extinguisher to slide downward on the inverted wick tube, substantially as and for the purpose set forth.

No. 64,800. Car Fender. (*Defense de chars.*)



Neil B. Dieterich, Louis N. Smyth, William S. Smyth, and John Fraser Moore, all of Kansas City, Missouri, U.S.A., 8th November, 1899; 6 years. (Filed 30th September, 1899.)

Claim.—1st. In a car fender, the combination with the rear section adapted to be connected with the car and provided with carrying wheels adapted to travel upon the track, of two forward sections hinged together so as to swing laterally relatively to each other, one of the forward sections being hinged to the rear section so as to swing vertically, and means for preventing much lateral or vertical movement of the forward end of the forward section relative to the track, substantially as described. 2nd. In a car fender, the combination with the rear section adapted to be connected with the car and provided with carrying wheels adapted to travel upon the track, of two forward sections hinged together so as to swing laterally relatively to each other, one of the forward sections being hinged to the rear section so as to swing vertically, and carrying wheels adapted to travel upon the track, and supporting one of the forward sections, substantially as described. 3rd. In a car fender, the combination with the rear section provided with carrying wheels adapted to travel upon the track, of two forward sections, one of which is supported and guided by the track, hinged together so as to swing laterally relatively to each other, one of the forward sections being hinged to the rear section so as to swing vertically, and a link connected to the rear section and adapted to be connected to the car, substantially as described. 4th. In a car fender, the combination with the rear section provided with carrying wheels adapted to travel upon the track, of two forwardly inclined sections, means for hinging the said two inclined sections together so that the forward section shall swing laterally relatively to the track, the rear one of said inclined sections being hinged to the rear section so as to swing vertically, substantially as described. 5th. A car fender, comprising three sections, the forward and centre sections being hinged together so as to swing laterally, and the centre and rear sections being hinged together so as to swing vertically, carrying wheels adapted to travel upon the track for supporting the forward and rear ends of the fender, and means for connecting the rear end of the fender with the car whereby the lateral movement of the car will not be communicated to the fender, substantially as described. 6th. A car fender, comprising a rear vertical and two forwardly inclined sections, means being provided whereby the forward inclined section may swing laterally in the plane parallel with the track, the centre section being hinged to the rear section so as to swing vertically, carrying wheels for supporting the fender upon the track, and a link for connecting the rear section with the car, substantially as described.

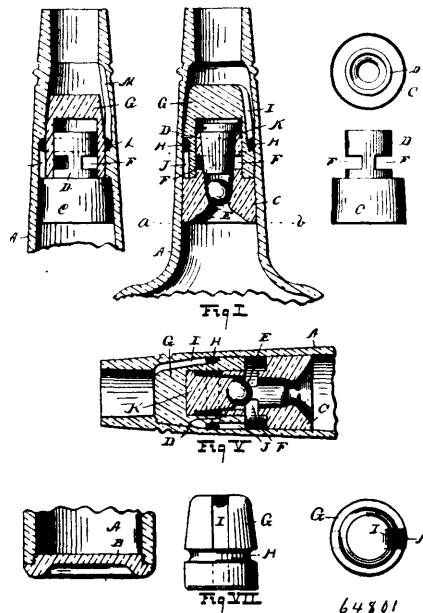
No. 64,801. Non-refillable Bottle.

(*Bouteille non-réemplissable.*)

Charles Jackson Nesbitt and Joseph Sexton Chick, both of Kansas City, Missouri, U.S.A., 8th November, 1899; 6 years. (Filed 30th September, 1899.)

Claim.—1st. A bottle stopper, comprising a base portion adapted to be secured to the neck of the bottle, and having a central opening extending lengthwise therethrough and provided with a reduced upper end having lateral discharge openings communicating with the central opening, a ball valve within and adapted to close the said central opening, a stopper valve movable lengthwise in the said central opening and adapted to cover and uncover the said lateral openings, a guard cap fitted upon the outer periphery of the reduced upper end of the base portion and adapted to move lengthwise thereon and cover and uncover the said lateral openings, and a channel adapted to convey the liquid contents from the said lateral openings past the said guard cap, substantially as described. 2nd. A bottle stopper, comprising the base *C*, having a central opening and the reduced upper end *D* provided with lateral openings, a ball valve *E* adapted to be seated in the lower end of said central opening, the stopper valve *K* movable lengthwise in the said central opening, and adapted to close the said lateral openings, a guard cap

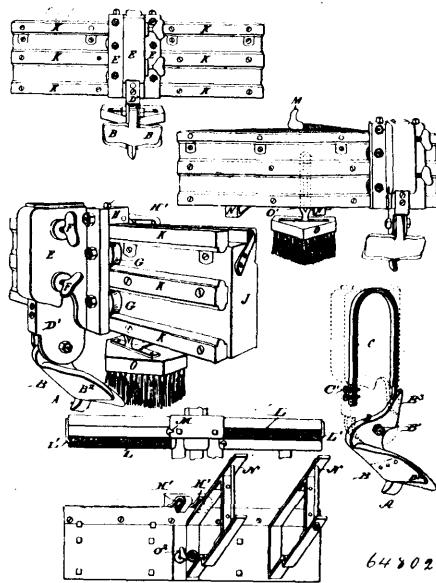
fitted upon the outer periphery of the portion D, and movable lengthwise so as to uncover the said lateral openings, and provided



with outer peripheral grooves for conveying the liquid contents from below the said cap past the same, substantially as described. 3rd. In a non-refillable bottle, the combination with the neck of the bottle, of a stopper secured in the neck, comprising a base portion provided with a central axial opening therethrough, and having a reduced upper end provided with lateral openings, a valve controlling the said central opening, a valve controlling the said lateral openings, a guard cap for shutting off access to the said lateral openings from the mouth of the bottle, and one or more channels leading around the said cap, substantially as described. 4th. In a non-refillable bottle, the combination with the neck of the bottle, of a stopper therein, comprising two members, one of which is rigidly secured in the neck of the bottle and provided with a central axial opening, and having lateral openings leading therefrom to the outside of the reduced periphery thereof, the other member being vertically movable upon the said reduced portion of the other member, and substantially filling the annular space between the said reduced portion and the inner periphery of the neck of the bottle, discharge openings leading past the said movable member, and valves controlling the said axial and lateral openings, substantially as described. 5th. In a non-refillable bottle, the combination with the neck of the bottle, a stopper mechanism located in the neck and comprising a rigid base, provided with a reduced upper end and having a central axial opening and provided with lateral openings in the said reduced portion, valves controlling the said axial and lateral openings, a guard cap encircling the said reduced portion of the base and vertically movable thereon, and a separable portion of the bottle adapted to be removed for the insertion of the preventative mechanism, substantially as described. 6th. In a non-refillable bottle, the combination with the bottle, having a separable portion, of a stopper adapted to be inserted in neck of the bottle after the separable portion has been removed, the stopper comprising a fixed base provided with a reduced upper end having lateral openings, a central opening in the base extending to the said lateral openings, a ball valve controlling said central opening, and a vertically movable cap mounted upon the reduced upper end of the base and adapted to cover and uncover the said lateral openings, and a channel for permitting the passage of liquid from the lateral openings around the cap to the bottle mouth, substantially as described. 7th. A bottle stopper, comprising a fixed member, provided with a central reduced tubular upper end, the inner periphery of which is flaring and having lateral openings, a ball valve located in the said flaring opening and adapted to control the same, an inverted cone shaped valve located in the said flaring opening and adapted to control the said lateral openings, and a longitudinally movable cap mounted upon the said tubular upper end and provided with outer grooves in its periphery extending along its length, the said cap being adapted to cover the said lateral openings, substantially as described. 8th. A bottle stopper, comprising the fixed member C, having the tubular projection D provided with the lateral openings F, the side member having a central axial opening, a ball valve controlling the said opening, the stopper valve K vertically movable in the said axial opening and adapted to control the said lateral openings F, and the guard cap G longitudinally movable upon the tubular projection D and provided in its periphery with an annular groove H and longitudinal grooves leading upward and downward therefrom, substantially as described.

No. 64,802. Girder Rail Groove Cleaner.

(Appareil à nettoyer les rails.)

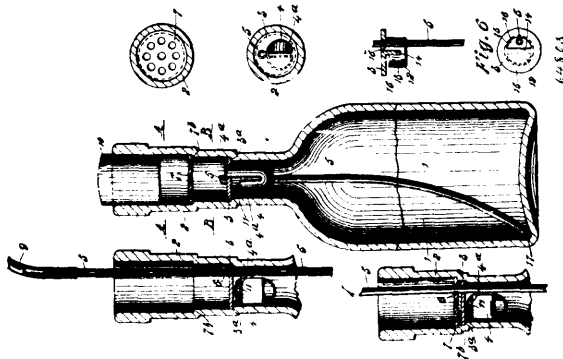


Louis Frederick Meyer, Richmond, Virginia, U.S.A., 8th November, 1899; 6 years. (Filed 3rd October, 1899.)

Claim.—1st. A girder rail groove cleaner, comprising a laterally movable plough and a brush in rear thereof and held from lateral movement, the brush being arranged to run directly behind the plough when the latter is in normal position, as when cleaning a straight rail, substantially as described. 2nd. A girder rail groove cleaner, comprising the block or support having rails and the carriage engaging said rails and movable laterally thereon and the plough on said carriage, substantially as described. 3rd. A girder rail groove cleaner, comprising the block, the carriage movable laterally thereon and provided with the plough and the springs secured at one end of the block and connected at their other ends with the carriage, substantially as described. 4th. A girder rail groove cleaner, comprising the block having guide rails, the carriage having rollers engaging said rails, said carriage being provided with a plough, the brush supported on the block in rear of said plough and the spring devices engaging said carriage, substantially as described. 5th. In a girder rail groove cleaner, the combination of the body or block the laterally movable carriage having a socket, the standard adjustable vertically in said socket, the plough pivoted to said standard and the spring carried by the standard and actuating the pivoted plough, substantially as described. 6th. The improved girder rail groove cleaner herein described, consisting of the body or block having rails, the brush carried by said block, the carriage having rollers engaging the rail, said carriage being provided with a socket, the spring devices for resisting the lateral movement of the carriage, the hollow standard adjustable vertically in the socket of the carriage, the plow pivoted to the standard and a bow spring engaging the plough, substantially as described.

No. 64,803. Non-refillable Bottle.

(Bouteille non récaplable.)

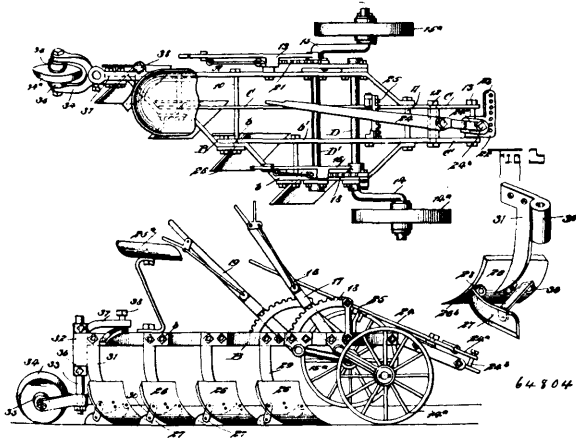


Charles Joseph Cooze, Carterton, New Zealand, Australia, 8th November, 1899; 6 years. (Filed 5th October, 1899.)

Claim.—1st. The combination in a non-refillable bottle, having the upper part of its neck enlarged to form a shoulder, of a disc

secured within the neck, a trap upon the disc, a tube extending above the mouth of the neck and to the bottom of the bottle, substantially as set forth herein. 2nd. The combination in a non-refillable bottle having the upper part of its neck enlarged to form shoulders, of a disc secured within the neck, a trap having serrated rims upon the disc, a tube passing through the disc and extending to the bottom of the bottle, and a perforated disc secured in the neck above the first disc, substantially as set forth. 3rd. In devices adapted to be inserted into a bottle neck, the combination of a disc carrying a trap consisting of a piece of tubing bent into a U shape and having an inlet beneath the disc and an outlet above the disc, and a tube passing through the disc and extending to the bottom of the bottle, and an attenuated part in the said tube to facilitate breaking at that part, substantially as set forth. 4th. The improved non-refillable bottle consisting of parts constructed, arranged, combined and operating, substantially as and for the purposes set forth herein and illustrated in the accompanying drawing.

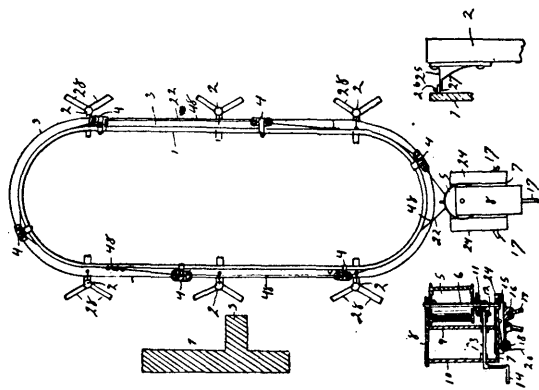
No. 64,804. Gang or Cultivator Ploughs.
(Charrure à disque.)



John T. Lucas, Wasco, Sherman Co., Oregon, U.S.A., 8th November, 1899; 6 years. (Filed 4th October, 1899.)

Claim.—1st. In a plough, the combination with a frame, of a plough share having a shank attached to the share and fixed to the frame, a sleeve carried rigidly by the shank, a vertical shaft mounted in the sleeve, a rear guide wheel supported by the vertical shaft at the lower portion thereof, an arm attached to the vertical shaft and extended forwardly, a guide over which the arm moves, and a pin carried by the frame and serving to limit the movement of the arm in one direction. 2nd. A plough, having a share, a land side connected with the share and having a cutting or sharpened lower edge, and means for bracing the land side against the share.

No. 64,805. Clothes Dying Apparatus.
(Appareil à sécher le linge.)

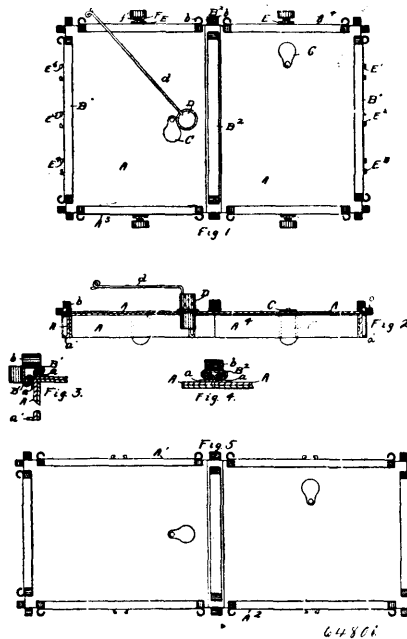


Taylor Jackson, Kansas City, Missouri, U.S.A., 8th November, 1899; 6 years. (Filed 4th October, 1899.)

Claim.—1st. In a clothes drying apparatus, the combination with a plurality of carriers, of a track upon which the carriers travel, a clothes supporting line in the form of a loop connecting each of the carriers, a rotatable drum movably mounted upon a suitable support, a cable which passes around the drum and connects with the carriers, means by which the said cable may be made to engage with or be disengaged from the carriers, means for rotating the drum, and means for providing a constant tension of the cable, substantially as

described. 2nd. In a clothes drying apparatus, the combination with a plurality of carriers, of a continuous track upon which the carriers are adapted to travel, a clothes carrying line connecting each of the carriers, a rotatable drum, a cable which passes around the drum, and which is adapted to engage the carriers, a frame for supporting the drum, a crank arm revolvably mounted in the said frame, and gearing connecting the crank arm with the drum, substantially as described. 3rd. In a clothes drying apparatus, the combination with the track 1, of the supporting posts 2, carriers 4 adapted to travel upon the track, line 23 connecting the carriers, drum 5 rotatably mounted in a suitable frame, cable 22 which forms a loop embracing the drum and the track and to which the carriers adapted to be connected, a support for the drum frame upon which the said frame is movably mounted, and means for moving the drum away from the track for the purpose of establishing a constant tension in the cable, substantially as described. 4th. In a clothes drying apparatus, the combination with the track 1, of the supporting posts 2, carriers 4, adapted to travel upon the said track, line 23 connecting the carriers, the drum 5, a frame upon which the drum is rotatable, a crank arm revolvably mounted in the said frame, gearing connecting the drum and crank arm, a support for the frame upon which the frame is movable toward or from the track, pulley 18 pivoted to the said frame support, a cord which passes over the said pulley and is connected at one end to the said frame, a weight secured to the other end of the cord, and a cable which passes around the drum and is connected with each of the carriers, substantially as described.

No. 64,806. Thawing Hood. (Appareil à dégeler.)



John Clarence Garvey, Seattle, Washington, U.S.A., 8th November, 1899; 6 years. (Filed 13th September, 1899.)

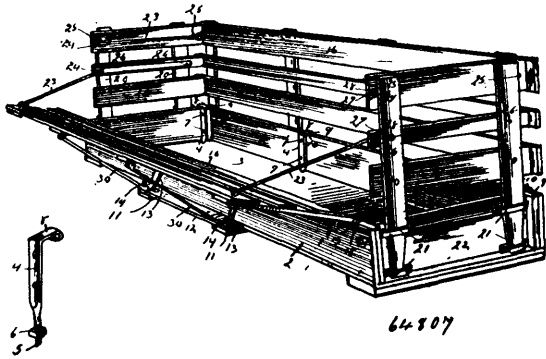
Claim.—The combination of a collapsible thawing hood, composed of plates of non-combustible material, the adjoining edges of which are provided with back turned lips or flanges *a*, held together at the corners by catches *B*¹, and at the straight joints by catches *B*², with wheel carrying arms *F* adapted to be secured in the sockets *E*, *E*¹, *E*², etc., carried by the side plates of the hood, substantially as and for the purpose set forth.

No. 64,807. Hay and Stock Rack. (Ratelier à foin, etc.)

Wallace George Cook and William Henry Shannon, both of Brighton, Michigan, U.S.A., 8th November, 1899; 6 years. (Filed 4th October, 1899.)

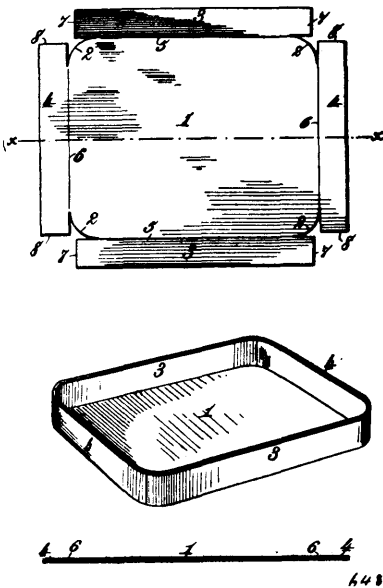
Claim.—1st. In a device of the class described, the combination of a wagon body provided with side ledges, outer inclined braces fastened to the sides and having their lower ends fastened to the side ledges, said fastening devices forming studs or projections, the rack sides hinged to the wagon body, the central bracing rods connected with the rack sides and provided at their lower ends with eyes fitting over the studs, rack ends, and the rods arranged at the terminals of the sides of the rack and engaging the rack ends, whereby the central bracing rods are retained on the studs, substantially as described. 2nd. In a device of the class described, the combination with a wagon body, of the vertical bars secured to the inner faces of the sides of the body and having their lower ends extended through and secured to the bottom of the body, said bars being provided at their upper ends with hooks engaging the upper

edges of the sides and provided with eyes, the rack side having pintles fitting in said eyes, the side ledges, the outer inclined braces



secured to the sides of the body by the fastening devices of the adjacent vertical bars and having their lower ends secured to the side ledges, studs arranged at the lower ends of the inclined braces, the rack ends, the central bracing rods secured to the sides of the rack and having eyes at their lower ends fitting over the said studs, and the rods located at the ends of the sides of the rack and engaging the rack ends, substantially as described.

No. 64,808. Paper Box Blank. (*Blanc de boîte en papier.*)



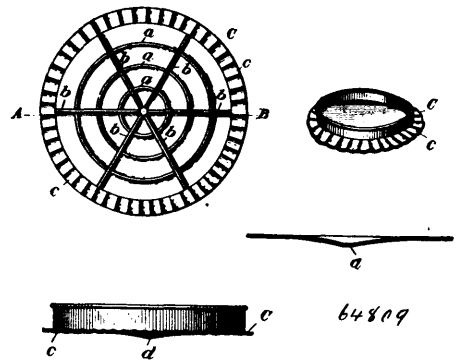
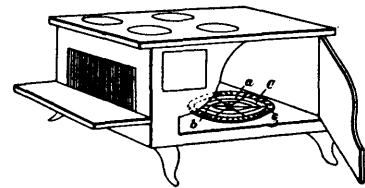
Harry Bridgman Smith, Brooklyn, New York, U.S.A., 8th November, 1899; 6 years. (Filed 30th September, 1899.)

Claim.—1st. A paper box blank formed from a single sheet, comprising a body portion having cutaway corners and integral side and end wings, the maximum length of said wings being slightly less than the maximum length of the sides and ends respectively of the body portion of the blank, so that when said wings are folded up into position for the formation of the box, the adjacent edges of the said side and end wings will abut but not overlap, substantially as described. 2nd. A paper box blank formed from a single sheet, comprising a body portion having rounded corners and integral side and end wings, the maximum length of said wings being slightly less than the maximum length of the sides and ends respectively of the body portion of the blank, so that when said wings are folded up into position for the formation of the box, the adjacent edges of said side and end wings will abut but not overlap, substantially as described. 3rd. A paper box blank formed from a single sheet, comprising a rectangular body portion having rounded corners and integral side and end wings, with lines of scoring or creasing at the points of connection between the wings and body of the blank, the maximum length of said wings being slightly less than the maximum length of the sides and ends respectively of the body portion of the blank, so that when said wings are folded upward into position for the formation of the box, the adjacent edges of said side and end wings will abut to form a close joint but will not overlap. 4th. A paper box formed from a single sheet, comprising a body portion having chambered or bevelled corners and integral side and end flaps, the maximum length of said flaps being

slightly less than the maximum length of the sides and ends respectively of the body portion of the blank, whereby when said flaps are folded up into position for the formation of the box the adjacent edges of said side and end flaps will abut but not overlap, substantially as described. 5th. A paper box blank formed from a single sheet, comprising a body portion having chambered or bevelled corners and integral side and end flaps, said flaps being scored or creased transversely at the points intersected by the ends of the chambered or bevelled corners, the maximum length of said flaps being slightly less than the maximum length of the sides and ends respectively of the body portion of the blank, whereby when said flaps are folded up into position to form the box the adjacent edges of said side and end flaps will abut to form a close joint but will not overlap, substantially as described.

No. 64,809. Rotary Oven Plate.

(*Plaque de fourneau rotatoire.*)



Olinda G. Naquin, Rockport, Texas, U.S.A., 8th November, 1899; 6 years. (Filed 3rd October, 1899.)

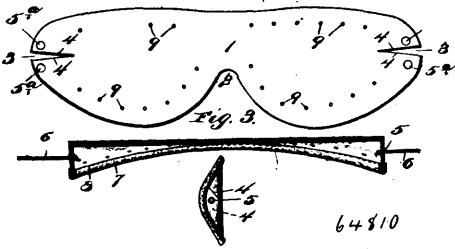
Claim.—1st. An oven plate stamped up of sheet metal, having opposite series of radial and concentric ribs and grooves, and radical corrugations extending from the outer concentric rib to the periphery of the plate, said plate being adapted to be rotated, substantially as described. 2nd. The herein described rotary oven plate stamped up of sheet metal, having opposite series of upper radial and concentric ribs and corresponding under grooves, a series of radial corrugations extending from the outer concentric rib and groove to the periphery of the plate, and a centrally depressed portion projecting below the plate, and forming a pivotal rest upon which it may be turned, substantially as described.

No. 64,810. Eye Shield. (*Garde-yeux.*)

Charles L. Sheldon, Kasson, Minnesota, U.S.A., 8th November, 1899; 6 years. (Filed 26th September, 1899.)

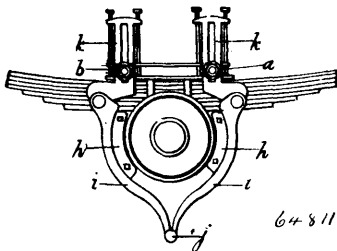
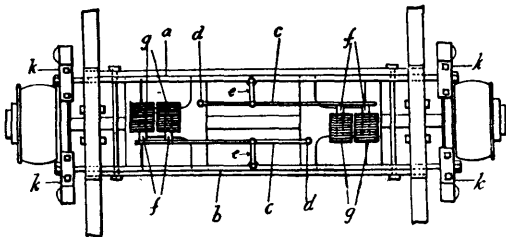
Claim.—1st. An eye shield formed from a single piece of flexible transparent material and having its ends notched, and the portions on each side of the respective notches crossed and secured together, substantially as and for the purpose specified. 2nd. An eye shield formed from a single piece of flexible transparent material and having a notch or recess formed in the lower edge to straddle the nose of the wearer, and its ends being notched, and the portions on each side of the respective notches being crossed and secured together, substantially as described. 3rd. An eye shield formed from a single piece of flexible transparent material, having its ends notched and the portions on each side of the respective notches crossed and secured together, and a binding of flexible absorbent material secured to the edge of the shield entirely around it, substantially as described. 4th. An eye shield formed from a single piece of flexible transparent material having its ends notched, and the portions on each side of the respective notches being crossed, an eyelet to secure the respective crossed perforations together, and elastic band or similar securing device secured in said eyelets, substantially as and for the purpose specified. 5th. An eye shield formed of a single continuous blank of flexible transparent material having its end portions folded inward and provided with attaching eyelets, said blank being further provided at a central point in its lower edge with a notch for the nose and between said notch and the inwardly folded ends, with oppositely located concavo-convex portions adapted to fit over and protrude outwardly from the eyes, sub-

stantially as set forth. 6th. An eye shield formed from a single piece of flexible transparent material and having a notch or recess



formed in its lower edge to straddle the nose of the wearer, and its ends being notched, and the portions on each side of the respective notches being crossed and secured together, a binding of flexible absorbent material secured to the shield and extending entirely around its edges, and said shield having a series of perforations therein to afford ventilation for the eyes of the wearer, substantially as described.

No. 64,811. Brake. (Frein.)



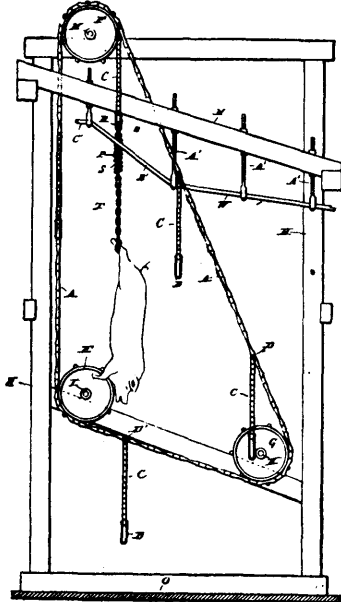
Alfred Stevens and William Stephen Penney, both of Ramsgate, Kent, England, 8th November, 1899; 6 years. (Filed 2nd October, 1899.)

Claim.—1st. In brakes for vehicles, two bars or rods carrying suitable guides, and operated through the medium of electrical pneumatic or hydraulic power, such as the cores and coils connected through the medium of levers to the rods or bars, cylinders or pistons similarly connected for pneumatic or hydraulic use, ends of said rods or bars being adjustably attached to supports or holders, pivotally carried at one of their ends, and other ends being as aforesaid, adjustably attached to the rods or bars, said supports or holders carrying brake blocks adapted to engage upon the required surface for the purpose of braking the same, such as the nave of the wheel, which may carry grooves for the reception of brake blocks, substantially as described and illustrated herein and for the purpose set forth. 2nd. In brakes for military use, such as artillery transport,

and other vehicles, two pivoted braking surfaces adapted to grip a suitable part of the wheel or axle for the purpose of braking, said braking surfaces being adjustably connected to bars or rods, an operating lever carried by a universal joint, and connected through the medium of the rod to a lever which is in turn pivotally connected to the operating bars or rods supplementary levers connected to said operating lever and operating mechanism for applying the brake, such as a toggle joint upon either wheel, according to the direction of movement of the operating lever, substantially as described and illustrated herein and for the purpose set forth.

No. 64,812. Hog Hoisting Machine.

(Machine pour soulever les porcs.)



George Archibald Lowry, Chicago, Illinois, U.S.A., 8th November, 1899; 6 years. (Filed 2nd October, 1899.)

Claim.—1st. In a hog hoisting machine, a carrier, means for actuating the same, means for attaching a hog thereto, and a receiving rail arranged adjacent to the path of travel of the carrier, and adapted to receive the hog from said carrier, said rail provided with an outturned or bent portion adapted to guide said carrier into position to properly deposit the hog upon said rail, as and for the purpose set forth. 2nd. In a hog hoisting machine, a carrier, means for actuating the same, means for attaching a hog to said carrier, and a receiving rail arranged adjacent to the path of travel of the carrier and adapted to receive the hog from said carrier, said rail provided with a sharply inclined portion, whereby the weight of the hog is gradually imposed upon said rail, as and for the purpose set forth. 3rd. In a hog hoisting machine, a carrier, means for moving the same, means for attaching a hog to said carrier, in combination with a receiving rail provided with an outwardly bent end and a sharply inclined portion, said rail arranged to receive the hog from said carrier, as and for the purpose set forth. 4th. In a hog hoisting machine, an endless chain carrier having the hoisting run or leg thereof vertically arranged, and having a run or leg arranged to travel through the shackling pen in a vertically inclined path, and means for attaching a hog to said carrier, whereby said hog is gradually drawn to a point in vertical line with the line of pull on the hoisting run or leg of said carrier, as and for the purpose set forth. 5th. In a hog hoisting machine, an endless carrier arranged to travel in a single plane, means for actuating said carrier, means for yieldingly supporting a hog from, to move with, said carrier, and a receiving rail arranged in proximity to and parallel with the plane in which said carrier moves, and adapted to receive the hog therefrom, as and for the purpose set forth. 6th. In a hog hoisting machine, an endless carrier arranged to travel in a single plane, means for moving a hog therewith, means for actuating said carrier, a receiving rail arranged parallel with the plane in which said carrier travels and in proximity to the path of travel thereof, adapted to receive the hog therefrom, and means for adjusting the position of said rail with reference to said hog moving means, as and for the purpose set forth. 7th. In a hog hoisting machine, a carrier, means for actuating the same, a pendant pivotally attached to, and arranged to travel with, said carrier, adapted to receive a hog, a receiving rail arranged alongside the path of movement of said carrier, and adapted to receive the hog from said pendant, as and for the purpose set forth. 8th. In a hog hoisting machine, a carrier, means for actuating the same, a flexible connection attached to and arranged to travel with said carrier and adapted to receive a hog, and a rail

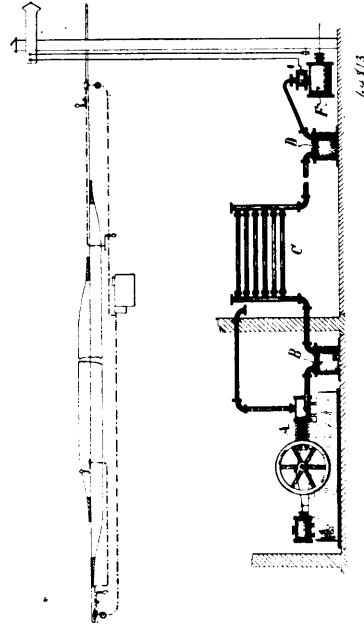
arranged adjacent to and alongside of the path of travel of said connection and adapted to receive the hog therefrom, as and for the purpose set forth. 9th. In a hog hoisting machine, a carrier, means for actuating the same, a flexible pendant pivotally attached to said carrier and adapted to receive a hog, and a rail arranged alongside the path of movement of said carrier, and adapted to receive the hog from said pendant, as and for the purpose set forth the same. 10th. In a hog hoisting machine, a carrier, means for actuating, a flexible pendant attached to said carrier, a shackle adapted to be secured to a hog and to be attached to said flexible pendant, and a rail arranged alongside the path of movement of said carrier and adapted to receive said shackle from said pendant, as and for the purpose set forth. 11. In a hog hoisting machine, an endless carrier, means for actuating said carrier, flexible suspending devices pivotally supported upon to travel with said carrier and adapted to receive the hogs, and a rail arranged alongside the path of movement of said carrier and adapted to receive the hogs from said suspending devices as and for the purpose set forth. 12th. In a hog hoisting machine, and in combination with a shackling pen, a travelling carrier having a portion thereof arranged to move in an inclined path through said pen, and means for suspending a hog from said carrier, whereby the hog is gradually hoisted to the point where the vertical pull is exerted, as and for the purpose set forth. 13th. In a hog hoisting machine, and in combination with a shackling pen, a travelling carrier, having a portion thereof arranged to move in an inclined path through said pen, suspending devices mounted on to travel with said carrier, and means for attaching the hogs to said suspending devices, whereby the hog is gradually hoisted to the point where the vertical pull is exerted, as and for the purpose set forth. 14th. In a hog hoisting machine, and in combination with a shackling pen, a travelling carrier having a portion thereof arranged to travel through said pen in an upwardly inclined path relative to the floor of said pen, suspending devices mounted on said carrier commanding the area of said floor and adapted to receive a hog, whereby the hog is gradually hoisted to the point where the vertical pull is exerted, as and for the purpose set forth. 15th. In a hog hoisting machine, a travelling carrier, pins mounted to rock thereon, suspending devices pivotally supported by said pins to swing in a plane at right angles to the axis of said pins, as and for the purpose set forth. 16th. In a hog hoisting machine, a travelling carrier, a series of chains pivotally mounted on said carrier to swing in intersecting planes and adapted to receive the hogs, and a receiving bar arranged adjacent to and parallel with the path of travel of said chains, and adapted to receive the hogs therefrom, as and for the purpose set forth. 17th. A hog hoisting machine, comprising in combination a carrier, a series of hoisting chains connected to said carrier, an elevated track extending alongside of said carrier, gearing for actuating said carriers whereby an animal made fast to the hoisting chains may be raised and transferred therefrom to the track, substantially as described. 18th. In a hog hoisting machine, a shackling pen, an endless carrier arranged to travel adjacent to one wall of said pen, means for actuating said carrier, and flexible suspending devices pivotally connected to travel with said carrier and adapted to receive a hog, and a receiving rail arranged parallel with the path of travel of said carrier, and adapted to receive the hog from said suspending devices, as and for the purpose set forth. 19th. In a hog hoisting machine, the combination with a frame of a carrier supported thereby and arranged to travel in a path outside of said frame, suspending devices connected to move with said carrier, and adapted to receive the hog to be hoisted, a receiving rail arranged adjacent to and parallel with the path of movement of said carrier, and adapted to receive the hog from said suspending devices, and means for actuating said carrier, as and for the purpose set forth. 20th. In a hog hoisting machine, a shackling pen, a carrier arranged adjacent to one side of such pen and carrying suspending devices adapted to command the area of the pen, in combination with a receiving rail arranged parallel with the path of travel of said carrier, as and for the purpose set forth. 21st. In a hog hoisting machine, a shackling pen, a carrier arranged adjacent to one side of such pen, a series of chains pivotally connected to said carrier and adapted to command the area of said pen, and means for actuating said carrier, as and for the purpose set forth. 22nd. In a hog hoisting machine, a carrier, means for actuating the same, flexible suspending devices connected to said carrier, in combination with a receiving rail, said rail provided with a sharply inclined portion, and suspending devices adapted to receive the hogs and deliver the same upon said rail, as and for the purpose set forth.

No. 64,813. Railway Brake. (Frein.)

Josef Erick, Munich, Bavaria, German Empire, 8th November, 1899; 6 years. (Filed 29th September, 1899.)

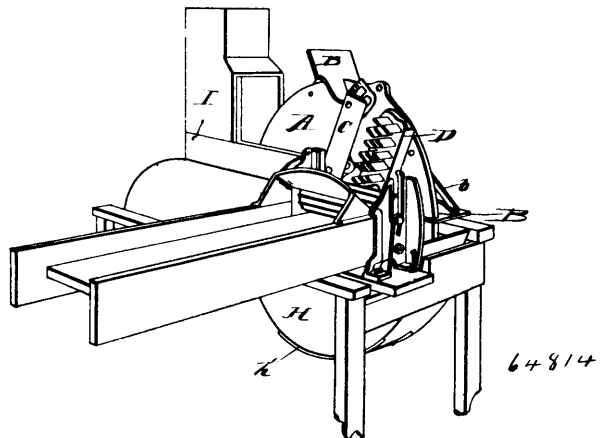
Claim.—1st. A brake for railway trains for use at through stations with double track, comprising longitudinal rails *n n* or other figured iron, suitably supported on sliding chairs *o* or the like, lying directly inside or outside the track rails and pressed towards or withdrawn from the latter by the action of the signal arm which stops the incoming traffic, which arm operates a suitable system of rods, levers, pulleys or the like, *d g c*, actuating the slide valve *b* of a compressed air cylinder *f*, and accordingly admitting the compressed air, supplied by any suitable air compressor, to enter before or behind the cylinder piston *a*, the rod of which piston, by means of a system of rods and pivoted levers *i, k, m, m*, forces the brake rails *n, n* against and withdraws them from the wheels of the train, all substantially as and for the purposes hereinbefore set forth.

rails *n, n* against and withdraws them from the wheels of the train, all substantially as and for the purposes hereinbefore set forth. 2nd.



A brake for railway trains for use at through stations with single track, comprising longitudinal rails *n, n* or other figured iron, suitably supported on sliding chairs *o* or the like, lying directly inside or outside the track rails and pressed towards or withdrawn from the latter in the case of the entrance of trains into the station by the action of the signal arm which stops such incoming traffic, and in the case of exit of trains by the pulley of the signal which stops such outgoing traffic, which said arm and pulley operate suitable systems of rods, levers, pulleys or the like, *d, g, c* actuating two slide valves *b* of a compressed air cylinder *f*, and accordingly admitting the compressed air, supplied from any suitable air compressor, to enter before or behind the cylinder piston *a*, the rod of which piston, by means of suitable systems of rods and pivoted levers *i, k, m, m*, forces the brake rails *n, n* against and withdraws them from the wheels of the train, all substantially as and for the purposes set forth. 3rd. A brake for railway trains for use at terminal stations, comprising longitudinal rails *n, n* or other figured iron, suitably supported on sliding chairs *o* or the like, lying directly inside or outside the track rails and pressed towards or withdrawn from the latter by the action of a rod *x* on the engine, which when depressed pushes down a pivotally mounted angle bar *f*, which is ordinarily elevated by springs *g*, said angle bar by a suitable system of rods and levers *d, c* actuating the slide valve of a compressed air cylinder *f*, and accordingly admitting the compressed air supplied by any suitable air compressor to enter before or behind the cylinder piston *a*, the rod of which piston, by means of a system of rods and pivoted levers *i, k, m, m*, forces the brake rails *n, n* against and withdraws them from the wheels of the train, all substantially as and for the purposes hereinbefore set forth.

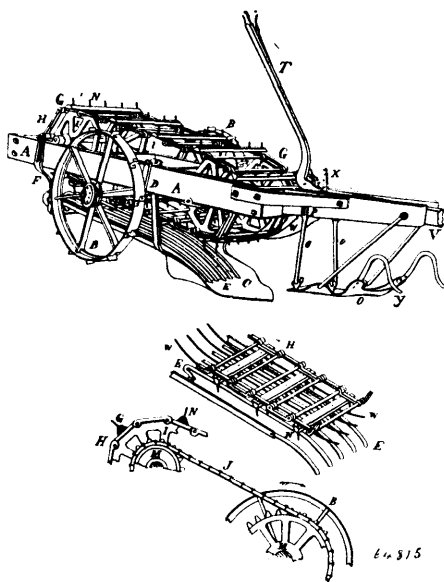
No. 64,814. Fodder Cutter. (Coupe faille.)



Joseph Dick, Canton, Ohio, U.S.A., 8th November, 1899; 6 years. (Filed 2nd October, 1899.)

Claim.—1st. In a fodder cutter, the combination with a solid fly wheel having mounted thereon a series of adjustable cutters or shredders, fan blades secured to the periphery of said fly wheel, substantially as described and for the purpose set forth. 2nd. In a fodder cutter, the combination with a solid fly wheel having mounted thereon a series of adjustable cutters or shredders, fan blades secured to the periphery of said fly wheel, extension posts engaging the cutters and fly wheel, the adjustable plates having cast therewith segmental cam racks and one or more cam faces and the connecting screw bolts, substantially as described and for the purpose set forth. 3rd. In a fodder cutter, the combination with the fly wheel having mounted thereon a series of adjustable cutters or shredders, fan blades secured to the circumference or periphery of said fly wheel, and a fan casing provided with an air inlet and exhaust pipe, substantially as described and for the purpose set forth. 4th. In a fodder cutter, the combination with the fly wheel having mounted thereon a series of adjustable cutters or shredders, fan blades secured to the periphery of said fly wheel, fan blades secured to the hub of the fly wheel, extension posts engaging the cutters and fly wheel, the adjustable plates having cast therewith segmental cam racks and one or more cam faces and the connecting screw bolts, substantially as described. 5th. The combination in a fodder cutter of a knife extension brace adapted to be held in engagement with the fly wheel, adjusting plates engaging therewith, having cast therewith segmental cam racks and one or more cam faces adapted to engage with corresponding cam racks and faces on the extension post, substantially as described and for the purpose set forth. 6th. The combination in a fodder cutter and with the leg of the supporting frame thereof of a sliding plate and a cam plate adapted to engage with the lug on the sliding extension plate, and means for locking them in engagement with each other and with the leg, substantially as described and for the purpose set forth.

No. 64,815. Potato Digger. (Arrache-patates.)

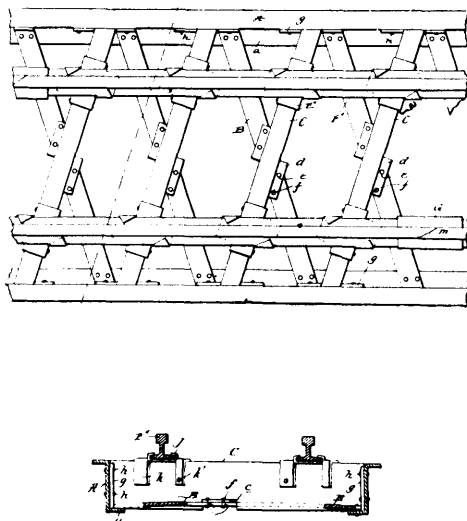


Peter Schurman, Summerside, Prince Edward Island, Canada, 8th November, 1899; 6 years. (Filed 2nd October, 1899.)

Claim.—1st. In a potato digger an adjustable share C, with small rods E, E, E, about an inch apart attached to the rear end thereof or detached and held in place at the rear end of the share C, by a strap or otherwise so as to leave the share free to be tilted as may be found necessary, and running from the rear end of the share C, backward with a slight elevation, in combination with a revolving endless apron G G, with iron teeth N, in it at certain intervals which revolves over the rods E, E, E, running back from the share C, on forked wheels I, I, attached to spindles running in boxes in or on the frame on either side driven from the spindle of the drive wheels B, B, by an endless chain J, running on sprocket wheels M, M, one of which is attached to the spindle of the drive wheels and the other to the spindle of the forked wheels, or by other device, substantially as and for the purpose hereinbefore set forth. 2nd. In a potato digger a revolving endless apron G G, with iron teeth N, in it at certain intervals which revolves over the rods E, E, E, running backward from the share C, on forked wheels I, I, attached to spindles running in boxes on or in the frame A, on either side driven from the spindle of the drive wheels B, B, by an endless chain J, running on sprocket wheels M, M, one of which is attached to the spindle of the drive wheels B, B, and the other to the spindle of the forked wheels I, I, or by other device, in combination with an adjustable share C, with small rods running from the rear end

thereof backward with a slight elevation substantially as and for the purpose hereinbefore set forth. 3rd. In a potato digger an adjustable shoe or roller O, which runs on the surface of the ground immediately in front of the share C, to give the machine its proper depth with two pieces of steel rod Y, Y, attached to it and bent and placed in such a manner that they catch the potato stalks and turn them down and guide them under the shoe or roller O, in combination with an adjustable share C, with small rods E, E, E, running from the rear end thereof backward, and with a revolving endless apron G, with iron teeth N, in it at certain intervals which revolves over the rods E, E, E, running from the share backwards substantially as and for the purpose hereinbefore set forth. 4th. In a potato digger cleaning rods W, attached to the frame A, at both ends and bent downwards and running close under the revolving endless apron G, to clean the stalks and other material from the teeth of the revolving endless apron G, as it rises at the rear at its revolutions, in combination with the revolving endless apron G, substantially as and for the purpose hereinbefore set forth. 5th. In a potato digger an adjustable share C, with small rods E, E, E, running from the rear end thereof backward, and revolving endless apron G, with iron teeth N, in it at certain intervals which revolves over the rods E, E, E, running from the share backwards, and an adjustable shoe or roller O, which runs on the surface of the ground immediately in front of the share C, to give the machine its proper depth, with two pieces of steel rod Y, Y, attached to it and bent and placed so as to catch the stalks and turn them forward and guide them under the shoe or, in combination with the endless chain drive gear J, the tilting gear T, the drive wheels B, B, the pole or tongue V, substantially as and for the purpose hereinbefore set forth.

No. 64,816. Railway. (Chemin de fer.)

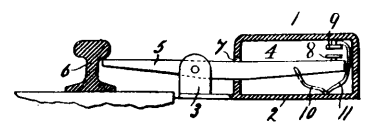
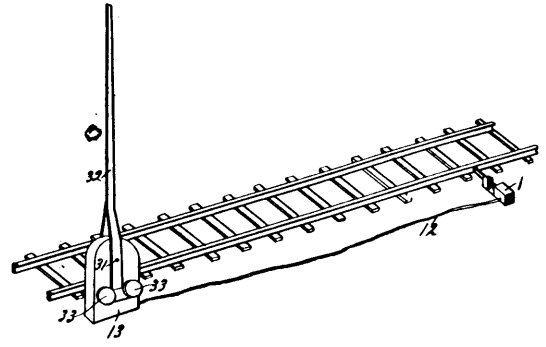


John I. Newburg, Vicksburg, Mississippi, U.S.A., 8th November, 1899; 6 years. (Filed 29th September, 1899.)

Claim.—1st. In an elevated railway, the combination of stringers having inwardly directed flanges, brace bars arranged parallel to each other and oblique to the stringers and having their ends arranged upon and connected to the flanges of the stringers, and the sheet metal cross beams arranged parallel to each other and oblique with respect to the stringers, and also arranged above the brace bars and extending in a direction opposite to the same, the said cross beams being of inverted U-shaped in cross section and having the recesses c, receiving the lugs d, connected to the brace bars and also having outwardly directed flanges at the ends of their vertical portions interposed between the ends of the brace bars and the stringers and connected to the latter, substantially as specified. 2nd. In an elevated railway, the combination of stringers having inwardly directed flanges, oblique brace bars interposed between and connected to the stringers and resting on the flanges thereof, and oblique cross beams arranged above and intersecting the brace bars, the said cross beams being of inverted U-shape in cross section and being connected at their ends to their stringers and at intermediate points of their length to their brace bars, substantially as specified. 3rd. In an elevated railway the combination of stringers, obliquely disposed sheet metal cross beams of inverted U-shape in cross section interposed between and connected to the stringers, rails disposed longitudinally above the cross beams, and sheet metal rail chairs, the said chairs being each formed in one piece and comprising a cruciform body, lips at opposite sides of opposite arms of the body engaging the opposite edges of the base of a rail, and depending lips at opposite sides of two opposite arms resting at the sides of a cross

beam, substantially as specified. 4th. In a railway structure, the combination of a rail having a recess *l*, in its base and also having the end of its web and head bevelled, a complimentary rail having a recess *l*¹, in its base and also having the end of its web and head bevelled, a joint receiving the said ends of the rails, and keys taking through coincident apertures of the rails and joints, the said keys each comprising a body having a head adapted to bear against the one side of a joint and a shoulder adapted to bear against opposite side of the joint, and a resilient arm connected to the body and arranged to bear against the walls of the apertures in the joint and rails, and thereby hold the head and shoulder of the body in engagement with the joint, substantially as specified. 5th. In a railway, the combination of cross ties or beams of wood, metal or other suitable material, rails disposed above said ties or beams, and sheet metal rail chairs, said chairs being each formed in one piece and comprising a cruciform body adapted to bear on and be held to a cross tie or beam, and lips at opposite sides of opposite arms of the body engaging the opposite edges of the base of a rail, substantially as specified. 6th. In a railway, the combination of obliquely disposed cross beams, rails disposed longitudinally above said cross beams, and sheet metal rail chairs, said chairs being each formed in one piece and comprising a cruciform body, lips at opposite sides of opposite arms of the body engaging the opposite edges of the base of a rail, and depending lips at opposite sides of two opposite arms resting at the sides of a cross beam, substantially as specified.

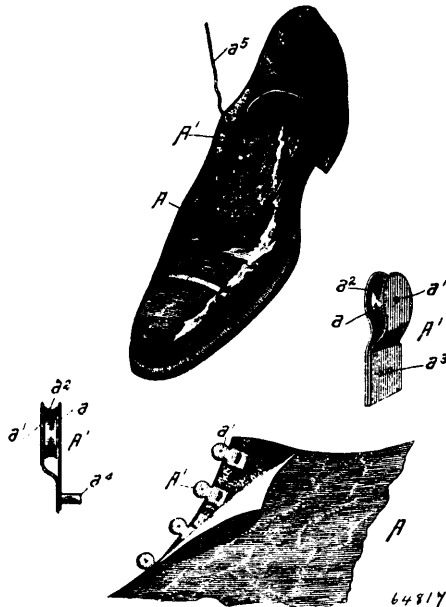
passage of a car for throwing said pinions alternately in mesh with the crown and spur gear, substantially as and for the purpose set



64818

No. 64,817. Shoe Fastening Device.

(Appareil d'attache pour chaussures.)

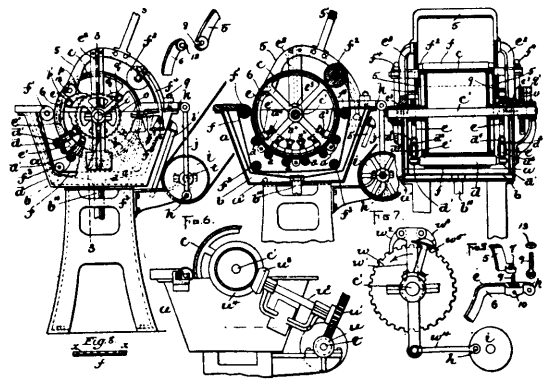


64817

forth. 4th. In a railway gate, the combination of a casing, a shaft journaled therein and carrying a gear wheel and gate arms, a combined crown and spur gear meshing with said gear wheel, said crown gear being interrupted at diametrically opposite points, a cam operated vertical shaft carrying pinions alternately in mesh with said crown gear, and means for revolving said shaft and said cam actuated by the passage of a car, substantially as described. 5th. In a railway gate, the combination of an electric motor, a circuit closer operated by the passage of a train, a worm mounted upon the shaft of said motor, a combined crown and spur gear rotated by a worm wheel in mesh with said worm, a gear wheel meshing with said crown and spur gear, and fixed upon a shaft journaled in a casing, and gate arms fixed upon said shaft, substantially as described. 6th. In a railway gate, the combination of a casing, a shaft journaled therein and carrying a gear wheel and gate arms, a combined crown and spur gear meshing with said gear wheel, a spring actuated vertical shaft carrying two pinions alternately in mesh with said crown gear, a cam in contact with the lower end of said vertical shaft, a worm wheel slidably fixed upon said vertical shaft, a worm wheel fixed upon the shaft of said cam, a motor driven worm meshing with said worm wheels, and a circuit closer operated by the passage of the train, substantially as described.

No. 64,819. Starching Machine.

(Machine à emperer.)



64819

Moïse Aimé Carbonneau, Yamachiche, Quebec, Canada, 8th November, 1899; 6 years. (Filed 29th September, 1899.)

Claim.—1st. A fastening for shoes, etc., comprising a series of pulleys secured to the edges of the parts to be fastened, and a string operatively engaging said pulleys, substantially as described. 2nd. A fastening for shoes, etc., comprising a bracket suitably secured to the edges of the parts to be fastened, a pulley rotatably mounted in each of said brackets, and a string passing through said brackets and around said pulleys, substantially as described.

No. 64,818. Railway Gate. (Barrière de chemin de fer.)

Richard John Tatham, Garfield, William Greenwood Ratcliffe, Passaic, and Alexander Thomson, West Orange, all of New Jersey, U.S.A., 8th November, 1899; 6 years. (Filed 30th September, 1899.)

Claim.—1st. In a railway gate, the combination of a casing, a shaft journaled in said casing, gate arms fixed upon said shaft, a gear wheel fixed upon said shaft inside the casing, and means for rotating said wheel automatically, and means being actuated by the passage of a car on the track, substantially as described. 2nd. In a railway gate, the combination of a casing, a shaft journaled therein, gate arms fixed upon said shaft, a gear wheel fixed upon said shaft within said casing, a combined crown and spur gear meshing with said wheel and being one-half the diameter of said gear wheel, and means for rotating said crown and spur gear, and means being actuated by the passage of a car on the track, substantially as described. 3rd. In a railway gate, the combination of a casing, a shaft journaled therein and carrying a gear wheel and gate arms, combined crown and spur gear meshing with said spur and gear, said crown gear having diametrically opposite interrupted portions, a vertical shaft having two pinions fixed thereon, and means operated by the

George Brown Wheeler, Brattleboro, Vermont, U.S.A., 8th November, 1899; 6 years. (Filed 2nd October, 1899.)

Claim.—1st. A starching machine comprising a cylinder, a segmental series of rolls pressed simultaneously toward the periphery of the cylinder, a loose belt or apron interposed between the cylinder and rolls, means for presenting starch to the belt and cylinder, the said rolls constituting a segmental pressure member at one side of the belt, while the cylinder constitutes a continuous pressure mem-

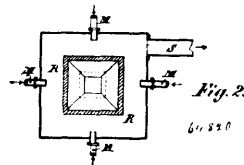
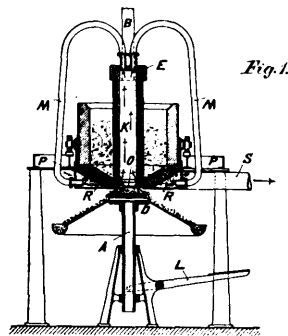
ber at the opposite side of the belt, automatic mechanism for imparting a back and forth movement to one of said members to distribute the pressure on goods between them, and means for feeding the goods progressively between the members. 2nd. A starching machine comprising a rotary cylinder, means for presenting starch to the cylinder, an endless belt or apron and guide rollers therefor arranged to hold a stretch of the belt in a curved position against a portion of the periphery of the cylinder, means for rotating the cylinder to cause a progressive movement of the goods between the cylinder and belt, a series of rolls bearing simultaneously on the under side of the curved portion of the belt, so that they exert pressure simultaneously through the belt on the goods passing between the cylinder and the belt, and means for reciprocating said pressure rolls in a curved path to give each roll a back and forth motion on the curved portion of the belt and distribute its pressure on the goods. 3rd. A starching machine comprising a rotary cylinder, means for presenting starch to the cylinder, an endless belt or apron and guide rollers therefor arranged to hold a stretch of the belt in a curved position against a portion of the periphery of the cylinder, means for rotating the cylinder to cause a progressive movement of the goods between the cylinder and belt, a frame mounted to oscillate in a path concentric with the periphery of the cylinder, means for oscillating said frame, and a series of rolls supported and reciprocated in a curved path by said frame, said rolls bearing simultaneously against the curved portion of the belt and exerting pressure through the latter on the goods between the cylinder and belt. 4th. A starching machine comprising a rotary cylinder, means for presenting starch to the cylinder, an endless belt or apron and guide rollers therefor arranged to hold a stretch of the belt in a curved position against a portion of the periphery of the cylinder, a frame mounted to oscillate in a path concentric with the periphery of the cylinder, means for oscillating said frame, a series of rolls supported and reciprocated in a curved path by said frame, and connection between the frame and cylinder through which a progressive rotary motion is imparted to the cylinder and belt, said rolls bearing simultaneously against the curved portion of the belt and exerting pressure through the latter on the goods between the cylinder and belt. 5th. A starching machine comprising a rotary cylinder, means for presenting starch to the cylinder, an endless belt or apron, guide rolls arranged at opposite sides of the cylinder to hold a stretch of said belt in a curved position against a portion of the periphery of the cylinder, means for yieldingly pressing the rear guide roll against the cylinder to cause it to cooperate with the cylinder in squeezing starch from the portion of the belt that rises from the tank, intermediate guide rolls for the lower stretch of the belt, a series of pressure rolls bearing simultaneously against the under side of the curved stretch of the belt, means for progressively rotating the cylinder to feed the goods between the belt and cylinder, and means for reciprocating said rolls in a curved path to distribute their pressure on the belt and goods. 6th. A starching machine comprising a rotary cylinder, means for presenting starch to the cylinder, a frame mounted to oscillate in a path which is concentric with the periphery of the cylinder, radial guides on said frame, a series of pressure rolls mounted in bearings which are radially movable in said guides, springs acting on said bearings to press the rolls inwardly toward the axis of the cylinder, a belt or apron movable between the cylinder and pressure rolls, and means for oscillating the frame to distribute the pressure of the rolls. 7th. A starching machine, comprising a rotary cylinder, a ratchet wheel affixed to the shaft of the cylinder, means for presenting starch to the cylinder, a belt or apron movable against a portion of the cylinder, a frame mounted to oscillate on the said shaft, a series of rolls carried by said frame and arranged to bear simultaneously against the belt, means for oscillating the frame to give the rolls a back and forth motion on the belt, and a pawl carried by the frame and engaged with the said ratchet wheel, whereby the cylinder is given a step by step forward rotation. 8th. A starching machine comprising a rotary cylinder, a ratchet wheel affixed to the shaft of the cylinder, means for presenting starch to the cylinder, a belt or apron movable against a portion of the cylinder, a frame mounted to oscillate on the said shaft, a series of rolls carried by said frame and arranged to bear simultaneously against the belt, means for oscillating the frame to give the rolls a back and forth motion of the belt, a pawl carried by the frame and engaged with the said ratchet wheel, whereby the cylinder is given a step by step forward rotation, and means for preventing the backward rotation of the cylinder. 9th. A starching machine comprising a rotary cylinder, means for presenting starch to the cylinder, a belt or apron movable against a portion of the cylinder, a frame composed of two separately connected sections, one extending above and the other below the cylinder shaft, a series of rolls supported by the lower section of the frame and arranged to bear simultaneously against the belt, and means for oscillating the frame.

No. 64,820. Electric Furnace. (*Fournaise électrique.*)

Siemens & Halske, Berlin, Germany, assignees of Oscar Frolich, Stogltitz, Germany, 9th November, 1899; 6 years. (Filed 24th September, 1898.)

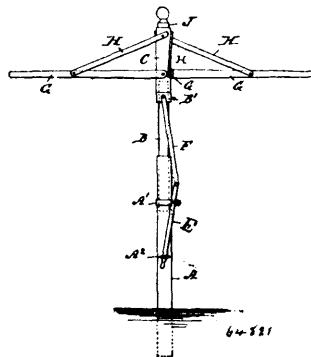
Claim.—An electric furnace, comprising an electrode crucible open at the top and having a discharge aperture in the bottom, a carbon tube electrode vertically mounted within said crucible, means for lowering and raising said carbon tube electrode, a lid covering the

top of said carbon tube electrode, a gas furnace under the bottom of said crucible, pipes from said tube electrode connecting with the



furnace, a truncated cone table or valve closing the discharge orifice in the bottom of said crucible and receiving the discharge therefrom, and means for adjusting said table or valve to regulate or stop the discharge, substantially as set forth.

No. 64,821. Clothes Drier. (*Sechoir à linge.*)



William J. Coulter, Chesley, Ontario, Canada, 9th November, 1899; 18 years. (Filed 4th October, 1899.)

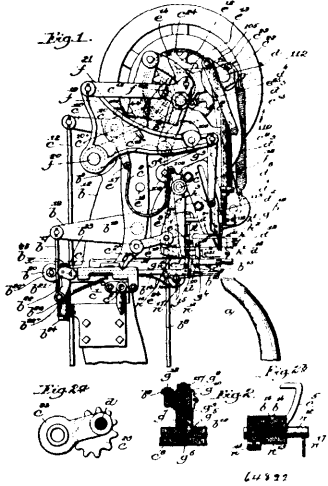
Claim.—In a clothes drier of the character described, the combination of the metal pipe section A provided with a bracket A¹, and stop pin A², pipe section B, provided with a fixed collar B¹, and telescoping into section A, pipe section C, sleeved rotatively on the upper end of section B, and the compound levers E and F, pivoted together and to said collar and bracket, as set forth.

No. 64,822. Pegging Machine. (*Machine à cheviller.*)

The McKay Shoe Machinery Company, Portland, Maine, U.S.A., assignee of Louis Amedee Gasgrain, Winchester, Massachusetts, U.S.A., 9th November, 1899; 6 years. (Filed 27th September, 1899.)

Claim.—1st. In a pegging machine employing an awl and awl bar, a driver bar and driver, a horn having a hole in its top, a plunger, and means to operate said plunger to retract it and open the hole in the horn in advance of the descent of the awl and to elevate said plunger during the driving of a peg, said plunger brooming or clinching the point of the peg, substantially as described. 2nd. In a pegging machine the following instrumentalities, viz.:—a plurality of awls, actuating means therefor, a stock supporting horn having a hole in its top, said hole being enlarged to receive simultaneously said plurality of awls, a plunger in the hole of the horn, means to retract said plunger in said hole as the awls penetrate the stock, and means to elevate said plunger in said hole after the awls rise from the stock, said plunger meeting the portion of the underside of the stock which was made to protrude and enter the hole in the horn by the descent of the awls, pushing back and smoothing such portions of the stock, substantially as described. 3rd. In a pegging machine the following instrumentalities, viz.:—a plurality of drivers, actuating means therefor, a stock supporting horn having a hole in its top to receive the points of a plurality of pegs, a plunger in said horn, and means to actuate it to meet the

ends of the driven pegs, broom or clinch the same and push back portions of the stock made to protrude into the hole in the horn with



the points of the pegs as the latter penetrates the stock at the top of the horn, substantially as described. 4th. A stock supporting horn having a hole at its top, a plunger fitted to be slid in a vertical passage in said horn, and means to move said plunger to retract it while an awl penetrates the stock, and then to lift the plunger to meet and broom or clinch a peg driven through the stock, substantially as described. 5th. A revolving stock support having a hole at its top, a plunger in said hole, a slide rod in engagement with said plunger, a second slide rod to actuate the slide rod co-operating with the plunger, and means to actuate said second slide rod, substantially as described. 6th. A revolving horn or stock support having a hole at its top, a plunger fitted in said hole, a lever carried by said horn, connections between it and said plunger, a collar or device in operative engagement with said lever in the different positions of the horn, and means to actuate said collar or device to actuate said lever and move said plunger to open and close the hole in the horn, for the purpose set forth. 7th. In a pegging machine, a revolving stock support, a plunger therein, a lever carried by and movable with said horn, connections between said lever and plunger to operate the same, a cam, a lever actuated thereby, and connections between said lever and the lever carried by said horn to actuate the plunger, substantially as described. 8th. In a pegging machine, a stud, a revoluble work supporting horn mounted on said stud, a plunger in said horn, a lever, and connections between it and said plunger, a collar or device surrounding said stud loosely and in operative engagement with said lever in the various positions occupied by said horn, and a lever to move said collar or device. 9th. In a pegging machine, a horn having a hole for a plunger, a plunger therein, a vertically movable slide rod in said horn, and a connection between said rod and plunger to actuate the latter. 10th. In a pegging machine, a horn having at its upper end a hole, a tip having a hollow sleeve entering said hole, a plunger having its shank guided in the hole of said tip, and means to move said plunger vertically. 11th. In a pegging machine, a horn having a vertically movable plunger provided with a transverse groove below its upper end, a slide rod having one end adapted to enter said groove, and a vertically movable slide rod operatively joined with the opposite end of the rod in engagement with said plunger. 12th. In a machine of the class described, a feeding device provided with a lip to ride on the outer face of the stock. 13th. In a machine of the class described, a feeding device having a lip presenting a convex underside to rest on a sole and ride up over the end of a tap sole. 14th. In a machine of the class described, a feeding device having a contact surface to engage the stock, and a lip to ride on the outer face of the stock, thereby ensuring the action of said contact surface upon the sole at a uniform distance from its outer face. 15th. In a pegging machine, a feed lever having a contact surface to engage the edge of the sole, and having at its end a lip to rest upon the outer face of the sole, said lip being convexed externally to run up an incline at the end of a tap. 16th. In a pegging machine, a feeding device having a contact surface to engage the stock, and having a lip projecting beyond said contact surface to bear upon the upper surface of the stock. 17th. In a pegging machine, a feeding device having a contact surface to engage the stock, and a lip to overlap and bear upon the surface of the stock, and means to move said feeding device forward to engage the stock. 18th. In a pegging machine, a feeding device having a contact surface to engage the stock, and at its forward end a lip to overlap and bear upon the face of the stock, and a cam leg to move said feed lever forward and cause the contact surface to engage the stock. 19th. In a machine of the class described, a stock support, a feeding device having a lip to ride on the stock during the operation of the machine, a contact surface to engage the edge of the sole, and means to move said feeding device to and fro and laterally to

engage the stock, feed it, and retire from the stock into its starting position. 20th. In a pegging machine, a feeding device having a contact surface to engage the stock, and at its forward end a lip to overlap and bear upon the face of the stock, a pivoted lever in which said feeding lever is free to slide, a cam leg to move said feeding lever in said pivoted lever to cause the contact surface to engage the stock, and means to move the said pivoted lever about its pivot to thereby cause the feed lever in engagement with the stock to feed the stock over the horn. 21st. In a machine of the class described, a feeding device, and means to lift said feeding device away from the stock when the machine is stopped. 22nd. In a machine of the class described, a stock support, a feeding device, and means to lift said feeding device away from the stock support when the machine is stopped to thereby provide for the ready removal and application of the stock from and to the stock support. 23rd. In a pegging machine, a feeding device shown as a lever having a contact surface to engage the stock, and having a lip projecting beyond said contact surface to bear on the upper surface of the stock, and means under the control of the operator to lift said feeding device away from the work to allow the work to be removed from or applied to the horn. 24th. In a machine of the class described, a stock support, a feeding device having a lip to bear on the stock during the operation of the machine, a lifting device under the control of the operator and normally occupying its inoperative position when the machine is in operation, said device when the machine is to be stopped being put automatically into its operative position to engage and lift said feeding device away from the upper end of the stock support. 25th. In a machine of the class described, a stock support, a feeding device to engage and feed the stock, a foot plate to bear on the stock, means carrying said foot plate, means to lift said foot plate during the operations of the machine, a lifting device moving in unison with said foot plate, means under the control of the operator to normally keep said lifting device in its inoperative position, and means to put said lifting device automatically in its operative position to engage and lift the feeding device with the foot plate when the machine stops. 26th. In a machine of the class described, a stock support, and a feeding device provided with a lip to ride on the outer face of the stock. 27th. In a machine of the class described, a stock support, a vertically movable foot plate, and a device carrying it, a locking device and suitable actuating means operating intermittently to lock the foot plate in position on the stock to clamp the same on the stock support. 28th. In a machine of the class described, a stock support, a foot plate, means to move it toward and from the stock support, to hold and to release the stock thereon, and an intermittently operated device to lock the foot plate temporarily in its position to clamp the stock between itself and said stock support. 29th. In a machine of the class described, a stock support, a foot plate to bear on the stock, a lever or device carrying the said foot plate, means to lift the foot plate from the stock, a device to cause said foot plate to descend and adapt itself to varying thickness of stock, a locking device and actuating means therefor to lock said foot plate temporarily in its position to clamp the stock between the foot plate and stock support. 30th. In a machine of the class described, a stock support, a lever carrying a foot plate, a driver bar having a driver, a driver bar actuating shaft rotatable in a hole in said lever, and a locking device to hold said lever and its foot plate in position to clamp the stock between itself and said stock support while the driver is operated to drive a peg into the clamped stock. 31st. In a machine of the class described, a stock support having a movable peg clinching plunger, a lever carrying a foot plate, a driver bar having a driver, a driver bar actuating shaft rotatable in a hole in said lever, and a locking device to hold said lever and the foot plate in position to clamp the stock between the foot plate and said stock support while the driver is operated to drive a peg into the clamped stock, and means to move said plunger to clinch the end of a driven peg. 32nd. In a machine of the class described, a stock support having a movable peg clinching plunger, a lever carrying a foot plate, an awl bar having an awl, a driver bar having a driver, a driver bar actuating shaft rotatable in a hole in said lever, and a locking device to hold said lever and the foot plate in position to clamp the stock between itself and said stock support while the awl bar is lifted to withdraw the awl and the driver is operated to drive a peg into the clamped stock, and means to move said plunger to clinch the end of a driven peg. 33rd. In a machine of the class described, a stock support, a lever carrying a foot plate, means to lift said foot plate from the stock, means to cause said foot plate to descend for a variable distance to meet the upper side of the stock whatever its thickness, a sliding clamp co-operating with a slotted part of the foot plate carrying lever, and means to move said clamp to temporarily lock the said lever in its down position. 34th. In a machine of the class described, a rotatable driver bar operating shaft, a lever hung on said shaft and provided with a foot plate, a main lever, means to actuate the same uniformly at each stroke to lift the foot plate, its carrying lever and the driver shaft to enable the foot plate to release the stock, and a spring to cause said lever and foot plate to descend and meet the stock of varying thickness. 35th. In a machine of the class described, a stock support, a lever carrying a foot plate, means to lift said foot plate from the stock, means to cause said foot plate to descend for a variable distance to meet the upper side of the stock whatever its thickness, and means to clamp the lever and hold the foot plate temporarily in contact with the stock during

part of the operation of the machine, a sliding clamp co-operating with a slotted part of the foot plate carrying lever, and means to move said clamp to temporarily lock the said lever in its down position. 36th. In a machine of the class described, a stock support having a vertically movable peg clinching plunger, a lever carrying a foot plate, means to lift said foot plate from the stock in order that it may be fed over the stock support, means to cause said foot plate to descend on the stock varying in thickness, a locking device, a lever, means to actuate it, a rod connected with said lever, and connections between said rod and the plunger in the horn to move the latter and devices also actuated by said rod to operate said locking device. 37th. In a machine of the class described, a lever carrying a foot plate, a feeding device, a lifting device pivoted on the foot plate carrying lever, means to lift said foot plate, and a starting and stopping treadle, the release of said treadle by the operator putting the said lifting device in position to engage and lift the feeding device with it. 38th. In a machine of the class described, a foot plate convexed at its lower side in the direction of movement of the shoe sole under it. 39th. In a pegging machine, a foot plate convexed on its lower side in the direction of the feeding movement of the sole, and concaved in the direction of its length, whereby said foot plate acts to level or round the sole, substantially as described. 40th. In a pegging machine, a foot plate having a recess at its underside, and convexed externally at its end beyond said recess, and a feed lever having at its front end an extended lip to bear on the sole, said lip entering at times said recess, substantially as described. 41st. In a pegging machine, a main lever, a peg ribbon gripper adapted to grip and feed a plurality of ribbons, a compensating lever carried by said main lever, and a device to govern the position of said compensating lever, and the ribbon gripper relatively to said main lever, in order that the peg ribbons may be fed for the same distances. 42nd. In a machine of the class described, a lever, a combined peg carrier and cutter, a peg ribbon feeding gripper carried by it, and means to operate said lever always for the same distance. 43rd. In a machine of the class described, a feeding device, a lever e^2 , to cause the movement of said feeding device laterally, a peg ribbon feeding gripper, and a peg ribbon holding gripper, a lever e^3 , devices carried by it to actuate said grippers alternately, and a connection between said levers e^2 and e^3 , and means to actuate said lever e^2 , positively whereby it through said connection actuates the lever e^3 . 44th. In a machine of the class described, a stock support, a foot plate and its carrying lever, means to lift said lever to a uniform starting point and cause it to descend for a variable distance depending on the thickness of the stock, a combined peg cutter and carrier moving up and down in unison with said foot plate, a plurality of peg ribbons having an area in cross section to correspond with the diameter of the peg desired, means to equally and uniformly feed said peg ribbons simultaneously each for a greater or less distance, into the holes of the peg cutter and carrier, means to operate said cutter and carrier to put the pegs therein in driving position, a plurality of drivers to drive said pegs, and means to lock said plate in position to clamp and hold the stock while the pegs are being driven. 45th. In a machine of the class described, a gripper semi-spherical at its back that it may tip to adapt its face to an inequality of thickness of the peg ribbon. 46th. In a machine of the class described, a rocking gripper, means to sustain it in position, and means to move said gripper toward and to grasp a peg ribbon. 47th. In a machine of the class described, a gripper having a curved back, combined with a shank having a seat to receive said back. 48th. In a machine of the class described, a gripper toothed at its face and presenting a curved back, and means to sustain said gripper that it may tip to adapt itself to the peg, and means to actuate said gripper. 49th. In a machine of the class described, a peg ribbon grippers presenting a curved back and a seat therefor, combined with a pin entering loosely a hole in said gripper. 50th. In a machine of the class described, a peg carrier and cutter, and a plate, combined with two blocks sustained therein above said peg carrier or cutter, said blocks being fixed in said plate and presenting two grooves for the reception of a plurality of peg ribbons, one of said blocks acting as a closer for said grooves. 51st. In a pegging machine, a foot plate convexed at its under side in the direction of movement of the stock under it, and corrugated to prevent slipping of the stock under the foot plate as the latter comes on to a tap sole. 52nd. In a pegging machine, a work support, a foot plate provided at its under side with a recess, combined with a feeding device having a lip movable in said recess as the feeding device is operated and the foot plate bears on the stock. 53rd. In a machine of the class described, a suitable support for the shoe to be pegged, a foot plate concaved at its under side to bear on the outer face of the sole, and round the same, and means to insert fastenings in succession into the rounded sole. 54th. In a machine of the class described, intermittently operating means for compressing and rounding or levelling the sole step by step, and means for inserting fastenings successively in said sole as it is being rounded or levelled. 55th. In a machine of the class described, a lever, means to move it, a feeding gripper, and a block or guide having grooves to receive a plurality of peg ribbons carried by said lever, and means to oscillate said block as the gripper carried by said lever acts to feed a plurality of peg ribbons, whereby the peg ribbons may be fed each for the same distance. 56th. In a machine of the class described, a lever, a compensating lever moved thereby and grooved for the reception of a plurality of peg

ribbons, a lever having a foot plate, a peg ribbon feeding gripper, a peg ribbon holding gripper, two rods for moving said grippers alternately, a lever to which said rods are attached, said lever being pivoted on the lever carrying the foot plate, and means to lock and hold said lever in position to clamp the stock while a peg is being driven into the same. 57th. The main lever, a compensating lever grooved to receive and direct a plurality of peg ribbons, and a peg gripper, combined with means to turn said compensating lever on said main lever as the latter is actuated to cause the peg ribbons to be fed into the machine uniformly. 58th. In a machine of the class described, automatic stock calipering means composed of a horn and a foot plate, said horn having an opening for the reception of the point of an awl, combined with means to close the said opening after the awl rises from the opening in the horn. 59th. In a machine of the class described, automatic stock calipering means composed of a foot plate and a horn having an opening for the reception of the point of an awl, an awl bar and awl, and a driver bar, combined with a plunger, and means to move said plunger to admit the awl into the opening of the horn and then to move said plunger again to fill said opening and close the exposed end of a peg. 60th. In a machine of the class described, a stock support, and a feeding device having a lip presenting a convexed underside to rest on a sole and ride up over the end of a tap sole. 61st. In a machine of the class described, a stock support, a feeding device having a contact surface to engage the stock, and a lip to ride on the outer face of the stock, thereby ensuring the action of said contact surface upon the sole at a uniform distance from its outer face. 62nd. In a machine of the class described, a vertically movable foot plate, a feeding device, a lifting device inoperative during the operations of the machine, a starting and stopping treadle, and means intermediate it and said lifting device to operate the lifting device to engage and lift the feeding device in unison with the foot plate as the latter is being put into its elevated position of rest with the machine stopped. 63rd. In a machine of the class described, a lever to control the time of starting and stopping the machine, a treadle under the control of the operator, connections between said treadle and said lever, a feeding device having a lip to ride on the outer face of the stock during the operations of the machine, a lifting device, a connection between said lifting device and said lever to keep said lifting device in its inoperative position during the operations of the machine, means to raise and lower said lifting device, the removal of the foot of the operator from said treadle to stop the machine putting said lifting device into its operative position to lift the feeding device from the stock as the machine comes to rest. 64th. In a pegging machine, a ribbon gripping device adapted to grip a plurality of ribbons, a lever carrying said gripping device and moving it in the arc of a circle to feed the ribbon, and a device to govern the position of the ribbon gripping device relatively to said lever so that the ribbons shall be fed for the same or uniform distances. 65th. In a pegging machine, an abutment located above the foot plate to guide the awl bar and prevent lateral strain on the awl while the awl is piercing the work. 66th. In a pegging machine a horn having a plunger capable of being moved vertically in a hole in the top of the horn, connected slide rods to control the movement of said plunger, and means to actuate said slide rods in all positions of the horn. 67th. In a pegging machine, a horn to support the stock, a plurality of awls to puncture the stock resting on the horn, a plurality of drivers to drive a plurality of pegs through the stock of the horn, and a plunger movable in said horn to clinch or broom up the points of the pegs. 68th. In a pegging machine, a peg guide-way composed of two pieces d^{20} and d^{21} , the piece d^{21} having a groove and a notch and the piece d^{20} , co-operating with the piece d^{21} to form two enclosed guideways. 69th. In a pegging machine, a guideway composed of two pieces d^{20} and d^{21} , the piece d^{21} having a groove and a notch, the piece d^{20} , co-operating with the piece d^{21} to form two enclosed guideways and a clamp extended through a hole in the piece d^{20} and engaging a peg ribbon on each of said grooves. 70th. In a machine for inserting fastenings, a lever to bear on the top of the hole, combined with an adjustable feeding device applied to said lever. 71st. In a machine for inserting fastenings, a lever adapted to rest at its end on the stock, a feeding device applied to said lever, and means to slide said feeding device backward and forward on said lever. 72nd. In a machine for inserting fastenings, a lever to bear on the sole, a feeding device applied to said lever loosely, an adjusting device to adjust said feeding device on said lever, said device having a co-operating distance regulator to keep the end of the feeding device in its adjusted position. 73rd. In a machine of the class described, a feeding device adapted to engage the edge of the stock, and means to cause said feeding device to engage the stock at a uniform distance from the upper surface of the stock, whatever the thickness of the stock. 74th. In a machine of the class described, a vertically movable foot plate, a feeding device, a lifting device inoperative during the operations of the machine, and means to actuate said lifting device to lift the feeding device when the machine is stopped.

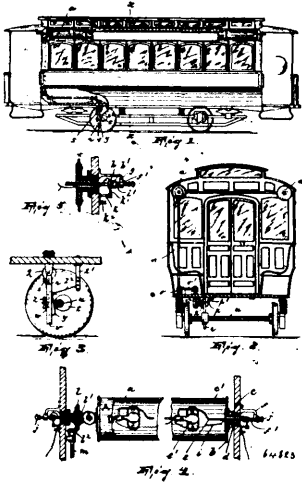
No. 61,823. Railway Advertising Apparatus.

(Appareil d'annonce de chemin de fer.)

Rosa Feder, Paterson, New Jersey, U.S.A., 9th November, 1899; 6 years. (Filed 19th March, 1899.)

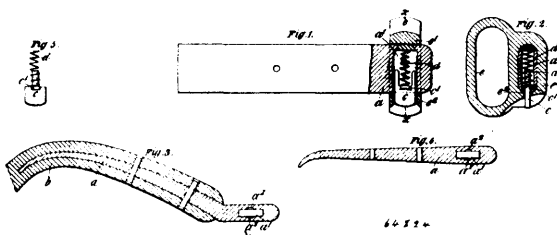
Claim.—1st. The combination with a vehicle, of a revoluble sign suitably journalled therein, a ratchet carried by said vehicle, a lever

fulcrumed upon a portion of said vehicle in proximity to said ratchet, a spring actuated pawl carried by the lever and adapted to



engage said ratchet, operative connection between said ratchet and the sign, a cam carried by a revolving member of the running gear and engaging said lever to vibrate the same, and means, disposed between the lever and the cam and adjustably mounted upon the latter, for varying the movement of said lever, substantially as described. 2nd. The combination with a vehicle, of a plurality of revolving signs journaled therein, a ratchet carried by said vehicle, a lever fulcrumed upon a portion of said vehicle in proximity to said ratchet, a spring actuated pawl carried by the lever and adapted to engage said ratchet, operative connections between said ratchets and one of the signs and between the respective signs, a cam carried by a revolving member of the running gear and engaging said lever to vibrate the same, and a wedge disposed between the lever and the cam and adjustably mounted upon the latter for varying the movement of said lever, substantially as described. 3rd. In an advertising apparatus for vehicles, the combination of a suitably journaled translucent cylinder, a hollow trunnion carried on each end of and supporting the same, a lamp carrying bracket projecting through said cylinder and penetrating said trunnions, suitably supported arms forming bearings for said brackets, one at each end thereof, a collar or collars on said bracket, a spiral spring disposed between said collar and the arm, and a feather and key arrangement between said arm and the bracket, substantially as described.

No. 64,824. Harness. (Harnais.)



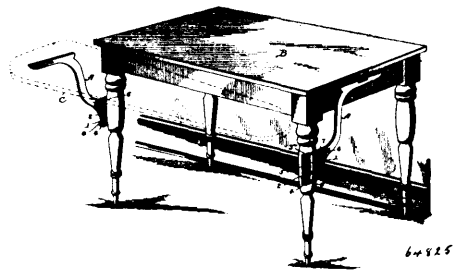
Wood and Walter, Westminster, London, England, assignee of Alfred Wood, Folkestone, England, 9th November, 1899; 6 years. (Filed 27th September, 1899.)

Claim.—1st. A fastening for harness, comprising a curved arm member attached to the harness strap, a band member adapted to slide on said strap, and a loose bolt adapted to slide in one of said members and to normally engage with the other of said members, substantially as described for the purpose specified. 2nd. A fastening for harness, comprising a curved arm member attached to the harness strap, a band member provided with a loop and adapted to slide on said strap, a loose bolt adapted to slide in a recess in one of said members and to normally engage with the other of said members, and means for retaining said bolt in engagement, substantially as described for the purpose specified. 3rd. A fastening for harness, comprising a curved arm member attached to the harness strap, a band member provided with a loop and adapted to slide on said strap, a loose bolt adapted to slide in a recess in one of said members and to normally engage with the other of said members, a spiral spring for retaining said bolt in engagement, and means for disengaging said bolt against the pressure of said spring in order to release the fastening, substantially as described for the purpose specified. 4th. In a fastening for harness, the combination of a curved arm attached to the harness strap and having a recess

in its free end, a band adapted to slide on said harness strap, a loop formed on said band and provided with a slot through one end, a loose bolt confined in the recess in the said curved arm and normally projecting into the slot in the said loop, and means for normally retaining the bolt in such projecting position, substantially as described for the purpose specified. 5th. In a fastening for harness, the combination of a curved arm attached to the harness strap and having a recess in its free end, a band adapted to slide on said harness strap, a loop formed on said band and provided with a slot through one end, a loose bolt confined in the recess in the said curved arm and projecting into the slot in said loop, and a spiral spring enclosed in the recess in the curved arm for normally retaining the bolt in such projecting position, substantially as described for the purpose specified. 6th. In a fastening for harness, the combination of a curved arm attached to the harness strap and having a recess in its free end, a band adapted to slide on said harness strap, a loop formed on said band and provided with a slot through one end, a loose bolt confined in the recess in the said curved arm and projecting into the slot in the said loop, a spiral spring enclosed in the recess in the curved arm for normally retaining the bolt in such projecting position, means for supporting said spiral spring, and a removable pin passed through the slot in the bolt, substantially as described for the purpose specified. 7th. In a fastening for harness, the combination of a curved arm attached to the harness strap and having a recess in its free end, a band adapted to slide on said harness strap, a loop formed on said band and provided with a slot through one end, a loose bolt confined in the recess in the said curved arm and projecting into the slot in the said loop, a spiral spring enclosed in the recess in the curved arm for normally retaining the bolt in such projecting position, means for supporting said spiral spring, and means for pressing the bolt into the recess in the curved arm against the force of the spiral spring in order to release the fastening, substantially as described for the purpose specified. 8th. In a fastening for harness, the combination of a curved arm attached to the harness strap and having a recess in its free end, a band adapted to slide on said harness strap, a loop formed on said band and provided with a slot through one end, a loose bolt adapted to slide in the slot in said loop and to normally engage with the recess in the curved arm, a spiral spring enclosed in the slot in the loop and adapted to normally retain the bolt in engagement with the recess in the curved arm, and means for withdrawing the said bolt out of the recess in the curved arm in order to release the fastening, substantially as described for the purpose specified. 9th. In a fastening for harness, the combination of a curved arm attached to the harness strap and having a recess in its free end, a band adapted to slide on said harness strap, a loop formed on said band and provided with a slot through one end, a loose bolt adapted to slide in the slot in said loop and to normally engage with the recess in the curved arm, a spiral spring enclosed in the slot in the loop and adapted to normally retain the bolt in engagement with the recess in the curved arm, and means for withdrawing the said bolt out of the recess in the curved arm in order to release the fastening, substantially as described for the purpose specified.

No. 64,825. Ironing Board Support.

(Support de planche à repasser.)

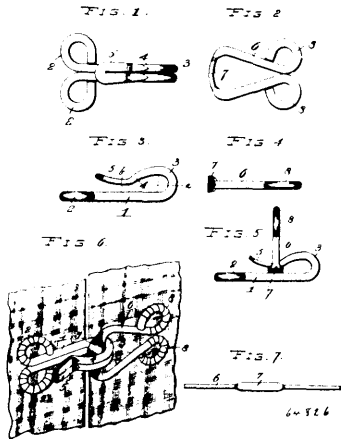


Charles M. Shaw, Leadville, Colorado, U.S.A., 9th November, 1899; 6 years. (Filed 6th October, 1899.)

Claim.—1st. The combination with a support provided with a projection, of an arm having a hinged vertically sliding connection with its support, said arm having an aperture to receive a projection on the support and also provided with a hook adapted to engage said support, the hook and projection locking the arm when the latter drops to its normally lowered position. 2nd. The combination with an arm, of a leaf adapted to be secured to a support, said leaf having a projecting staple and a grooved lower edge, the arm provided with a hook and an aperture, said arm having a vertically sliding hinged connection with the leaf whereby its hook, aperture and lower edge become locked to the upper edge, the staple and the grooved lower edge respectively, of the leaf when the arm is in its outward position. 3rd. In a support for ironing or other boards, the combination of a hinge, one leaf of which is provided with a groove at its lower edge and has a staple or tongue, and the other leaf provided with an aperture or opening adapted to receive the

staple or tongue, said apertured leaf adapted to enter the groove at the lower edge of the other leaf when the two leaves are together whereby they are locked in that position and an arm projecting from the apertured leaf for the support of the ironing board. 4th. In a support for ironing or other boards, the combination of a pair of leaves hinged together, one having a groove at its lower edge adapted to receive the lower edge of the other leaf, said grooved leaf having a notched upper edge adapted to receive a lip of the other leaf, said grooved leaf having a tongue or staple and the other leaf an aperture or opening to receive the tongue or staple, a key for locking the leaves in closed position and an arm projecting from the apertured leaf for the supporting of the ironing board.

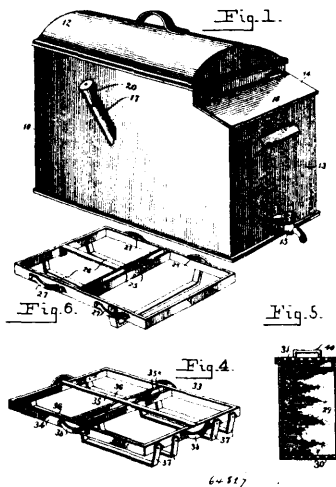
No. 64,826. Hook and Eye. (*Agrafe et porte agrafe.*)



William G. Templeman, Colorado Springs, Colorado, U.S.A., 9th November, 1899; 6 years. (Filed 7th October, 1899.)

Claim.—1st. In a device of the class described, a hook constructed with a narrow passageway into the opening which is normally occupied by the eye, and an eye having a widened portion at its center, which widened portion occupied a position at an angle to the plane occupied by the body of said eye, substantially as specified. 2nd. In a device of the class described, a hook having its free end bent so as to form a narrow passageway into the opening normally occupied by the eye, and an eye provided with a flattened portion at its center, which flattened portion is at an angle to the plane occupied by the body portion of the eye, and which flattened portion is in thickness less than the width of the narrowed passage leading into the opening in the hook, substantially as specified. 3rd. In a device of the class described, a hook constructed with a narrow passage leading into the opening normally occupied by the eye, and an eye provided with a widened portion in its engaging loop, which widened portion is so arranged as that said eye must be turned at an angle to the hook in order to engage said eye in said hook, substantially as specified.

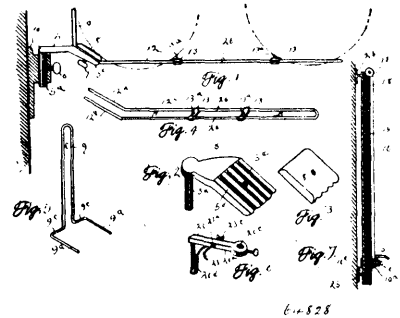
No. 64,827. Culinary Steamer. (*Ustensile de cuisine.*)



Josiah G. Phenix and Martha S. Phenix, both of Seattle, Washington, U.S.A., 9th November, 1899; 6 years. (Filed 7th October, 1899.)

Claim.—1st. A culinary steamer consisting of a casing provided with a series of ledges, a skeleton tray having the external lugs which space the tray relatively to the casing and support the same on the ledges, and a series of cooking vessels fitted removably to the tray, substantially as described. 3rd. A culinary steamer consisting of a casing provided with ledges arranged in different horizontal planes, the skeleton trays each provided with the external lugs which rest on the ledges and space the tray relatively to the walls of the casing, and cooking vessels fitted removably to the trays and spaced with relation one to the other, whereby circulation spaces are provided between the vessels on the trays and the walls of the casing, substantially as described. 3rd. A culinary apparatus consisting of a casing, a filling spout attached to the casing and opening through the latter, and internal tube communicating with said spout and terminating above the bottom of the casing to provide a space or opening at the foot of said tube, and a removable whistle tube fitted to the filling spout, substantially as described. 4th. In a culinary steamer, a skeleton tray consisting of a frame provided with braces which divide the same into a series of pockets, the depending stirrups attached to the frame and lying below the horizontal plane thereof, and the lugs arranged exteriorly to the frame, combined with a casing having ledges on which the tray lugs are adapted to rest, and cooking vessels fitted individually into the pockets of the tray, substantially as described. 5th. A culinary steamer consisting of a casing provided at one end with a water reservoir and with the horizontal ledges within its steam chamber, the skeleton trays having the external lugs which rest on the ledges and the depending stirrups, and the series of cooking vessels fitted individually to compartments in the trays, one or more of said cooking vessels being provided with the perforated top and bottom and with the removable false bottom, substantially as described.

No. 64,828. Bicycle Stand. (*Support de bicyclets.*)

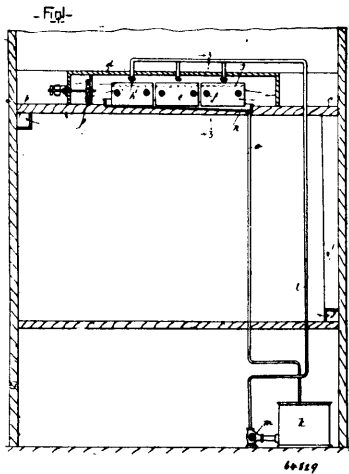


Joseph R. Moore, Denver, Colorado, U.S.A., 9th November, 1899; 6 years. (Filed 12th April, 1899.)

Claim.—1st. In a bicycle stand, the combination of a suspended bracket having a groove inclined face, the shoe adapted to fit the inclined face of the bracket and provided with counterpart grooves, the horizontal and vertical racks, each composed of two parallel arms adapted to receive the wheels of the bicycle and support the latter in an upright position, said racks being adapted to engage the grooves in the bracket and shoe, and suitable means for connecting the bracket and shoe, substantially as described. 2nd. In a bicycle stand, the combination of a suspended swinging bracket having a grooved inclined face, the horizontal and vertical racks each composed of two parallel arms adapted to receive the bicycle wheels, and having bent extremities adapted to engage the grooves in the bracket and shoe, and suitable means for connecting the bracket and shoe, substantially as described. 3rd. In a bicycle stand, the combination of a vertically adjustable suspended bracket having an inclined face, a shoe adapted to fit the bracket, the horizontal and vertical racks, each having parallel arms adapted to receive the bicycle wheels, said racks being adapted to engage the bracket and shoe which embrace the rack extremities on opposite sides, and suitable means for connecting the bracket and shoe whereby the racks are held securely in place. 4th. In a bicycle stand, the combination of the suspended vertically adjustable swinging bracket having an inclined face, a shoe adapted to fit said face, the horizontal and vertical racks adapted to receive the wheels of the bicycle and support the same in an upright position, said racks being adapted to engage the inclined face of the bracket, and suitable means for connecting the bracket and shoe which embrace the rack extremities on opposite sides. 5th. A bicycle stand, comprising a rack occupying substantially a horizontal position and composed of two separated arms adapted to receive the bicycle wheels and provided with suitable stops to hold the wheel securely in place, and suitable means attached to one extremity of the rack for suspending the latter at any desired height above the ground or other surface. 6th. In a bicycle stand, the combination with a suitable socket, of a bracket having an inclined face provided with grooves, and a depending stem adapted to engage and turn in the socket which is located a suitable distance above the ground or other surface, the horizontal and vertical racks having bent extremities adapted to engage the grooves in the inclined face of the bracket, each of said racks being

composed of two parallel arms adapted to receive the wheels of the bicycle, the horizontal arm being provided with stops engaging the wheels and holding the machine securely in place, a shoe adapted to engage the inclined face of the bracket and having counterpart grooves adapted to engage the rack extremities, and suitable means for fastening the shoe to the bracket and securing the racks in place, said means consisting of a screw passing through an aperture in the bracket and engaging threaded apertures in the shoe. 7th. The combination with a suitable support, of a vertically adjustable socket located a suitable distance above the ground or other surface, a bracket having a depending stem adapted to engage and turn freely in the socket, the horizontal and vertical racks, each rack having one extremity adapted to engage the bracket, a shoe adapted to engage the bracket and embrace one extremity of each rack, the said rack extremities being located between the bracket and the shoe, and suitable means for fastening the shoe to the bracket and securing the rack in place, substantially as described. 8th. In a bicycle stand, the combination with an upright tube suitably supported, a socket support having a collar surrounding said tube, the bracket having a stem adapted to engage the socket of said support, a rack detachably connected with said bracket, the rack having separated parallel arms adapted to receive the wheel or wheels of the bicycle, and having suitable stops attached to the arms of the rack for holding the wheel securely in place, and means for vertically adjusting the bracket consisting of a cord or chain, having one extremity attached to the bracket, a pulley attached to the upper extremity of the tube over which the cord passes, and a weight attached to the opposite extremity of the cord and adapted to move freely in the tube during the vertical adjustment of the bracket. 9th. In a bicycle stand, the combination with an upright tube or hollow bar, the socket bar movably attached to said tube, a bracket having a stem engaging the socket of said support, a rack detachably secured to the bracket, the rack consisting of parallel arms adapted to receive the wheels of the bicycle, and having stops connecting the arms for holding the bicycle securely in place, and means connected with the socket support and engaging the tube for maintaining the bracket and its attachment at any desired height above the ground or other surface. 10th. A bicycle stand, comprising a swinging bracket, suitably suspended above the floor or other surface, a rack suitably attached to said bracket and adapted to engage the wheels of a bicycle and support the latter in an upright position, and suitable means connected with the bracket for limiting the swinging of the bicycle in a horizontal plane, said means being adapted to engage the wall or other upright support upon which the bracket is suspended. 11th. A bicycle stand comprising a suitable suspended support, and a rack suitably attached to said support and comprising two separated parallel arms, and an adjustable stop attached to said arms and adapted to engage a wheel of the bicycle, as and for the purpose set forth.

No. 64,829. Refrigerating and Drying Apparatus.
(Appareil réfrigérant.)

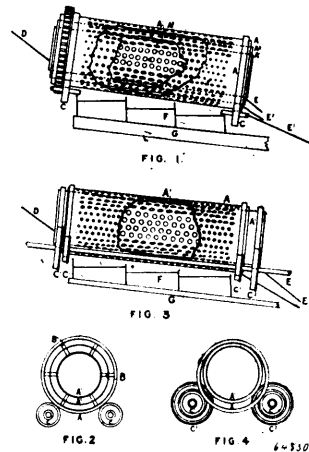


Carl Wilhelm Vollmann, Montreal, Quebec, Canada, 8th November, 1899; 6 years. (Filed 28th March, 1899.)

Claim.—1st. The improvement in the art of cooling and drying refrigerating or freezing rooms, which consists in drawing the air from such rooms, passing it through brine spray and in contact with cooling plates covered with brine and returning same to the refrigerating room, as set forth. 2nd. Apparatus for cooling and drying refrigerating or freezing rooms, consisting of an enclosure or conductor located above the room to be cooled and communicating therewith at both ends, a series of vertical cooling plates within and extending longitudinally of such enclosure, a circulating supply of brine with means for spraying the brine between and over said cooling plates, and means for effecting the passage of the air from

the room to be cooled between said cooling plates and through the brine spray back to said room, as set forth. 3rd. Apparatus for cooling and drying refrigerating or freezing rooms, consisting of a box like enclosure or conductor located above the room to be cooled and communicating therewith at both ends, a series of vertical cooling plates within and extending longitudinally of such enclosure or conductor, a source of supply of brine and feed pipes for the brine leading to points within the enclosure and above the said plates, with pump for feeding the brine, means for spraying it between and over said plates and return pan and pipes for such brine, a fan located in said enclosure for drawing air from the room to be cooled and passing it between the cooling plates and through the sprayed brine, back to the refrigerating room, and means for operating said fan, substantially as shown and described. 4th. Apparatus for drying and cooling refrigerating or freezing rooms, consisting of a box *d*, located above the room to be dried and cooled, air conductors *b* and *c*, communicating respectively one with each end of said box, a fan *p* located within the conductor *b*, one or more transverse series of longitudinally arranged vertical cooling plates *e*, bolts *g* and sleeves *f* for supporting and localizing said plates, a series of horizontal perforated plates *j* partially dividing the space between said vertical plates at their upper ends, a supply gutter *h*¹ extending transverse over each of said series of vertical plates and the horizontal plates between them, a tank *k* located below the room, a pump *m*, flow pipes *l* connecting said tank to said pump and said pump to said gutters, a collecting pan *n* located beneath said series of plates, and a return pipe *o*, connecting said pan to said tank, substantially as described and for the purpose set forth.

No. 64,830. Screen. (Tamis.)



Thomas Christopher Donnelly, Dunedin, New Zealand, 9th November, 1899; 6 years. (Filed 5th October, 1899.)

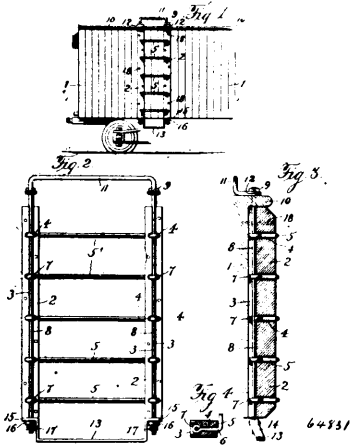
Claim.—In revolving screens especially for gold dredging, the combination of more than one screen fixed together *A*, *A*², *A*¹, or working separately *A*, *A*¹, the material being delivered into the inner screen which sifts out the coarser part of the wash, relieving the outer or final screen to a large extent, substantially as described and as illustrated in the accompanying drawing and for the purpose indicated.

No. 64,831. Car Ladder. (Echelle de chars.)

John Henry Rapp, Fort Apache, Arizona, U.S.A., 9th November, 1899; 6 years. (Filed 7th October, 1899.)

Claim.—1st. A car ladder, comprising two vertical rails, means for securing said rails to the side of the car, rounds each consisting of a metallic rod bent at right angles at its opposite ends and passing transversely through the rails from the front to the rear sides thereof, eyes formed on the extremities of said bent end, a rod disposed longitudinally on the rear side of each of the rails and passing through all the eyes arranged therein, and means for preventing lengthwise movement of the rods, substantially as described. 2nd. A car ladder, comprising two vertical rails longitudinally grooved on their rear sides and provided with transverse mortices extending from front to rear of the rails and communicating with said grooves, rounds bent inwards at right angles at their opposite ends and provided at their extremities with eyes, said bent ends passing through said mortices and the eyes disposed in said grooves, a rod arranged longitudinally in each of said grooves and passing through each of the eyes therein, means for preventing endwise movement of said rods, and means for attaching the rails to the side of the car, substantially as described. 3rd. A car ladder, comprising two vertical rails longitudinally grooved on their rear sides and provided with transverse mortices extending from front to rear of the rails and communicating with said grooves, rounds bent inwards at right angles at their opposite ends and provided at their extremities with eyes, said bent ends passing through said mortices and the eyes

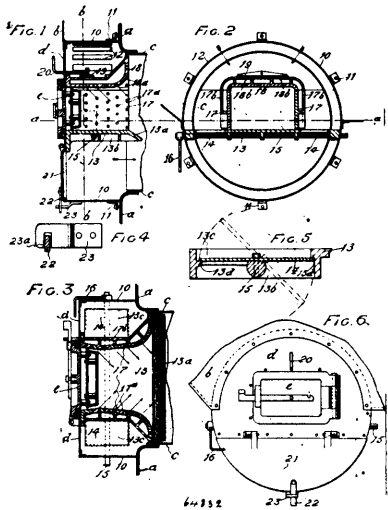
disposed in said grooves, means for securing the rails to the sides of a car, headed rods passing through the eaves of the car roof and



through a hand hold arranged on the roof, each of said rods also passing through all the eyes in one of the rails, and a step fixed on the lower ends of said rods, substantially as described. 4th. A car ladder comprising two vertical rails bolted to the sides of the car and longitudinally grooved on their rear sides, said rails being provided with transverse mortices extending from the front to the rear thereof, rounds bent inwards at right angles at their opposite ends and provided at their extremities with eyes, said bent ends passing through said mortices and their eyes disposed in said grooves, a hand hold arranged on the car roof above the ladder, headed rods passing through said hand hold and roof and through the eyes in the grooves, a step fitted over the lower threaded ends of said rods, nuts screwed on the rods beneath the ends of the step, and cotter pins fitted in the rods beneath the nuts, substantially as described.

No. 64,832. Furnace Front and Doorway Lining.

(Devant de fournaise et garniture de porte.)

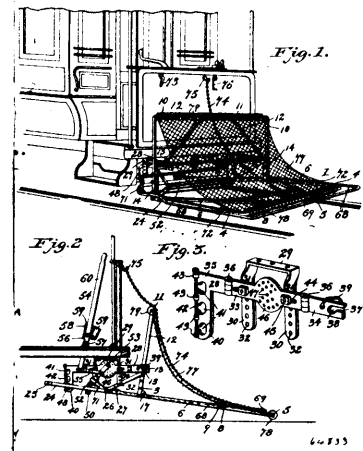


John Broadfoot Houston, Vancouver, British Columbia, Canada, 9th November, 1899; 6 years. (Filed 9th October, 1899.)

Claim.—1st. In a furnace for the purpose set forth, a furnace front consisting of a casing 10 formed around the mouth of the furnace flue, elongated ports in the upper side of said casing for the passage of air, in combination with a dead plate 13 secured across the said casing and fitted into opposite sides of the furnace flue, side plates 17 having an inner and an outer wall lying on the dead plate, said side pieces curving round and connecting with the opposite sides of the furnace flue, and a top or cover 18 lying on the side pieces having the air chamber therein forming the top of the doorway and curving upwards, and with the side pieces, forming a tight closure for the mouth of the furnace above the dead plate, save that portion occupied by the doorway, a slide valve 19 for admitting air between the walls of the sections 18 and 17 and apertures 18a and 17a communicating with the furnace, and butterfly valves communicating between the upper and lower sides of the dead plate, means for closing the doorway, and a fixed plate *d* for sealing the air chamber within the casing 10 above the door and a flap door 21

for closing it below the door. 2nd. In a furnace front designed for mechanical draught, consisting of castings 13, 17 and 18, designated as the dead plate, the side pieces and the top forming the door passage to the furnace, the side pieces 17 and the top piece being formed with double walls having air passages between, and a port at the top of the casting 18, covered by a slide valve 19, operated by a handle 20, and apertures communicating between the air passages and the furnace, and closable openings 13c communicating between the upper and the lower sides of the dead plate, in combination with a casing 10, having air passages 12 round its upper side, a plate *d* encircling the mouth of the door passage and connecting with the forward rim of the casing 10, and a flap door 21 sealing the lower part of the casing 10, forming a sealed chamber round the castings 13, 17 and 18, substantially as set forth. 3rd. In a furnace front of the class described, a dead plate fitted within a casing 10 and forming the lower side of the door passage way to the fire box, and closable openings on each side of the door passage way, side pieces 17 formed with double walls curved round and connected with the opposite sides of the mouth of the fire box and forming the sides of the door passage, a top piece 18 covering said side pieces curving upwards and connecting clear across above the side pieces with the mouth of the fire box, and an aperture through the top piece to within the chambers in the sides and top and small apertures communicating from such chambers to within the furnace, as specified.

No. 64,833. Car Fender. (Defense de porte.)



Earl Sherwood, Brooklyn, New York, U.S.A., 9th November, 1899; 6 years. (Filed 9th October, 1899.)

Claim.—1st. In a car fender, a tilting fender frame mounted for movement up and down, in combination with a sectional operating lever connected thereto, one lever section being adjustable as to its angle to the other section, substantially as set forth. 2nd. A tilting fender frame mounted for movement up and down, in combination with a sectional operating lever, an oscillating operating frame engaging the tilting fender frame and connected to said lever, and means for adjusting the angle of one section of the lever relatively to the other section, substantially as and for the purpose specified. 3rd. In a car fender, a tilting fender frame, in combination with an oscillating operating frame engaging therewith, and a lever connected to said operating frame, said lever comprising two sections, one section having a socket piece with relatively oblique openings, the other section being interchangably fitted in said openings, substantially as described. 4th. In a car fender, a tilting fender frame, in combination with an oscillatory operating frame engaging therewith, and a sectional operating lever connected to the operating frame, said lever comprising a detachable section which is adjustable as to its angle with relation to the other section, and adapted to be moved into contact with a portion of a car for locking the operating frame, substantially as described. 5th. In a car fender, a back frame having side bars, portions of which are doubled or comprise parallel members spaced apart, and shoulders 22 between said parallel members, in combination with a horizontal frame, and hinge plates rigidly connected thereto and having tongues pivotally mounted between said parallel members, and provided with shoulders 21 which abut against the shoulders of the back frame, substantially as described. 6th. In a car fender, a back frame having side bars, portions of which are double or comprise parallel members spaced apart, and shoulders 22 between said parallel members, in combination with a horizontal frame, and hinge plates rigidly connected thereto and having tongues pivotally mounted between the said parallel members, and provided with shoulders 21, which abut against the shoulders of the back frame, the hinge plates being further provided with additional shoulders 19, which abut against corresponding shoulders on the back frame, substantially as described. 7th. In a car fender, the combination with slotted hanger bars on the car, of a detachable fender frame having

horizontal fulcrum irons of half round cross sectional shape removably fitted in the slots of the hanger bars, substantially as described. 8th. In a car fender, the combination with slotted hanger bars on the car, of a detachable fender frame having a horizontal cross-bar, and fulcrum irons of half round cross sectional shape secured to said bar and removably fitted in the slots of the hanger bars, substantially as described. 9th. In a car fender, a horizontal frame comprising side bars, a front cross bar connecting the same, oblique braces united at one end to the side bars and connected at their opposite ends by a cross bar secured to the front bar and a cross brace connecting the oblique braces, substantially as described. 10th. In a car fender, a tilting fender frames, an oscillatory operating frame having a horizontal bar and a superimposed roller parallel thereto, and a tail piece on the fender frame working between the bar and the roller, substantially as described. 11th. In a car fender, a tilting fender frame, an oscillatory operating frame having double side arms which comprise parallel portions connected at or near their lower ends, superimposed rollers above the connecting positions, and parallel tail pieces projecting rearwardly from the fender frame and working beneath said rollers, substantially as described. 12th. In a car fender, a tilting fender frame having parallel tail pieces, an oscillatory operating frame having pendant looped side arms, and rollers journaled within the looped side arms and co-operating with the tail pieces of the fender frame, substantially as described. 12th. In a car fender, a tilting fender frame, an oscillatory operating frame engaging therewith, rigid arms on the side bars of the operating frame, and a trip frame having its forward portion arranged in advance of the fender, and its side bars pivotally attached to said rigid arms on the operating frame, substantially as described. 14th. In a car fender, a tilting fender frame, an oscillatory operating frame engaging the same, rigid arms on the side bars of the operating frame, a trip frame having its forward portion arranged in advance of the fender, and its side bars pivotally attached to said rigid arms, and rests on the side arms of the trip frame slidable upon the side bars of the fender frame, substantially as described. 15th. In a car fender, the combination with a hanger on the car, of a hanger bar adjustable up and down thereon, and detachably connected thereto, substantially as described. 16th. In a car fender, a hanger attached to the car, and having a parallel pendent arms, in combination with a hanger bar extending across said arms and adjustably and detachably connected thereto, so that it may be moved up and down and adjusted as to its angle to a horizontal plane, substantially as described. 17th. In a car fender, a hanger attached to the car, and comprising pendant parallel arms, in combination with a hanger bar adjustably connected for movement up and down on said arms, the said bar being provided with an enlarged central portion between the hanger arms, and provided in said portion with a plurality of openings, substantially as and for the purpose specified. 18th. In a car fender, a hanger attached to the car and having pendant parallel arms, in combination with a hanger bar adjustably secured to said arms and adjustable up and down thereon, the hanger bar comprising a hinged terminal section, forming a support for the fender, substantially as and for the purpose specified. 19th. In a car fender, a hanger attached to the car and having pendant parallel positions, in combination with a hanger bar adjustable up and down said arms, and having a hinged terminal portion slotted to receive the fulcrum bar of the fender, and a retaining hook adjacent to the slot in said bar for engaging the fulcrum bar of the fender, substantially as described. 20th. In a car fender, a hanger attached to the car and comprising pendant parallel portions, a hanger bar movable up and down thereon, the said bar comprising a hinged terminal portion having an angular extension provided with openings for the fulcrum bar of the fender, and a device carried by said extension for closing the entrance to said openings, substantially as described. 21st. In a car fender, the combination with the fender frame embodying a front cross bar, and an elevated cross bar at the top of the back frame, of the fender, of a net suspended between and attached to said bars, a spiral shoe surrounding the front bar and engaging the meshes of the net, and a spiral buffer surrounding the upper bar and engaging the meshes of the net at that point, substantially as described.

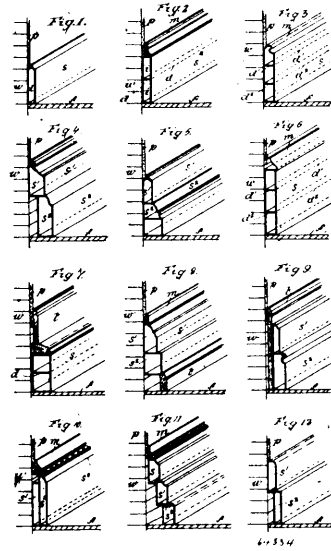
No. 64,834. Means for Heating Dwellings, etc.

(*Moyen de chauffer les maisons.*)

Thomas Scotland, 6 Balmoral Terrace, Tolleross, Glasgow, Scotland. 9th November, 1899; 6 years. (Filed 6th October, 1899.)

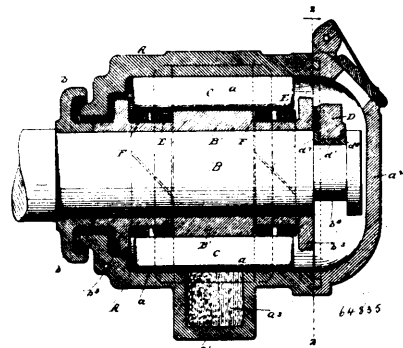
Claim.—1st. The combination with the wall of an apartment of a hollow metal skirting through which a heating medium is passed and of means for supplying the heating medium, substantially as set forth. 2nd. The combination with the wall of an apartment of a hollow metal skirting divided by partitions into chambers or passages through which a heating medium is passed, and of means for supplying the heating medium, substantially as set forth. 3rd. The combination with the wall of an apartment of a hollow metal skirting ornamentally moulded and through which a heating medium is passed and of means for supplying the heating medium, substantially as set forth. 4th. The combination with the wall of an apartment of a hollow metal skirting *s*, a moulding on top of the skirting, a heating medium passed through the skirting and means for supplying the heating medium, substantially as set forth. 5th. The combination with the wall of an apartment of a hollow metal skirt-

ing through which a heating medium is passed, means for supplying the heating medium to the skirting, an air duct, tubes passed through



the skirting and connecting the air duct with the interior of the apartment, and means for supplying air to the air duct, substantially as set forth.

No. 64,835. Journal Box. (Cousinet de tourillon.)

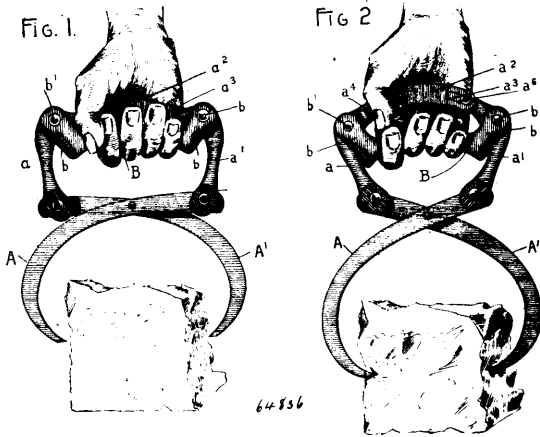


Benjamin S. Lawson, Red Bank, New Jersey, U.S.A., 9th November, 1899; 6 years. (Filed 19th July, 1899.)

Claim—1st. The combination of an axle or shaft formed with an annular groove, a fastening member composed of a main body having the intermediate portion of its lower face provided with shoulders aligned with opposite sides of the groove in the axle or shaft, and a detachable engaging piece inserted into said groove and formed with shoulders interposed between the form or shoulders and the adjacent surfaces of the axle or shaft, and a casing having a movable bonnet or closure for holding the fastening member in its adjusted position, said bonnet or closure being provided with a socket for receiving a portion of the main body of the fastening member, substantially as and for the purpose described. 2nd. The combination of an axle or shaft formed with an annular groove, a fastening member composed of a main body having the intermediate portion of its lower face provided with the shoulders aligned with opposite sides of the groove in the axle or shaft, and a detachable engaging piece inserted into said groove and formed with shoulders engaged with opposite sides of the main body, and additional shoulders interposed between the shoulders on the intermediate portion of the lower face of said main body and the adjacent surfaces of the axle or shaft, and a casing having a movable bonnet or closure for holding the fastening member in its adjusted position, said bonnet or closure being provided with sockets for receiving the ends of the main body of the fastening member, substantially as and for the purpose specified. 3rd. The combination of an axle or shaft, a sleeve on the axle or shaft, a fastening member having its intermediate portion engaged with the sleeve for preventing endwise movement thereof, and a casing having a movable bonnet or closure holding the fastening member in position, said bonnet or closure having its inner face provided with sockets for receiving the ends of the fastening member, substantially as and for the purpose described. 4th. The combination of an axle or shaft formed with an annular groove, a sleeve on the axle or shaft at one side of the groove, a

casing, and a fastening member supported by the casing and provided with an engaging piece inserted into the groove and having one of its sides engaging with one wall of the groove, and with the sleeve, substantially as and for the purpose described.

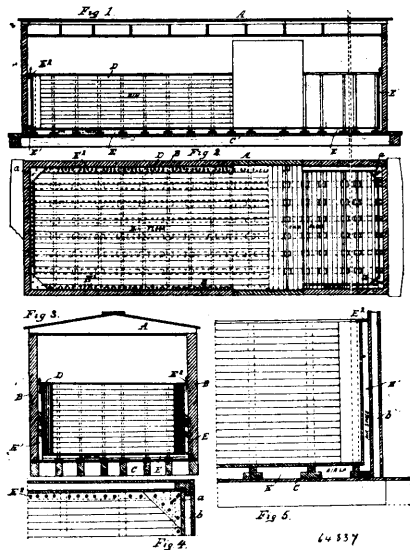
No. 64,836. Ice Tongs. (Tenailles à glace.)



Joseph Roy, Joliette, Quebec, Canada, 9th November, 1899; 6 years. (Filed 12th July, 1899.)

Claim.—1st. An ice tongs, comprising suitable gripping members pivotally connected together, a bell crank lever pivoted to the upper end of each of said gripping members, a strap pivotally connecting said bell crank levers, and a handle bar pivoted at each end to said bell crank levers, substantially as described. 2nd. An ice tongs, comprising suitable gripping members pivotally connected together, a bell crank lever pivoted to the upper end of each of said gripping members, a strap having a slot in each end and pivotally connected to the upper ends of said bell crank levers by means of a pin fixed to said levers and engaging the said slots of said strap, and a handle bar, arranged below said strap and pivotally connected at each end to said bell crank levers, substantially as described.

No. 64,837. Refrigerator Car. (Char réfrigérant.)



Edward L. McDonell, Muskegon, Michigan, U.S.A., 9th November, 1899; 6 years. (Filed 14th March, 1899.)

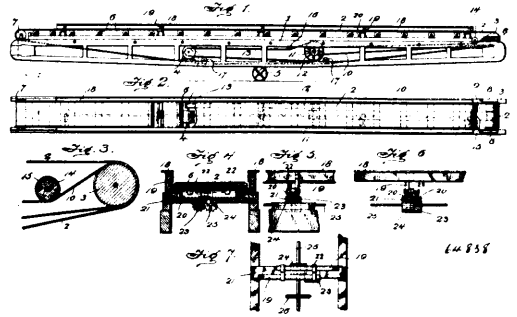
Claim.—In a car of the character described, the combination with the main receptacle contained therein, formed with air spaces therearound, and the ends of the receptacle cut away on a bevel forming enlarged air chambers at such points, and the grating connecting the upper edges of the receptacle with the car, substantially as described.

No. 64,838. Portable Elevator. (Elevateur portatif.)

William Leggett McCabe, Tacoma, Washington, U.S.A., 9th November, 1899; 6 years. (Filed 7th October, 1899.)

Claim.—1st. A portable conveyor comprising a frame, an endless conveyor belt mounted thereon, a driving pulley or drum engaging

said belt, said drum having a peripheral groove to receive the driving belt, a driving belt engaging said groove and flush with the



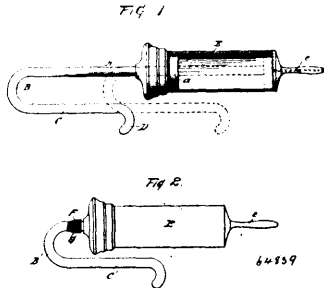
periphery of the drum, so as to come into frictional contact with the conveyor belt and thereby actuate the same, and means for actuating the driving belt, substantially as described. 2nd. A portable conveyor comprising a frame, an endless conveyor belt mounted thereon, a driving drum engaging said belt, said drum having an annular depression formed in its periphery, a driving belt adapted to run in the said depression so as to be flush with the surface of the drum, the belt thus serving not only to actuate the drum but to come into frictional contact with the conveyor belt as it passes around said drum and prevent its slipping thereon, means for actuating the said belt, and means for guiding the belt in the frame, substantially as described. 3rd. A portable conveyor comprising a frame, a conveyor belt, pulleys for supporting the same, a driving drum engaging the conveyor belt and having an annular peripheral depression formed therein, a driving belt running in the said peripheral depression for actuating the drum and coming into frictional contact with the conveyor belt to assist in moving it and an idler for directing the driving belt, a pulley for actuating the same, and means for connecting said pulley with a suitable motor, substantially as described. 4th. A portable conveyor, comprising a suitable frame, an endless conveying belt thereon, guide rails for directing packages or bags upon the conveyor belt, arms carrying the said guide rails, the said arms being arranged parallel and so as to pass each other, and means for adjusting the said arms with respect to each other for increasing or diminishing the space between the guide rails, substantially as described. 5th. A portable conveyor comprising a suitable frame and a conveying belt mounted thereon, means for actuating said belt, guide rails for directing the bags or packages carried by the said belt, said rails being mounted upon suitable arms, racks formed upon said arms, pinions for engaging the said rack and means for rotating the said pinions, whereby the rails are caused to approach or recede from each other, substantially as described. 6th. A portable conveyor comprising a suitable frame, an endless conveying belt mounted thereon, guide rails adapted to direct packages or bags upon the said belt, the said rails being supported upon suitable arms, angle irons forming the said arms and having racks formed on their lower edges, pinions engaging the said rack and meshing with each other, and means for moving one pinion, whereby motion will be communicated to the other and to the racks in opposite directions for adjusting the guide rails, substantially as described. 7th. A portable conveyor comprising a suitable frame and an endless conveying belt mounted thereon, guide rails for directing bag or packages on the conveyor belt, arms supporting the said rails, said arms having racks on their lower edges, pinions engaging said racks and meshing with each other, one set of pinions being secured upon a common shaft, a handle secured to the said shaft for actuating all of the pinions simultaneously whereby the rails will be caused to approach or recede from each other, substantially as described. 8th. In a portable conveyor, the combination with a suitable frame and a conveyor plate mounted thereon, of guide rails upon each side of the said belt, supporting arms arranged in pairs along the frame of the conveyor and engaging cross bars, cleats for holding the said arms upon the said bars and directing their movement and pinions for moving the said arms back and forth, substantially as described.

No. 64,839. Syringe. (Seringue.)

Letitia Mumford Geer, New York City, New York, U.S.A., 9th November, 1899; 6 years. (Filed 18th March, 1899.)

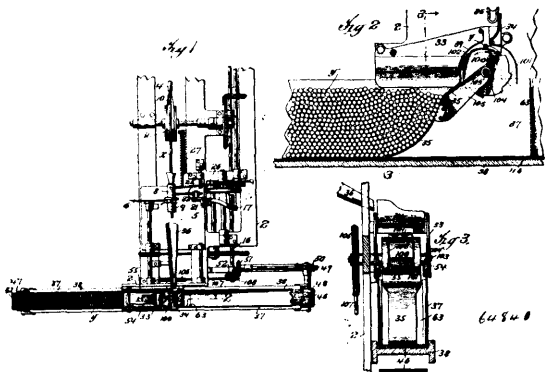
Claim.—1st. In a hand syringe, the combination of a cylinder, a piston and an operating rod which is bent upon itself to form a smooth and rigid arm terminating in a handle, which in its extreme positions, is located within the reach of the fingers of the hand which holds the cylinder, thus permitting one hand to hold and operate the syringe, substantially as shown and described. 2nd. In a hand syringe, the combination of a piston, a cylinder, a nozzle, and a piston-rod having an arm secured thereto which extends approximately parallel therewith towards the nozzle of the syringe, and has upon its free end an extension for engaging the fingers of a person using the syringe, whereby the appliance may be operated

by use of one hand, substantially as shown and described. 3rd. The combination with a syringe, of a handle extended toward the



point of ejection approximately parallel with the syringe piston-rod and connected thereto, the said handle having a projection on the free end thereof, substantially as shown and described.

No. 64,840. Delivery Mechanism for Cigarette Machines. (*Mécanisme de distribution pour machines à cigarettes.*)



The American Tobacco Company, New York City, New York, assignee of William Thomas Coalter, Barton Heights, Virginia, both in the U.S.A., 10th November, 1899; 6 years. (Filed 28th November, 1898.)

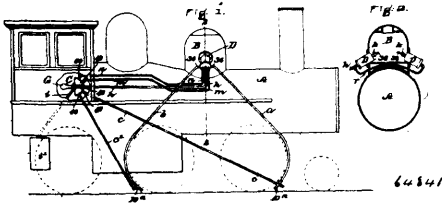
Claim.— 1st. The combination with the cigarette rod forming and delivering mechanism of a continuous rod cigarette machine and a cutting mechanism for severing the cigarette rod into cigarettes, of delivery mechanism arranged to receive the cigarettes from the machine after they are cut from the cigarette rod and successively advance them sidewise and deliver them uniformly into a receptacle, said delivery mechanism including a hopper for receiving the cigarettes from the cigarette machine, a roller for advancing the cigarettes sidewise from the hopper, and an inclined way extending downward into the receptacle and over which the cigarettes pass below the roller into the receptacle, substantially as described. 2nd. The combination with the cigarette rod forming and delivering mechanism of a continuous rod cigarette machine, and cutting mechanism for severing the cigarette rod into cigarettes, of delivery mechanism arranged to receive the cigarettes from the machine after they are cut from the cigarette rod and successively advance them sidewise and deliver them uniformly into a receptacle, said delivery mechanism including a hopper for receiving the cigarettes from the cigarette machine, a roller for advancing the cigarettes sidewise from the hopper, an inclined way extending downward into the receptacle and over which the cigarettes pass below the roller into the receptacle, and means for positioning the cigarettes endwise as they pass to the receptacle, substantially as described. 3rd. The combination with the cigarette rod forming and delivering mechanism of a continuous rod cigarette machine and cutting mechanism for severing the cigarette rod into cigarettes, of delivery mechanism arranged to receive the cigarettes from the machine after they are cut from the cigarette rod and successively advance them sidewise and deliver them uniformly into the receptacle, said delivery mechanism including a hopper for receiving the cigarettes from the cigarette machine, a roller for advancing the cigarettes sidewise from the hopper, an inclined way extending downward into the receptacle and over which the cigarettes pass below the roller into the receptacle, and retarding means co-acting with the roller for positioning the cigarettes sidewise, substantially as described. 4th. The combination with the cigarette rod forming and delivering mechanism of a continuous rod cigarette machine and cutting mechanism for severing the cigarette rod into cigarettes, of delivery mechanism arranged to receive the cigarettes from the machine after they are cut from the cigarette rod and successively advance them sidewise and deliver them uniformly into a receptacle,

said delivery mechanism including a hopper for receiving the cigarettes from the cigarette machine, a roller for advancing the cigarette sideways from the hopper to the receptacle, an inclined way extending downward into the receptacle and over which the cigarettes pass below the roller into the receptacle, means for positioning the cigarettes endwise as they pass to the receptacle, and retarding means co-acting with the roller for positioning the cigarette sidewise, substantially as described. 5th. The combination with the cigarette rod forming the delivering mechanism of a continuous rod cigarette machine and a cutting mechanism for severing the cigarette rod into cigarettes, of delivery mechanism arranged to receive the cigarettes from the machine after they are cut from the cigarette rod and successively advance them sidewise and deliver them uniformly into a receptacle, said delivery mechanism including a roller onto which the cigarettes are delivered and provided with edge feeding projections for advancing the cigarettes sidewise, and an inclined way extending downward into the receptacle, and over which the cigarettes pass below the roller into the receptacle, substantially as described. 6th. The combination with the cigarette forming and delivering mechanism of a continuous rod cigarette machine, and cutting mechanism for severing the cigarette rod into cigarettes, of delivery mechanism arranged to receive the cigarettes from the machine after they are cut from the cigarette rod and successively advance them sidewise and deliver them uniformly into a receptacle, said delivery mechanism including a roller onto which the cigarettes are delivered and provided with edge feeding projections for advancing the cigarettes sideways, an inclined way extending downward into the receptacle and over which the cigarettes pass below the roller into the receptacle, and means for positioning the cigarettes endwise as they pass to the receptacle, substantially as described. 7th. The combination with the cigarette rod forming and delivering mechanism of a continuous rod cigarette machine and cutting mechanism for severing the cigarette rod into cigarettes, of delivery mechanism arranged to receive the cigarettes from the machine after they are cut from the cigarette rod and successively advance them sidewise and deliver them uniformly into a receptacle, said delivery mechanism including a roller onto which the cigarettes are delivered and provided with edge feeding projections for advancing the cigarette sidewise, an inclined way extending downward into the receptacle and over which the cigarettes pass below the roller into the receptacle, and a gate beneath which the cigarettes pass and co-acting with the roller for positioning the cigarettes sidewise, substantially as described. 8th. The combination with the cigarette rod forming and delivering mechanism of a continuous rod cigarette machine and cutting mechanism for severing the cigarette rod into cigarettes, of delivery mechanism arranged to receive the cigarettes from the machine after they are cut from the cigarette rod and successively advance them sidewise and deliver them uniformly into a receptacle, said delivery mechanism including a hopper for receiving the cigarettes from the cigarette machine, a roller onto which the cigarettes are delivered and provided with edge feeding projections for advancing the cigarettes sidewise, an inclined way extending downward into the receptacle and over which the cigarettes pass below the roller into the receptacle, means for positioning the cigarettes endwise as they pass to the receptacle, and retarding means co-acting with the roller for the positioning the cigarettes sidewise, substantially as described. 9th. The combination with a machine for making cigarettes and other like articles, of mechanism for delivering the articles endwise therefrom, a hopper receiving the articles, and a roller in the hopper onto which the articles are delivered and arranged to advance the articles endwise, substantially as described. 10th. The combination with a machine for making cigarettes and other like articles, of mechanism for delivering the articles endwise therefrom, a hopper receiving the articles, and a roller in the hopper onto which the articles are delivered and arranged to advance the articles sidewise, and an inclined way on to which the articles are fed by the roller, substantially as described. 11th. The combination with a machine for making cigarettes and other like articles, of mechanism for delivering the articles endwise therefrom, a hopper receiving the articles, a roller in the hopper on to which the articles are delivered and arranged to advance the articles sidewise, an inclined way on to which the articles are fed by the roller, and a travelling receptacle for the articles into which the lower end of the way extends, substantially as described. 12th. The combination with a machine for making cigarettes and other like articles, of mechanism for delivering the articles endwise therefrom, a hopper receiving the articles, and a roller in the hopper on to which the articles are delivered and provided with edge feeding projections arranged to advance the articles sidewise, substantially as described. 13th. The combination with a machine for making cigarettes and other like articles, of mechanism for delivering the articles endwise therefrom, a hopper receiving the articles, a roller in the hopper on to which the articles are delivered and provided with edge feeding projections arranged to advance the articles sidewise, and an inclined way on to which the articles are fed by the roller, substantially as described. 14th. The combination of inclined way 35, curved side plates 102 extending above said way, and a feeding roller rotating between said side plates for advancing articles thereon, substantially as described. 15th. The combination of inclined way 35, curved side plates 102 extending above said way, a feeding roller rotating between said side plates for advancing articles thereon, and a roller 100 having edge feeding projections 101, substantially as described.

16th. The combination with roller 100 having edge feeding projections 101, of side plates 102 curved about said roller and eccentrically thereto so as to move the articles beyond the projections at the delivery point, substantially as described. 17th. The combination with roller 100 having edge feeding projections 101, of side plates 102 curved about said roller and eccentrically thereto so as to move the articles beyond the projections at the delivery point, and retarding means bearing against the articles on said plates at the delivery point of the roller, substantially as described. 18th. The combination of inclined way 35, curved side plates 102 extending above said way, a feeding roller rotating between said side plates for advancing articles thereon, a roller 100 having edge feeding projections 101, and a way 25 in line with the roller beyond its delivery point, substantially as described. 19th. The combination with chute 36 and curved pocket 34, of roller 100 below said pocket having feeding projections, substantially as described. 20th. The combination with chute 36 and curved pocket 34, of roller 100 below said pocket having its face cut away to form receiving pockets with feeding projections 101, substantially as described. 21st. The combination with the curved side plates 102, of a roller for advancing cigarettes or similar articles downward over said plates, and inclined way 35 below the roller, substantially as described.

No. 64,841. Pneumatic Track Sanding Apparatus.

(Appareil pneumatique à sabler les voies.)

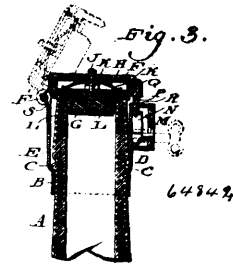


John Henry Hanlon, Boston, and William James Hanlon, Fitchburg, Massachusetts, U.S.A., 10th November, 1899; 6 years. (Filed 2nd October, 1899.)

Claim.—1st. In a track sanding apparatus, the combination with the sand box, of a casing entering the same at or near its bottom, and provided with a central core forming a space between the same and the interior of the casing for the passage of the sand, a track sanding pipe or pipes communicating through sand ports with the outer end of said casing, and leading therefrom to the rails, an air supply pipe passing centrally through the casing, and provided above the inner end of the same and above the floor of the sand box with means for directing the air blast down through the casing to carry the sand through the sand port or ports, an air pipe communicating through a passage or passages at the base of the casing with the sand pipe at its junction with the casing, and means for controlling the admission of compressed air to the air pipes, substantially as described. 2nd. In a track sanding apparatus, the combination with the sand box, of a casing connected therewith at or near its bottom, and provided with a central core forming a passage for the sand between the same and the interior of the casing, track sanding pipes connected with the casing at its bottom, and communicating with its interior through sand ports or openings, air passages having air pipes connected therewith, and arranged to direct air blasts into the upper end of the track sanding pipes at their junctions with the said casing, an air pipe extending centrally through the casing and beyond the upper end of the same, and provided with means for directing the air blast down through the casing to carry the sand to the sand pipes, a nozzle at the upper end of the central air pipe arranged to direct a blast of air across the interior of the sand box, and a valve for controlling the admission of compressed air to the several air pipes, substantially as described. 3rd. In a track sanding apparatus, the combination with the casing, its track sanding pipes, air passages and central core, of an axially movable air pipe extending longitudinally through the said core, and provided at its top with means for directing the air blast into the sand box and down through the casing, a stationary disc located at the mouth or inner end of the casing, and provided with openings for the passage of the sand, and a movable disc overlying the stationary disc, and provided with openings adapted to register with the openings of said stationary disc, and forming a shut-off valve for the sand, said movable disc being secured to the axially movable air pipe, substantially as described. 4th. In a track sanding apparatus, the combination with a sand box, of a casing having a central core and an air pipe extending therethrough, and provided with means for directing an air blast downwardly through said casing, sand ports through which the sand is delivered to the track sanding pipes, the latter connected with the bottom of the casing, air passages connected with air pipes, and opening into the said sand ports at their junctions with the sand pipes, and governing screws for regulating the volume of air passing through the air passages, substantially as described. 5th. In a track sanding apparatus, the combination with the sand box, its casing and the air pipes connected therewith, of a governor valve consisting of a casing having a face curved in the arc of a circle, and provided with openings, each having one of the air pipes connected therewith, a plug having a passage communi-

ing with a common air supply pipe, a tubular handle connected with the valve plug, and in communication with its air passage, and a hollow piston open at both ends and sliding within said handle, and having its outer face curved to correspond to the curvature of the casing against which it is forced by the pressure of the air, and a suitable packing between the piston and the hollow handle, substantially as described. 6th. In a track sanding apparatus, the combination with the sand pipe, of a tip or discharge nozzle consisting of an outer shell or casing adapted to be connected with a pipe for containing air under pressure, and an inner perforated tube open at both ends, and forming the discharge outlet for the sand, said perforated tube being arranged within the outer casing to form an air space or chamber between the two, whereby the air is caused to pass from the air chamber outwardly through the perforations of the inner tube, to keep said tube free and clear for the passage of sand to the rail, substantially as described. 7th. A sand pipe tip or discharge nozzle for track sanding apparatus, comprising an outer tubular member adapted to be connected with a pipe for containing air under pressure, an inner tubular member open at both ends, and arranged within the outer casing to form an air space or chamber between said two members closed at the top and bottom, said inner tubular member forming the outlet or discharge pipe for conducting the sand to the rail, and having perforations on one side for the passage of the air from the air chamber to its interior, substantially as described. 8th. The combination with a track sanding pipe, of a tip or nozzle secured to the lower end of the same, said tip consisting of an outer tubular shell or casing having on one side a branch connection with a pipe for containing air under pressure, an inner perforated tube arranged within the outer casing to form an air space or chamber between the two, a washer interposed between the bottom of the sand pipe and the adjacent end of the inner perforated tube to close the top of the air chamber, and a cap fitted to the bottom of the tube, and having a seat for receiving the lower end of the inner tube, said cap closing the bottom of the air chamber, and having a central aperture for the passage of the sand to the rail, substantially as described. 9th. In a track sanding apparatus, the combination with two track sanding pipes, each having a tip or nozzle provided with a delivery passage or outlet for the sand, and an adjoining air space or chamber having its wall perforated for the passage of the air from the air chamber to the sand passage, of an air pipe extending from one tip to the other, and connecting their air chambers, said connecting pipe bracing and holding the tips in position over the rails and being connected with a compressed air supply pipe, substantially as described.

No. 64,842. Bottle Stopper. (Bouchon de bouteilles.)

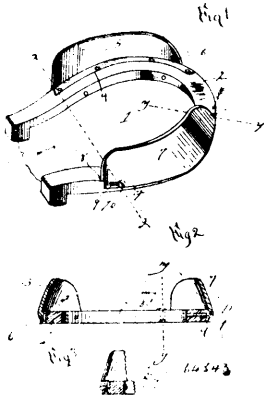


Francis Gillis Stuart and Alexander Hazard, both of Philadelphia, Pennsylvania, U.S.A., 10th November, 1899; 6 years. (Filed 3rd October, 1899.)

Claim.—1st. A bottle stopper, consisting of a cap, a plug and means for connecting said plug with said cap to permit oscillation of said plug, said means consisting of a plate to which said plug is attached, a pin secured to said plate and freely connected with said cap, and a spring interposed between said cap and plate and pressing downwardly on the latter. 2nd. In a bottle stopper, a cap, and an oscillating plug thereon, the latter being connected with the former by a rolling pin which is attached to said plug and cap and a spring which is interposed between said cap and plug and mounted on said pin and adapted to exert a downward pressure on the latter. 3rd. In a bottle stopper, consisting of a stopper member proper and a member for connecting the same with a bottle, a lockwork attachable to one member, means on the other member adapted to be engaged by said work and a spring bearing against said stopper member for throwing up the same when said lockwork is operated to release said means. 4th. A band connectible with a bottle, arms rising therefrom, a cap pivoted to one arm, a lock having its case secured to the other arm, and a plug and a dog pendent from said cap, said case having an opening adapted to receive said dog and also a keyhole. 5th. A band connectible with a bottle, arms rising therefrom, a cap pivoted to one arm, a lock having its case secured to the other arm, and a stopper and a dog pendent from said cap said case having an opening adapted to receive said dog and also a keyhole, and a spring bearing against said cap for throwing up the same when said dog is unlocked. 6th. In a bottle stopper, a cap, an oscillating plug connected therewith, a spring interposed between said cap and plug and bearing downwardly on the latter, a band connectible with the bottle, arms rising from said band, a lock

having its case secured to one of said arms, the other arm having said cap hinged to it, and a dog pendent from said cap, the case of said lock having an opening therein to receive said dog and also a keyhole. 7th. In a bottle stopper, a cap, an oscillating plug connected therewith, a spring interposed between said cap and plug and bearing downwardly on the latter, a band connectible with the bottle, arms rising from said band, a lock having its case secured to one of said arms, the other arm having said cap hinged to it, a dog pendent from said cap, the case of said lock having an opening therein to receive said dog and also a keyhole, and a spring connected with said cap bearing upwardly to elevate the same and said plug when said dog is unlocked.

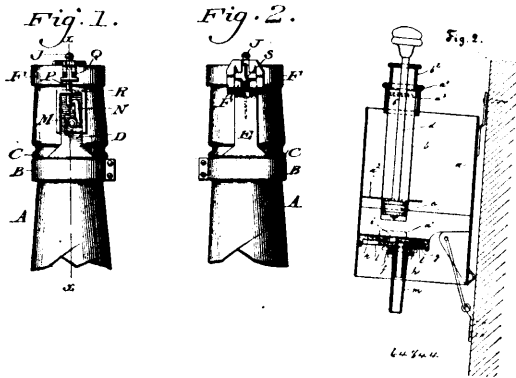
No. 64,843. Nailless Horse Shoe. (*Per à cheval sans clous.*)



John F. Edds and William S. Elza, both of Heedenheimer, Texas, U.S.A., 10th November, 1899; 6 years. (Filed 11th October, 1899.)

Claim.—A horse shoe having in its outer sides at the rear of the toe 2, longitudinal recesses that extend adjacent to the heel of the shoe, in combination with two clamping plates each of which is provided with an angular base, the base of one plate being fixed in one of said recesses, and the base of the other plate being pivoted in the other recess, and a set screw extending transversely through the opposite end of the pivoted base and into the shoe, substantially as and for the purpose set forth.

No. 64,844. Tap and Measure for Syrup, Etc. (*Robinet et mesure pour le sirops, etc.*)

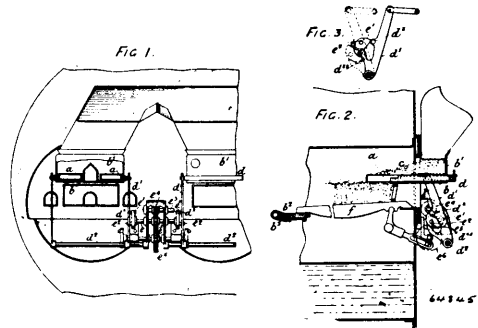


Eric Herman Ericson, Oscarsham, Sweden, 10th November, 1899; 6 years. (Filed 24th March, 1898.)

Claim.—1st. In an apparatus for measuring and tapping syrup or other viscous liquids the combination of, a receptacle, a pump, the working barrel of which is movable longitudinally to a certain extent, a slide valve moveable in guides outside the discharge opening in the receptacle and pressed against the same by springs, substantially as and for the purpose set forth. 2nd. In an apparatus for measuring syrup or other viscous liquids, the combination of a receptacle adapted to contain the material to be tapped, a pump the working barrel of which is open below and moveable longitudinally to a small extent and guided in the cover and near the bottom, a ring around the discharge opening in the bottom adapted to fit snugly around the lower end of said working barrel when it is in its lowest position, a slide valve moveable in guides outside the discharge opening and pressed against the receptacle by means of a spring, substantially as and for the purpose described. 3rd. In an apparatus for tapping syrup or other viscous liquids, the combination with the receiver for the liquid to be tapped, of a pump tightly moveable in

the cover of said receiver to a certain extent, and by its lower end fitting snugly in a ring around the discharge opening when said working barrel is in its lowest position only, a slide valve moveable in guides outside the said discharge opening and pressed against the receptacle fastened by springs, and an arm fastened by one end to the receptacle and by the other end engaging the said discharge valve or a discharge pipe fastened to the same, substantially as described. 4th. In an apparatus for tapping syrup or other viscous liquids, the combination with the receiver for the liquid to be tapped of, a pump the working barrel of which is open below and moveable longitudinally to a certain extent and guided in the cover and near the bottom, a ring around the discharge opening in the bottom of the receptacle adapted to fit snugly around the lower end of said working barrel when it is in its lowest position, a slide valve moveable in guides outside the said discharge opening and pressed against the receptacle by means of springs, a discharge pipe fastened to said slide valve, and an arm fastened by one end to the receiver and by the other end engaging the said discharge pipe, substantially as described.

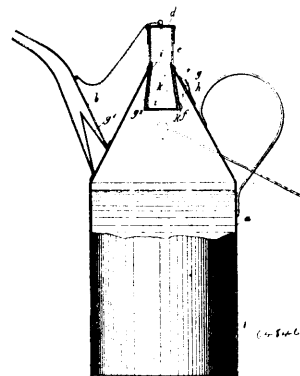
No. 64,845. Stoking Machine. (*Machine de chauffe.*)



James Proctor, Hammerton Street Iron Works, Burnley, Lancaster, England, 10th November, 1899; 6 years. (Filed 8th September, 1898.)

Claim.—1st. In a mechanical coking stoker, the combination of of the rams arranged side by side, shafts beneath the rams, levers carried by the shafts, connections between the levers and rams, an operating cam shaft carrying a cam and projections on one of the levers and the cam whereby a to and fro movement may be imparted to said levers, substantially as described. 2nd. In a furnace a steam bearer for the inner ends of moving fire bars, having its rear steam containing portion upwardly inclined, substantially as and for the purposes set forth. 3rd. In a furnace, an ash pit provided with steam spaces k^1, k^2 , substantially as shown and described. 4th. In a furnace the combination with the ash pit having steam spaces k^1, k^2 , of the steam bearer b^2 , substantially as shown and described.

No. 64,846. Can for Inflammable Liquids. (*Bidon pour liquides inflammables.*)

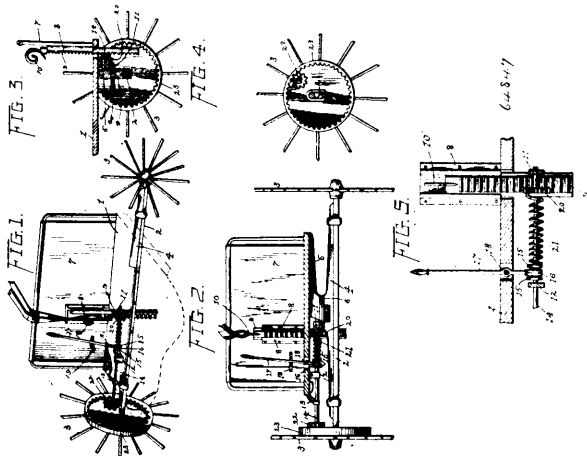


Ferdinand Henze, Salzkotten, near Paderborn, Prussia, German Empire, 10th November, 1899; 6 years. (Filed 9th October, 1899.)

Claim.—1st. Safety can for inflammable liquids characterized by the provision of an air inlet opening in the side of the body of the can which is covered by a perforated plate, in addition to the usual fill opening and spout, constructed and arranged substantially as hereinbefore described. 2nd. A form of construction of the can specified in claim 1, in which the air inlet opening f , covered by a perforated plate g , is further covered by a protecting piece of sheet metal which forms a receiver and serves for the reception of the liquid spurting through the air inlet opening f , when the can is being

filled, constructed and arranged, substantially as hereinbefore described. 3rd. A form of construction of the can specified in claim 1, in which a perforated piece *g*¹, is provided at the commencement of the spout *b*, which is so situated in the tube that it cannot become injured from without, constructed and arranged, substantially as hereinbefore described. 4th. A further form of construction of the can specified in claim 1, in which a perforated sieve-like body *g*², is arranged beneath the fill opening which is stiffened by ribbed, perforated sheet metal *k*, constructed and arranged, substantially as hereinbefore described.

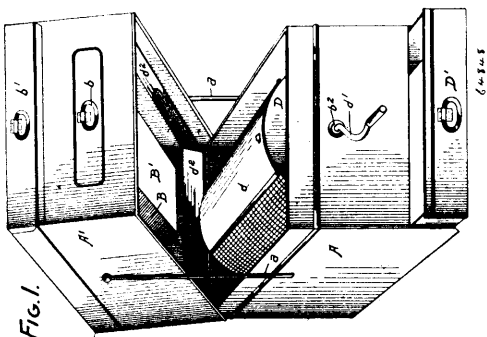
No. 61,847. Line Holder. (Porte-réens.)



John Brough, Boston, Massachusetts, U.S.A., 10th November 1899; 6 years. (Filed 9th October, 1899.)

Claim.—1st. In a device of the character set forth, the combination of a vertically movable toothed rein holding bar, an adjustable shaft carrying a pinion on its inner end in engagement with said bar and a gear on the outer end of the same, a wheel having a toothed disc with which the gear on the outer end of the shaft is adapted to mesh, and a spring surrounding a portion of the shaft and having one end attached to one of the bearings of the latter and the opposite end to said pinion. 2nd. In a device of the character set forth, the combination of a vertically movable toothed rein holding bar, an adjustable shaft having a pinion on the inner portion thereof in continual mesh with the said bar and a gear on the outer end of the same, and a toothed disc with which the gear on the outer end of the shaft is adapted to mesh. 3rd. In a device of the character set forth, the combination of a vertically movable toothed rein holding bar, a shaft having a pinion on the inner portion thereof and engaging the said bar, and a gear on the outer end of the same, a wheel having a toothed disc adapted to mesh with the said gear on the outer end of the shaft, a spring surrounding a portion of the shaft connected at one end to the pinion and at the other end to one of the bearings of the said shaft, and a shifting lever having its lower end engaging said shaft for the purpose of moving the latter inwardly or outwardly to throw the said gear out of or in mesh with the disc.

No. 61,848. Ash Sifter. (Tamis à cendres.)

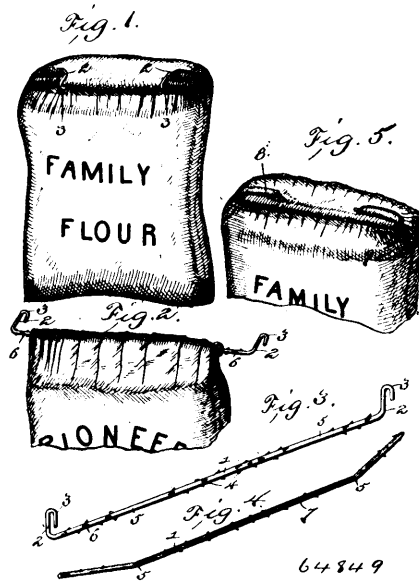


Robert Edward Genge, Kingston, Ontario, Canada, 10th November, 1899; 6 years. (Filed 9th October, 1899.)

Claim.—An ash sifter, comprising a cover hinged thereto, an ash receptacle mounted in said cover, a sliding bottom connected thereto, a door hinged to the said cover, closing the opening to the ash

receptacle, a perforated cylinder rotatably mounted in said casing and having a removable cover, a handle for rotating said cylinder, and an ash pan removably arranged in the bottom of said casing, substantially as described.

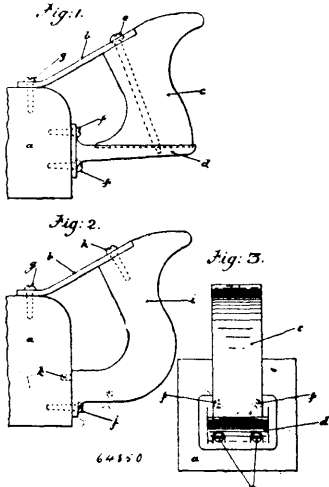
No. 61,849 Bag Fastener. (Attache sac.)



John F. Hutchens, Pioneer, Missouri, U.S.A., 10th November, 1899; 6 years. (Filed 10th October, 1899.)

Claim.—1st. The combination with a bag or sack, of a fastener thereof for which is separate from, or unattached to, said bag, and comprises a pliable, continuously barbed wire or rod laid across the mouth of the bag or sack and rolled therewith, the ends of said pliable rod or wire being bent or turned at an angle to those parts of the bag and the wire which are rolled together, as and for the purposes described. 2nd. The combination with a bag or sack, of a fastener for closing the mouth of the same which is separate from, or unattached to the bag, and consists of a pliable barbed rod or wire of a length greater than the width of the bag, and laid across the mouth of the same to have its barbs engage with the bag fabric and its ends extended beyond said bag, the bag mouth and rod being rolled together, and the ends of the rod or wire bent or folded with a portion of the bag fabric at angles to the rolled part of the bag mouth, as and for the purposes described. 3rd. As a new article of manufacture, a bag fastening comprising a pliable, barbed wire or rod having its ends lying at angles to the length of the same, whereby the barbed wire or rod may be engaged with a mouth of the bag to be rolled compactly therewith, and its angular protruding ends provided convenient means for manipulating the fastener during the rolling thereof with the bag mouth and for attaching the fastener and rolled bag fabric together at the ends of said rolled portion of the bag mouth, as and for the purpose described. 4th. A bag having its mouth portion rolled upon itself, and a barbed fastener which is inclosed within said rolled portion of the bag and which has its ends folded or bent inwardly upon itself and with a portion of the bag fabric, substantially as described, for the purposes set forth. 5th. The combination with a bag, of a barbed wire fastener which is rolled with the edges of the bag, at the mouth portion thereof, said fastener having its ends bent or folded upon itself and engaged with the rolled mouth portion of the bag to cause the latter to fold with the folded or bent ends of said fastener, substantially as described. 6th. The combination with a bag or sack, of a fastener having its shank folded or rolled with the bag at the mouth portion thereof and provided with bent ends which are interlocked with the shank, substantially as described, for the purposes set forth. 7th. As a new article of manufacture, a bag fastener consisting of an elongated shank and the off-standing hooks which are adapted to be bent around and engage with the said shank after the fastener has been attached to a bag, substantially as and for the purposes described. 8th. As a new article of manufacture, a bag fastener consisting of a length of wire forming a shank, angular arms at the extremities of the shank, and hooks at the free ends of said arms, said shank being barbed or toothed at intervals and leaving unbarbed smooth portions at distances from the ends of the fastener shank where the latter is designed to be bent, for the purpose described, substantially as set forth. 9th. A bag fastener comprising a single length of pliable wire provided with barbs or teeth and rolled with the edges of the bag at the mouth portion thereof, said wire having its end bent into interlocking engagement with the folded portion of the bag mouth, substantially as described.

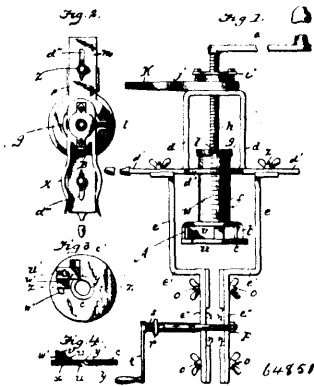
No. 64,850. Handle for Planes. (*Poignée de robots.*)



John Henry Webb, Cardiff, Glamorganshire, Wales, 10th November, 1899; 6 years. (Filed 11th July, 1899.)

Claim.—In means for attaching handles to plane blocks and the like tools in combination, two brackets secured by means of screws to the plane block one upon the end thereof and the other upon the adjacent top of the plane block, a handle of suitable material adapted to engage between said brackets, a screw passing through the top bracket handle and engaging in the bottom bracket for the purpose of securing a handle in position, a recess in said bottom bracket, substantially as described and illustrated herein and for the propose set forth.

No. 64,851. Tenoning Machine. (*Machine à tenons.*)



Willam Brodhage, Addieville, Illinois, U.S.A., 10th November, 1899; 6 years. (Filed 9th August, 1899.)

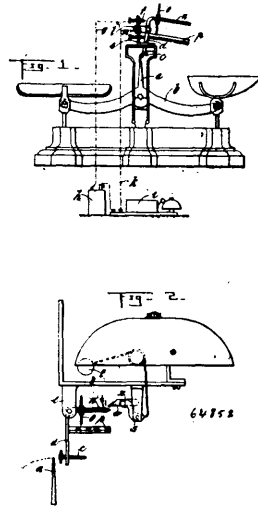
Claim.—A tenoning machine consisting of a clamping mechanism, a frame work carrying said clamps, a screw threaded rod carrying at its end a cutting mechanism, a stop for said rod and cutting mechanism, internally threaded pliers adapted to surround said rod, the thread of the pliers being adapted to engage the thread of the rod, the pliers being normally located against a stationary portion of the framework, a flexible cushion interposed between pliers and a stationary attachment of the framework and a crank handle secured to the top of the screw threaded rod, adapted to revolve the cutting mechanism, substantially as shown and described.

No. 64,852. Weighing Machine. (*Bascule.*)

Henry Valder, Wellington, New Zealand, 10th November, 1899; 6 years. (Filed 17th October, 1898.)

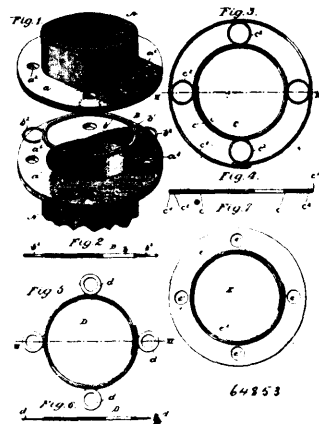
Claim.—1st. As a new article of manufacture, an attachment for a scale weighing machine, to indicate when a predetermined weight has been placed in the scale pan, said attachment comprising a bell, means for ringing the same, a lever normally disconnected from the weighing machine but having an arm which depends into the path of a moving part of said machine, an adjustable screw in the end of said arm adapted to be struck by the moving part of the machine and cause the bell to ring, and an adjustable weight on the other arm of the lever, whereby the amount of the predetermined weight can be regulated, substantially as described. 2nd. As a new article of manufacture, an attachment for a scale weighing machine to indicate when a predetermined weight has been placed in the scale pan, said attachment comprising a bell, means for ringing the

same, a bent lever normally disconnected from the weighing machine but having an arm which depends into the path of a moving part of



the weighing machine scale beam, an adjustable screw carried in the end of said arm and adapted to be struck by the scale beam at a certain point in its movement to cause the bell to ring, a dial staff attached to said arm and parallel with the outer arm of the lever, and an adjustable weight movable along said other arm adjacent to the dial staff, whereby the amount of the predetermined weight can be accurately regulated, substantially as described.

No. 64,853. Steam Packing. (*Garniture pour la vapeur.*)



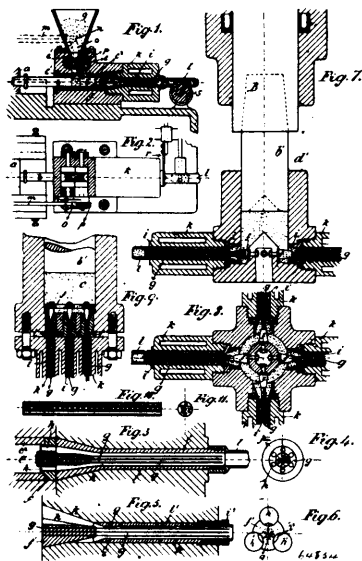
Charles Howard Merwarth, South Bethelam, Pennsylvania, U.S.A., 10th November, 1899; 6 years. (Filed 23rd May, 1899.)

Claim.—1st. A packing for steam and hydraulic joints comprising an annular compressible metal portion of less diameter than the exterior diameter of the pipe ends to be joined, and a thin comparatively wide retaining and centering portion of less thickness than said compressible portion united thereto as a separate piece and adapted to hold the latter in proper position for compression concentric with the interior diameter of the pipe ends without itself being compressed, substantially as described. 2nd. A packing for steam and hydraulic joints comprising an annular compressible soft metal portion of less diameter than the exterior diameter of the pipe ends to be joined, and a series of eyes or loops to receive the fastening bolts by which the pipe ends are joined together and adapted to retain the annular packing concentric with the interior diameter of the pipe ends, substantially as described. 3rd. A packing for steam and hydraulic joints comprising an annular compressible soft metal portion of less diameter than the exterior diameter of the pipe ends to be joined, and an annular portion of thin metal having a series of correspondingly thin eyes or loops arranged exteriorly of the soft metal packing to receive the fastening bolts by which the pipe ends are joined together, and adapted to retain the annular packing concentric with the interior diameter of the pipe ends without itself being compressed, substantially as described. 4th. A packing for steam and hydraulic joints comprising an annular soft metal portion of less diameter than the exterior diameter of the pipe ends to be joined, and a thin metal ring inclosing and joined to said packing ring, and having thin exterior eyes or loops for receiving bolts by which the packing may be retained concentric with the interior of the pipe, substantially as described. 5th. A packing

for steam and hydraulic joints comprising an annular copper ring comparatively large in cross section, but of less diameter than the exterior diameter of the pipe ends to be joined, and a thin metal ring inclosing and joined to said packing ring, and having thin exterior eyes or loops integral therewith for receiving bolts by which the packing may be retained concentric with the interior of the pipe, substantially as described. 6th. A packing for steam and hydraulic joints comprising a soft metal ring arranged within a larger soft metal ring, and an intermediate ring of thin metal encircling and secured to the inner ring and provided with integral eyes or loops spanning the space between the two packing rings and secured to the outer ring, substantially as described.

No. 64,854. Cigar Making Machine.

(Machine à faire des cigares.)

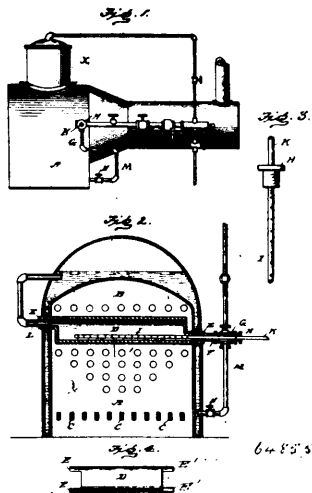


Julius Wilhelm von Pittler, Leipzig-Gohlis, Germany, 10th November, 1899; 6 years. (Filed April 13th, 1899.)

Claim.—A machine for the manufacture of cigars by means of a press, characterized in that one or more wires of any desired form are arranged in the compression chamber so that their free ends extend into the press tube in order that the compressed tobacco in the compression chamber shall surround the wires and thus form a rope or rod of tobacco which is provided with one or more draught passages.

No. 64,855. Feed water Heater.

(Chauffeur d'eau d'alimentation.)

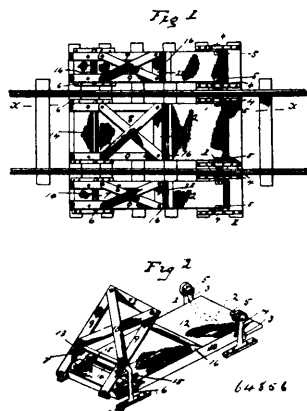


John W. Casey, Sistrerville, West Virginia, U.S.A., 10th November, 1899; 6 years. (Filed 11th October, 1899.)

Claim.—1st. The combination of a steam generator with a removable feed water heater provided with necks located at the top of one of its ends and at the bottom of the other for supporting the heater in the fire box, a feed water pipe entering the lower neck and a cir-

culating pipe connected to the said lower neck and the bottom of the boiler and means for connecting the heater to the upper water space of the boiler, substantially as described. 2nd. In a feed water heater for boiler furnaces, the combination with the heater provided with an upper outlet entering about the water level of the boiler and a lower inlet at its opposite ends, of a perforated feed pipe smaller than the interior diameter of the inlet and entering the said inlet and located near the bottom of the heater and a circulating pipe connected to the inlet to the heater and to the bottom of the boiler, substantially as described. 3rd. In a feed water heater the combination of a circulation pipe leading from the bottom of the boiler to the bottom end of the heater, with a feed pipe entering the said heater through the circulation pipe near the bottom thereof and means for connecting the other end of the heater with the upper water space of the boiler and secured to a nipple in the coupling of the circulating pipe, substantially as described.

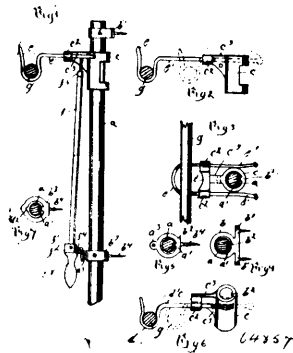
No. 64,856. Cattle Guard. (Garde-bétail.)



Roderick C. Cummings, Malone, New York, U.S.A., 10th November, 1899; 6 years. (Filed 11th October, 1899.)

Claim.—1st. In a cattle guard, the combination with a guard pivotally supported a distance from its rear end and normally folded, of a platform having hinged or pivotal connection at its rear end with the rear end of the guard and normally elevated thereby, and a fender or strip secured to the top side of the platform for the front end of the guard to fold behind, as and for the purpose set forth. 2nd. A cattle guard, comprising standards having lateral journals, a bail suspended from said standards, an arched frame located at a distance from said standards, a guard mounted to turn upon the horizontal portion of the arched frame and adapted to swing upward and rearward at its free end, clips connecting the guard with the said frame, and a platform loosely supported, at its front end upon the horizontal portion of the bail and having its rear end pivoted or hinged to the rear end of the guard in the rear of the horizontal portion of the said arched frame, and having a transverse seat to receive the horizontal portion of the frame, and intersecting depressions to receive the clips, said platform having its front portion extending in advance of the free end of the guard when the latter is folded, substantially as specified.

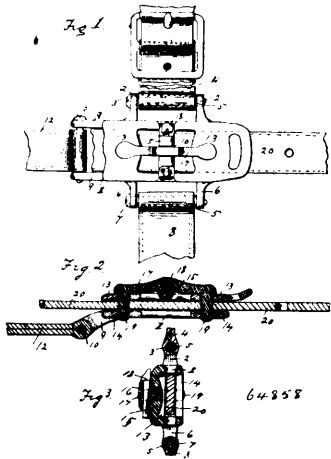
No. 64,857. Curtain Pole Holder. (Porte-baton de rideau.)



Charles O. Foedisch and Ernest E. Lang, both of Chicago, Illinois, U.S.A., 10th November, 1899; 6 years. (Filed 11th October, 1899.)

Claim.—The combination with horizontally reciprocable curtain pole hooks and vertically reciprocable brackets, carrying said hooks, and means to hold said brackets in the vertical plane of their motion, of means to vertically reciprocate and means to adjustably hold said brackets, substantially as specified.

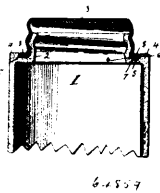
No. 64,858. Trace Buckle. (Boucle de traits.)



David Foreman, Strout, Illinois, U.S.A., 10th November, 1899; 6 years. (Filed 11th October, 1899.)

Claim.—The buckle 1, formed with the integral lugs 2 2, and 6 6, and the ears 9 9, the screw threaded bolts 3 7, and 10, removably secured to said lugs and ears, comprising the orificed plates 13 and 14, and the recessed bridge 15, and the longitudinal yoke 17, removably secured in said bridge and formed with the integral pins 19 19, extending through said orificed plates, substantially as shown and described.

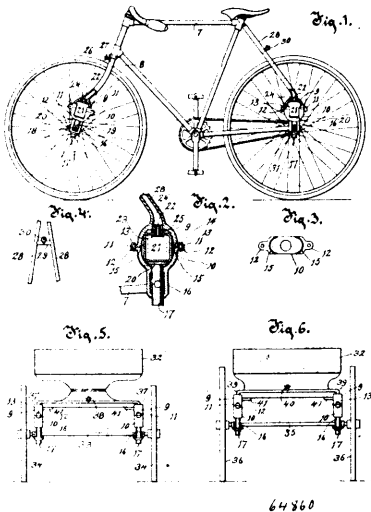
No. 64,859. Preserving Jar. (Jarre à confiture.)



Charles E. De Lancy, Newport, Pennsylvania, U.S.A., 10th November, 1899; 6 years. (Filed 11th October, 1899.)

Claim.—An improved preserving jar provided with an externally threaded neck, formed with an annular horizontal imperforate seat 5, provided with continuous parallel walls 6, 6, in combination, an elastic packing ring, confined within said parallel walls, and an internally threaded screw cap 3, formed with a horizontal imperforate flange 8, adapted to bear upon said packing ring parallel with said horizontal seat 5, substantially as shown and described.

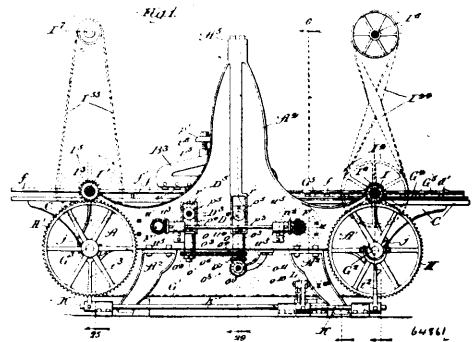
No. 64,860. Vehicle Frame Support. (Support de cadre de véhicules.)



Charles L. Merkel and Alexander Goldsmith, both of Milwaukee, Wisconsin, U.S.A., 11th November, 1899; 6 years. (Filed 10th April, 1899.)

Claim.—1st. The combination of an axle, tubular arms supported by said axle, stirrups mounted on the axle, frames or saddles which terminate the tubular arms and overhang the stirrups, respectively, the tubular cavity of the arms leading through the inner surface of the seat of the frames or saddles, inflated cushions interposed between such frames or saddles and the stirrups, respectively, and tubes extending from the cushions into the tubular arms. 2nd. The combination of an axle, tubular arms supported by said axle, stirrups mounted on the axle, frames or saddles which terminate the tubular arms and overhang the stirrups, respectively, the tubular cavity of the arms leading through the inner surface or seat of the frames or saddles, and each frame or saddle composed of sections, one section being detachably connected to the other, and inflated cushions interposed between said frames or saddles and the stirrups, respectively, and communicating with the tubular arms. 3rd. The combination of tubular arms formed or provided at their lower ends with frames or saddles, an air valve applied to the tubing, an axle, upwardly extending arms at opposite ends of the axle, said arms extending through the lower sides of the frames or saddles and formed or provided at their upper ends within the frames or saddles with plates or stirrups, and hollow cushions within the frame or saddles, said cushions confined between the opposite sides of the frames or saddles, and between the tops of said frames and the plates or stirrups, said cushions provided with openings registering with openings in the tubing and adapted to be inflated by air forced through the tubing.

No. 64,861. Machine for Step Mitering Box Blanks. (Machine d'assemblage à onglet des blanc de boîtes.)



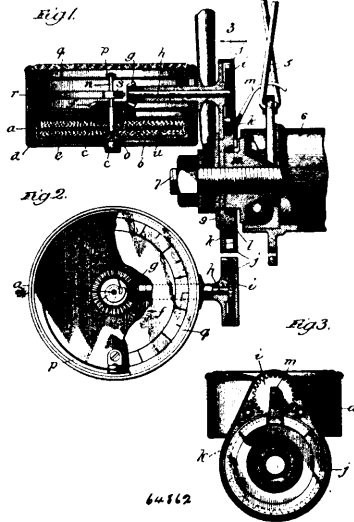
William P. Healy, assignee of Frederick Peter Rosback, both of Chicago, Illinois, U.S.A., 11th November, 1899; 6 years. (Filed 17th March, 1899.)

Claim.—1st. In a step mitering machine, the combination with the saw and chipping disc clusters on their rotary shafts, of a reciprocating carrier on the machine bed, for the material to be step mitered, a feed clutch for engaging the carrier driving gear to move the carrier toward said clusters, a return clutch for engaging said gear to move the carrier in the opposite direction, a reciprocable trip bar connected with the movable members of said clutches to actuate them, and driving means engaging said trip bar to throw it alternately in opposite directions to actuate the clutches, substantially as described. 2nd. In a step mitering machine, the combination with the saw and chipping disc clusters on their rotary shafts, of a reciprocating carrier on the machine bed, for the material to be step mitered, said carrier comprising block equipped endless chains on sprockets secured to rotary shafts journaled toward opposite ends of the machine, a feed clutch and gearing for connecting one of said sprocket shafts with its driving power to move the carrier toward said clusters, a return clutch and gearing for connecting the other sprocket shaft with its driving power to move the carrier in the opposite direction, a reciprocable trip bar connected with the movable member of said clutches to actuate them, and driving means engaging said trip bar to throw it alternately in opposite directions to actuate the clutches, substantially as described. 3rd. In a step mitering machine, the combination with the saw and chipping disc clusters on their rotary shafts, of a reciprocating carrier on the machine bed, for the material to be step mitered, a feed clutch for engaging the carrier driving gear to move the carrier toward said clusters, a return clutch for engaging said gear to move the carrier in the opposite direction, a trip bar connected with the movable members of said clutches, and driving means engaging said trip bar to throw it in contrary directions for actuating said clutches, comprising a rotary drive shaft carrying a crank arm, a lever connected with said bar at one side of said drive shaft and a bell crank having one arm connected with said bar at the opposite side of said drive shaft, said lever and bell crank arms extending to be engaged successively by the free end of said crank in traversing its path, substantially as described. 4th. In a step mitering machine, the combination with the saw and chipping disc clusters on their rotary shafts, of a reciprocating carrier on the machine bed, for the material to be step mitered, said carrier having endless chains on sprockets secured to rotary shafts journaled toward opposite ends of

the machine, a feed clutch on a rotary shaft geared with suitable driving power and with one of said sprocket shafts, a return clutch on a rotary shaft geared with suitable driving power and with the other sprocket shaft, the sliding members of said clutches being movable in opposite directions to engage with their companion members, a trip bar pivotally connected with arms on parallel rock shafts carrying arms to engage said sliding clutch members, and driving means engaging said trip bar to throw it alternately in opposite directions to actuate the clutches, substantially as described. 5th. In a step mitring machine, the combination with the saw and chipping disc clusters on their rotary shafts, of a reciprocatory carrier on the machine bed, for the material to be step mitered, said carrier comprising block equipped endless chains on sprockets secured to rotary shafts journaled toward opposite ends of the machine, a feed clutch for engaging the carrier driving gear to move the carrier toward said clusters, a return clutch for engaging the carrier driving gear to move the carrier in the opposite direction, a reciprocable trip bar connected with the movable member of said clutches to actuate them, driving means engaging said trip bar to throw it alternately in opposite directions to actuate the clutches, and bars supported adjacent to said chains to support said material, deposit it on and then lift it off said carrier, said bars being connected with said trip bar to be raised and lowered by its movements, substantially as described. 6th. In a step mitring machine, the combination with the saw and chipping disc clusters on their rotary shafts, a reciprocatory carrier on the machine bed, for the material to be step mitered, and its actuating clutch devices, of a reciprocable trip bar connected with the movable members of said clutch devices to actuate them, driving means engaging said trip bar to actuate said clutches, and means for supporting said material preparatory to feeding it past said clusters, then depositing it and finally lifting it off said carrier, said means comprising rock shafts extending crosswise of the base of the machine and connected with said trip bar to be turned by its movements, bars supported on arms extending from said rock shafts, vertical rods bearing at intervals on said bars to be raised and lowered with them, and bars connecting said rods in pairs and extending lengthwise of the machine, substantially as described. 7th. In a step mitring machine, the combination with a carrier for the material to be step-mitered, of the saw and chipping disc clusters on rotary shafts geared together and journaled in vertically adjustable bearings, a vertically adjustable cross head confined in the frame of the machine and carrying presser feet depending over the machine bed, and the end bearings for said shafts, screw and nut supports on the frame for said bearings and a rotary shaft geared with the screws of said supports to turn them in their nuts by turning the shaft to raise and lower said cluster shafts and cross head, substantially as and for the purpose set forth. 8th. In a step mitring machine, the combination with the frame supporting bed rails at intervals and a carrier for the material to be step mitered, of the saw and chipping disc clusters on rotary shafts geared together and journaled in vertically adjustable bearings, a vertically adjustable cross head confined in said frame and carrying pendent presser feet and the end bearings for said shafts, intermediate bearings for said shafts supported on the bed rails, screw and nut supports for said end and intermediate bearings, and a rotary shaft geared with the screws of said supports to turn them in their nuts by turning the shaft to raise and lower said cluster shafts and cross head, substantially as described. 9th. In a step mitring machine, the combination with the frame supporting bed rails at intervals and having side cheeks, and a carrier for the material to be step mitered, of a vertically adjustable cross head confined between said cheeks and carrying presser feet, logs on the opposite ends of said cross head terminating in shoes provided with journal bearings and at which the cross head is supported in the frame sides, saw and chipping disc clusters on rotary shafts geared together and journaled in said bearings, screw and nut supports for said bearings, bearings for said shafts on said bed rails and having screw and nut supports, and a rotary shaft geared with the screws of said supports to turn them in their nuts by turning the shaft to raise and lower said cluster shafts and cross head, substantially as described. 10th. In a step mitring machine, the combination with the frame supporting the bed, a carrier for the material to be step mitered and means in the path of said material for step mitering it, of a cross head supported on the frame over the bed, and containing a longitudinal slot, presser feet having shanks from which they are adjustably suspended on the cross head at said slot, and adjustable stops confined against the upper ends of said shanks, substantially as described. 11th. In a step mitring machine, the combination with the frame supporting the bed, a carrier for the material to be step mitered and means in the path of said material for step mitering it, of a cross head supported on the frame over the bed, containing a longitudinal slot and provided with a flange along its upper forward edge and a backward extending ledge, presser feet carrying anti-friction rollers on their bases and provided with shanks at which they are adjustably bolted in said slot, and adjustable stops depending from said ledge to bear against the presser feet, substantially as described. 12th. In a step mitring machine, the combination of the saw and chipping disc clusters adjustable longitudinally of their rotary shafts, bed rails adjustably supported at intervals in the frame and connected with said clusters, screw shafts journaled in the frame to extend across said rails, and nut sections adjustably supported on a bed rail to be moved into engagement with said screw shafts, whereby turning said screw

shafts moves said rail and the clusters connected therewith, substantially as and for the purpose set forth. 13th. In a step mitring machine, the combination of the saw and chipping disc clusters adjustable longitudinally of their rotary shafts, bed rails adjustably supported on the cross girders of the machine frame and connected with said clusters, screw shafts journaled in the frame to extend across said rails, nut sections adjustably supported on a bed rail adjacent to said screw shafts and connected together to be moved by a single operation out of engagement with said screw shafts or into engagement therewith to cause turning of the screw shaft to move said rail and the clusters connected therewith, substantially as and for the purpose set forth. 14th. In a step mitring machine the combination with the frame having cross girders, of bed rails adjustably supported at intervals on said girders, rotary shafts journaled in the frame to extend across said rails, supports on the rails for said shafts, sleeves on said shafts rotating with them and confined by said supports to move lengthwise of the shafts with the rails, saw disc and chipping disc clusters secured on said sleeves of the respective shafts, screw shafts journaled in the frame to extend across said rails, and nut sections adjustably supported on a bed rail to be moved into engagement with said screw shaft, whereby turning said screw shafts move said rail and the sleeves connected therewith, substantially as and for the purpose set forth. 15th. In a step mitring machine, the combination with the frame having cross girders, of bed rails bifurcated at their opposite ends and adjustably supported at intervals on said girders, sprocket wheels journaled in the bifurcated ends of said rails and carrying endless block equipped chains, saw and chipping disc clusters secured on rotary parallel shafts to rotate with and be adjustable lengthwise of them, said shafts being journaled in the frame to extend across said rails, and supported thereon and said clusters being connected with their rail supports for adjustment with the rails, screw shafts journaled in the frame to extend across said rails, a pair of nut sections adjustably supported on each bed rail adjacent to the screw shafts and a link and lever connection between the members of each pair of said nut sections, having an operating handle for actuating it substantially as and for the purpose set forth.

No. 64,862. Speed Indicator. (Indicateur de vitesse.)

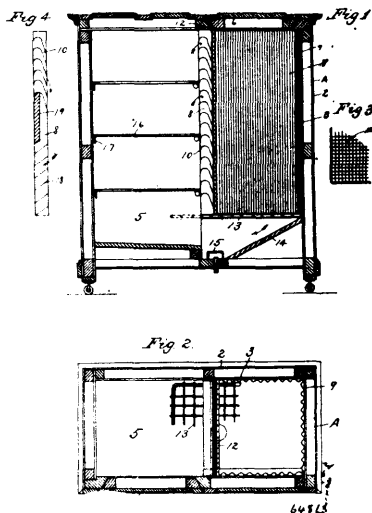


The Construction and Maintenance Company, assignee of Warren Moon, all of Chicago, Illinois, U.S.A., 11th November, 1899; 6 years. (Filed 27th April, 1899.)

Claim.—1st. In an instrument of the class described, the combination of a rotatable cylinder, and a staff independently mounted in such cylinder and adapted when such cylinder is rotated to be subjected to the action of centrifugal and frictional force to indicate the speed of a rotating object, substantially as described. 2nd. In an instrument of the class described, the combination of a rotatable cylinder, a staff independently mounted in such cylinder, a disc secured to such staff and within the rotatable cylinder and adapted to be subjected when such cylinder is rotated to the action of centrifugal and frictional force, and tension mechanism secured to the indicating staff to compensate and gradually overcome the frictional force of the staff, substantially as described. 3rd. In an instrument of the class described, the combination of a rotatable cylinder, a staff independently mounted in such cylinder, a disc secured to such staff and within the rotatable cylinder and adapted to be subjected to the action of centrifugal and frictional force when the cylinder is rotating, an indicating hand on such staff, an inclosing frame or case, and a spring secured to the staff and to the frame or case to gradually overcome the frictional force, substantially as described. 4th. In an instrument of the class described, the combination of a rotatable cylinder, a staff independently mounted in such cylinder, a disc secured to such staff and within the rotatable

cylinder, a fluid body in such rotatable cylinder adapted when the cylinder is rotating to be subjected to centrifugal force and frictionally engage the diaphragm or disc on the indicating staff, an inclosing case for such rotating cylinder, an indicating hand on the staff and a spring connected with the staff and with the frame or case to gradually overcome the developed frictional force, substantially as described. 5th. In an instrument of the class described, the combination of a rotatable cylinder, a staff independently mounted in such cylinder, a disc secured to such staff and within the rotatable cylinder, a body of mercury in such rotatable cylinder adapted when the cylinder is rotating to be subjected to centrifugal force and frictionally engage the diaphragm or disc on the indicating staff, an inclosing case for such rotating cylinder, an indicating hand on the staff, and a spring connected with the staff and with the frame or case to gradually overcome the developed frictional force, substantially as described. 6th. In an instrument of the class described, the combination of a casing, a rotatable cylinder secured within such casing, a bevel pinion on such rotatable cylinder, a bevel pinion engaged therewith so as to drive the same and provided with a spur pinion extending outside of the casing, and a second spur gear or pinion engaging therewith and provided with means by which it may be engaged by a rotating shaft or similar element and operate the rotatable cylinder, as and for the purpose specified.

No. 64,863. Refrigerator. (Refrigerateur.)



Gebhard Carl Bohn, St. Paul, Minnesota, U.S.A., 11th November, 1899; 6 years. (Filed 29th August, 1899.)

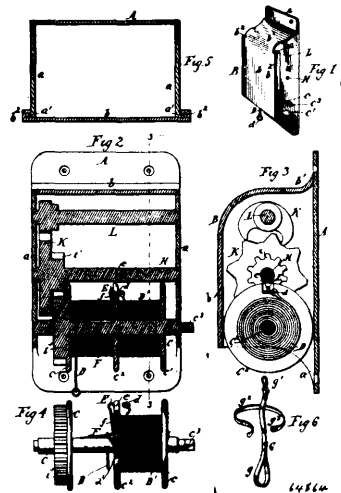
Claim.—1st. A refrigerator, comprising in combination a food chamber, an ice bunker, an openwork bottom for said bunker, and a wall separating said chamber and bunker made up of a plurality of siphon shaped ports, the long conduits of which extend downward into the ice bunker and the short conduits of which extend downward into the food chamber. 2nd. A refrigerator, comprising in combination a food chamber, an ice bunker, an openwork bottom for said bunker, and a wall separating said chamber and bunker made up of a plurality of curved siphon shaped ports, with the short conduits of said ports extending downwardly into the food chamber and the long conduits extending downwardly into the ice bunker.

No. 64,864. Fire Escape. (Sauveteur d'incendie.)

William Oliphant Abbott, Kittanning, Henry Stanley Evans, Pittsburg, both of Pennsylvania, and Jonas Francis Young, New Martinsville, West Virginia, all in the U.S.A., 11th November, 1899; 6 years. (Filed 5th October, 1899.)

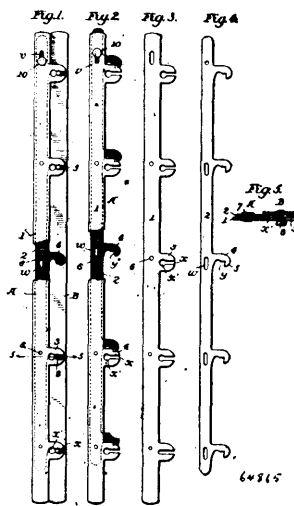
Claim.—1st. An enclosing case for a fire escape, consisting of a back plate, two side plates projecting forwardly from the back plate, and a cover having a front plate which slides upon the front ends of the side plates, and a top plate which bears against the top of the side plates, substantially as set forth. 2nd. The combination with the drum shaft provided with two drums which are separated by a disc, of a single line or rope which is arranged with its central portion in an opening in said disc and which trends with its two ends or branches in opposite directions, so that upon turning the drums together in either direction one of the lines or rope branches is wound upon its drum and the other line or rope branch is unwound from its drum, substantially as set forth. 3rd. The combination with two drums and two ropes adapted to be wound upon said drums, of a locking device which holds the rope of one drum against unwinding and which is controlled by the rope of the other drum, substantially as set forth. 4th. The combination with two drums and two ropes adapted to be wound upon said drums, of a catch which is held in engagement with the end of one of said ropes by the coils of the other rope, and a spring whereby said catch is dis-

engaged from the rope which it holds when said coils are unwound, substantially as set forth. 5th. The combination with a drum shaft



provided with two drums and two ropes wound upon said drums, of a catch adapted to engage with the end of one of said ropes and hold the same against unwinding, a spring which is secured to the drum shaft and which is pressed inwardly by the coils of the other rope when wound upon its drum, and an arm connecting said spring with said catch, substantially as set forth. 6th. The combination with a drum shaft provided with two side discs and an intermediate disc, forming two drums upon said shaft, and the ropes adapted to be wound upon said drums, of a catch adapted to bear with its end against the bottom of a recess in the intermediate disc and engage with a ring on the end of one of said ropes so as to hold the same against unwinding from its drum, a flat spring which is secured lengthwise to the drum shaft and which is pressed inwardly by the coils of the other rope when the latter is wound upon its drum, and an arm connecting the free end of the spring with said catch, substantially as set forth.

No. 64,865. Corset Clasp. (Agraffe de corset.)

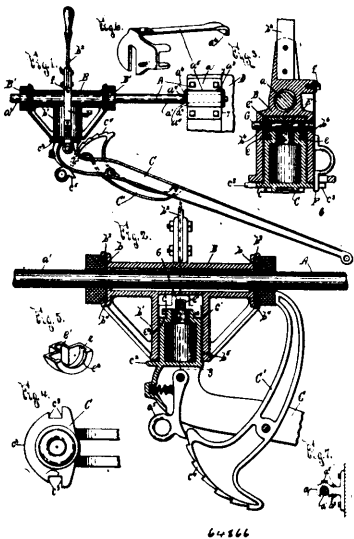


The Eureka Instantaneous Opening Corset Steel Company, Dover, Delaware, assignee of Austin Herr, St. Elmo, Virginia, U.S.A., 11th November, 1899; 6 years. (Filed 7th October, 1899.)

Claim.—1st. The combination in a corset clasp, of a busk consisting of a blade provided with projections at one side, each with a slot extending inward from the outer end, and a second blade sliding longitudinally on the first and provided with hooks rigid therewith arranged to cross said slots to close the outer ends of the same, substantially as set forth. 2nd. The combination in a corset clasp, of a busk consisting of a blade provided with projections at one side, each with a slot extending inward from the outer end and enlarged to form an eye, and a second blade sliding longitudinally on the first and provided with hooks rigid therewith and arranged to cross said slots to close the outer ends of the same, substantially as set forth. 3rd. The combination in a corset clasp, of a busk consisting of a blade provided with projections at one side, each with a slot

extending inward from the outer end, and a second blade sliding longitudinally on the first and provided with hooks rigid therewith arranged to cross said slots to close the outer ends of the same, one or more of said hooks having inclined edges, substantially as set forth. 4th. The combination in a corset clasp, of a busk consisting of a blade provided with projections at one side, each with a slot extending inward from the outer end, and a second blade sliding longitudinally on the first and provided with hooks rigid therewith arranged to cross said slots to close the outer ends of the same, the latter blade arranged to slide to carry the hooks away from the slotted projections in an upward direction, substantially as set forth. 5th. The combination in a corset clasp, of a busk consisting of plates, each consisting of a steel blade with projections at one edge in one piece with the blade, the projections of one blade having slots extending inward from the outer ends, and the projections of the other blade in the form of hooks to close the outer ends of said slots, substantially as set forth.

No. 64,866. Mail Bag Catcher. (*Attrape-sac de maille.*)



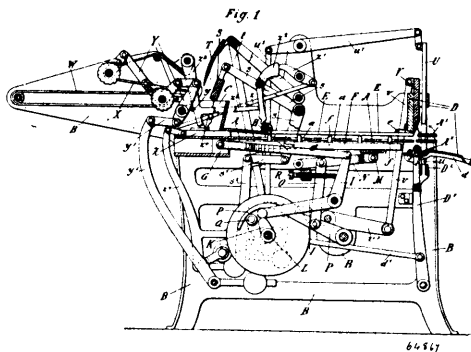
John Hampden Hopkins, assignee of George Washington Smith, both of Rochester, New York, U.S.A., 11th November, 1899; 6 years. (Filed 28th August, 1899.)

Claim.—1st. A bag catcher comprising a frame, a reversible catcher arm carried by the frame, and a locking member fixed to one of said parts and movable into and out of engagement with the other part for holding the catcher arm in operative position, substantially as and for the purpose described. 2nd. A bag catcher comprising a support, a frame carried by the support and having a socket, a catcher arm journaled in the socket and provided with oppositely arranged locking shoulders, and a locking member having one end fixed to the frame and its other end movable into and out of engagement with the locking shoulders, substantially as and for the purpose set forth. 3rd. A bag catcher comprising a support, a frame carried by the support and having a socket, a catcher arm journaled in the socket and provided with a flange for engaging the wall of the socket, said flange having an engaging face and shoulders, and a locking member having one end fixed to the frame and its other end movable into and out of engagement with the said engaging face and shoulders, substantially as and for the purpose specified. 4th. A bag catcher comprising a support, a frame carried by the support and having a socket, a catcher arm journaled in the socket and provided with oppositely arranged locking shoulders, and a locking member consisting of a spring arm having one end fixed to the frame and its other end movable into and out of engagement with the locking shoulders, substantially as and for the purpose set forth. 5th. A bag catcher comprising a support, a frame carried by the support and having a socket, a removable catcher arm journaled in the socket, means for preventing revoluble movement of the catcher arm, a fastening member arranged within the socket and engaged with the adjacent portion of the catcher arm, said fastening member being removable from the socket with the catcher arm, and means for holding the fastening member in position, substantially as and for the purpose described. 6th. A bag catcher comprising a support, a frame carried by the support and having a socket, a catcher arm journaled in the socket, a fastening member arranged within the

socket and engaged with the adjacent portion of the catcher arm, a bolt for holding the fastening member in position, and a movable locking member for preventing revoluble movement of the catcher arm and holding said bolt in operative position, substantially as and for the purpose set forth. 8th. A bag catcher comprising a support, a frame carried by the support and having a socket, a removable catcher arm journaled in the socket and having a portion thereof within the socket reduced in diameter and formed with an annular groove, means for preventing revoluble movement of the catcher arm, a fastening member arranged within the socket and removable from the socket with the catcher arm, said fastening member being composed of separable lengthwise sections having corresponding parts arranged at opposite sides of the reduced portion of the catcher arm, and formed with shoulders arranged in said annular groove, and means for holding the fastening member in position, substantially as and for the purpose described. 9th. A bag catcher comprising a support, a frame carried by the support and provided with recesses extending inwardly from its opposite extremities and having their inner ends formed with annular enlargements, buffers supported in the recesses and formed with annular flanges projecting into said annular enlargements, and a reversible catcher arm supported by the frame, substantially as and for the purpose set forth. 10th. In a bag catcher, the combination with a bracket having a lengthwise bearing and an engaging face, a bar detachably supported in the bearing and provided with an engaging shoulder, a fastening member having one end detachably engaged with the engaging face of the bracket, and its other end provided with a spring arm having a shoulder for engaging said shoulder of the bar, and a catcher arm mounted on said bar, substantially as and for the purpose specified.

No. 64,867. Cigar Making Machine.

(*Machin à faire des cigares.*)

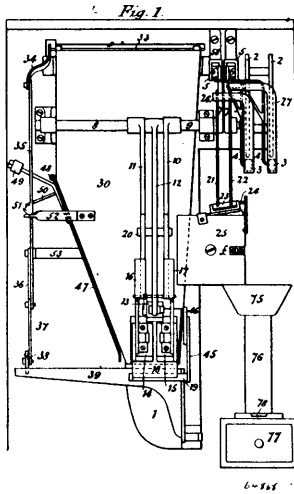


Julius Haarer, Frankport on the Maine, Prussia, Germany, 11th November, 1899; 6 years. (Filed 14th November, 1898.)

Claim.—1st. A machine for manufacturing cigars, consisting of a transport channel A, on the left hand end of which is fixed the forming press C, and on the right hand end the wrapping mechanism D, the channel A being enclosed at the top by spring bars E, and the forward motion of the tobacco therein being effected by pins f, fixed to a frame F, receiving an oscillating motion from the driving shaft L, through gear G H I K and M N O P Q, the driving shaft L, being at the same time made to actuate the forming press C, and wrapping mechanism by means of suitable transmitting devices, constructed and arranged, substantially as hereinbefore described. 2nd. In a machine for making cigars, the arrangement of a feeding device W X, actuated from the driving shaft L, by means of ratchet gear Y, connecting rod y^1 , weighted lever y^2 , and rim cam y^3 , and connected by trigger gear z^1, z^2, z^3 , to the pusher Z, in such manner as to be put in and out of action at the proper moments, constructed and arranged, substantially as hereinbefore described. 3rd. In a machine for making cigars, and the forming press such as C, the special construction of the actuating gear, consisting for the knife T, of the rod t, and cam t^1 , for the hammer S, of the elbow lever s, connecting rod s^1 , weighted lever s^2 , and wiper discs s^3 , for the pusher Z, of the weighted lever z^1 , and the rim cam z^2 , constructed and arranged, substantially as hereinbefore described. 4th. In a machine for making cigars, and the wrapping apparatus, the special arrangement of the actuating gear, consisting for the divider V, of the rod v, lever v^1 , and the cam v^2 , for the stamper U, of the lever u^1 , rod u^2 , spring u^3 , and eccentric u^4 , for the elbow lever D¹, of the rod d^1 , and the cam d^2 , constructed and arranged, substantially as hereinbefore described. 5th. In a machine for making cigars, and the wrapping apparatus, the application of the clamping piece A¹, which effects the turning of the transport direction of the tobacco through 90° and of the smoothing device A², on the lever D¹, constructed and arranged, substantially as hereinbefore described. 6th. In a cigar making machine, the arrangement of a delivering device D², on the lever D¹, into which the finished roll drops from the rolling table a, when in the extreme right hand position and from which the roll is pressed down into a mould by a bar

u, combined with the stamper *U*, when in the extreme left hand position, constructed and arranged, substantially as hereinbefore described.

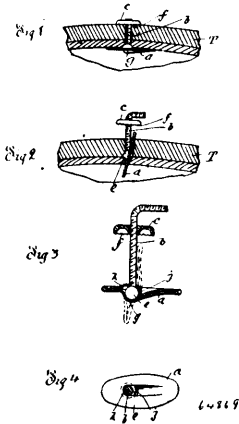
No. 64,868. Mail Box. (Boîte à malle.)



Frank Hoole, Balham, Surrey, England, 11th November, 1899; 6 years. (Filed 17th April, 1899.)

Claim.—1st. The combination in a postal receiving box operated by coin freed mechanism of a stamp indicating the time and date of posting affixed to a lever and operated thereby with a push rod or handle all substantially as set forth. 2nd. The combination in a postal receiving box operated by coin freed mechanism of a stamp indicating the time and date of posting affixed to a lever and operated thereby, and push rod or handle, with a money counter worked by said push rod or handle, all substantially as set forth. 3rd. The combination in a postal receiving box operated by coin freed mechanism of a stamp indicating the time and date of posting attached to a lever operated by a push rod or handle, and money counter with a numbering stamp for impressing consecutive numbers upon the letters or packets, all substantially as set forth. 4th. The combination in a postal receiving box operated coin freed mechanism of a stamp indicating time and date of posting attached to a lever operated by a push rod or handle, money counter and numbering stamp for impressing consecutive numbers upon the letters or packets, with a letter shoot having a movable base plate for allowing the letters or packets to pass away into the letter box after stamping, all substantially as set forth. 5th. The combination in a postal receiving box operated by coin freed mechanism of a stamp indicating the time and date of posting attached to a lever operated by a push rod or handle, money counter, numbering stamp for impressing consecutive number upon the letters or packets, letter shoot and movable base, with a hinged shutter affixed to the mouth of the letter shoot for operating the movable base by means of arms or levers, all substantially as set forth. 6th. The combination in a postal receiving box operated by coin freed mechanism of a stamp indicating the time and date of posting attached to a lever operated by a push rod or handle, money counter, numbering stamp for impressing consecutive numbers upon the letters or packets, letter shoot with moveable base, hinged shutter affixed to the mouth of the letter shoot, with a swinging plate forming one side of the letter shoot, pivoted and weighted for the purpose of ensuring the passing of the letters to the proper side of the shoot for the purpose of receiving the stamp, all substantially as set forth. 7th. The combination in a postal receiving box operated by coin freed mechanism of a stamp indicating the time and date of posting attached to a lever operated by a push rod or handle, money counter, numbering stamp for impressing consecutive numbers upon the letters or packets, letter shoot having moveable base, hinged shutter affixed to the mouth of the letter shoot, swinging plate forming one side of the said letter shoot, with sliding stop pieces operated by arms or levers affixed to the coin buckets for making the connection between the push rod and the stamp lever, all substantially as set forth. 8th. The combination in a postal receiving box operated coin freed mechanism of a stamp indicating the time and date of posting attached to a lever operated by a push rod or handle, money counter, numbering stamp for impressing consecutive numbers upon the letters or packets, letter shoot having moveable base, hinged shutter affixed to the mouth of the letter shoot, swinging plate forming one side of the letter and sliding stop pieces operated by arms or levers affixed to the coin buckets with a hopper affixed to a glass tube connected with a cash box, said glass tube being fitted with a sliding piece at its base to retain the coins in the glass tube, all substantially as set forth.

No. 64,869. Pneumatic Tire Puncture Closing Device. (Appareil pneumatique à fermer les piqures des baudages.)

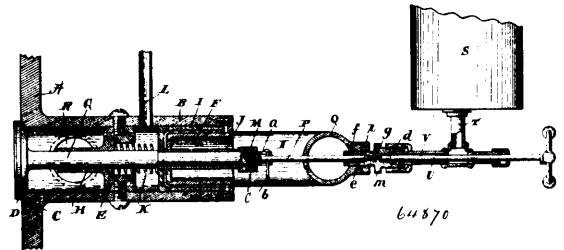


Robert William Sampson, Quebec City, Quebec, Canada, 11th November, 1899; 6 years. (Filed 23rd August, 1899.)

Claim.—1st. A puncture closer for tubing comprising a shank, a head, a universal joint for connecting said head to said shank, said head having a slot extending from said universal joint and of sufficient width to accommodate said shank, and a co-operating cap, substantially as described. 2nd. A puncture closer for tubing, consisting of the threaded shank *b* with its upper end off-set to form a temporary handle and having a ball *e* formed upon its lower end, the head *a* formed with a socket to receive and loosely retain said ball, and the slot *j* narrower than the ball *e* and of sufficient width to accommodate the shank *b*, and the co-operating retaining cap with serrated under surface, substantially as described.

No. 64,870. Oil Valve for Gasoline Engines. (Soupape à huile pour machines à gazولين.)

(*Soupape à huile pour machines à gazولين.*)

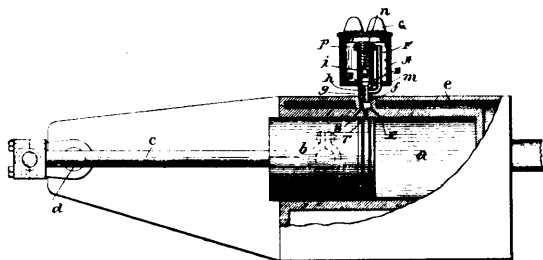


Alexander Winton, Cleveland, Ohio, U.S.A., 11th November, 1899; 6 years. (Filed 1st September, 1899.)

Claim.—1st. In an explosive engine, an explosive cylinder having an explosive inlet port, an outwardly projecting cylinder in communication with said port, an inlet valve having a stem projecting through the said cylinder, an intermediately disposed web within said cylinder, the stem having an outwardly disposed cup-shaped piston, an inwardly disposed cap for the end of said cylinder and projecting within the cup-shaped piston, and a pressure communication with the cylinder between the piston and the centrally disposed web, substantially as described. 2nd. An explosive engine, comprising a cylinder having an inlet port, an outwardly disposed cylinder in communication with said port, the cylinder having a centrally disposed web with an inwardly extending tube, an inlet port valve having a stem passing through the said tube and through the centrally disposed web, an inwardly disposed tubular cap for the outer end of the cylinder, an outwardly disposed cup-shaped piston enclosing the said tubular cap, the said cup-shaped piston having a tube passing through the inner wall of the tubular cap, and a pressure communication with the cylinder between said web and the piston, substantially as described. 3rd. A gasoline engine, comprising a cylinder, an inlet port valve therefor, an oil supply, a longitudinally adjustable nipple at the outlet end of the oil supply, and a valve connected with the inlet port valve stem, substantially as described. 4th. A gasoline engine, comprising an explosion cylinder having an inlet port, an inlet port valve therefor provided with a stem, an oil valve longitudinally movable upon said inlet port valve stem, a spring for normally holding the oil valve outward, an oil supply, and an adjustable nipple for the outlet end of the oil supply having a seat into which the longitudinally movable oil valve projects, substantially as described. 5th. A gasoline engine, comprising a cylinder having an inlet port, an inlet port valve provided with a stem, the end of the stem having a longitudinal socket, an oil valve stem projecting within the socket, a pin passing through

the socket and through the oil valve stem, elongated openings for the pin to permit longitudinal movement of the valve, a spring within the socket holding the valve normally outward, an oil supply, and a longitudinally adjustable nipple at the outlet end of the oil supply, said nipple provided with a valve seat receiving the oil valve, substantially as described. 6th. A gasoline engine, comprising a cylinder having an inlet port, an inlet port valve provided with a stem, an oil valve longitudinally movable upon said stem, a combined air and oil tube, an oil supply, a nipple at the exit end of the oil supply, the said nipple being screw threaded and passing through a screw threaded opening in the combined air and oil tube, means for locking the nipple, the nipple having a valve seat, said longitudinal valve extending within the nipple and resting upon the said valve seat, substantially as described. 7th. A gasoline engine, comprising a cylinder having inlet port, an inlet port valve provided with a stem, an oil valve longitudinally movable thereon, a spring for normally holding the oil valve outward, an oil supply, and a nipple at the outlet end of the said oil supply, the nipple having a cut-off valve seat at one end and an inlet valve seat at the opposite end receiving said oil valve, and a cut-off valve adapted to co-act with the cut-off valve seat, substantially as described.

No. 64,871. Lubricator. (*Graisseur.*)



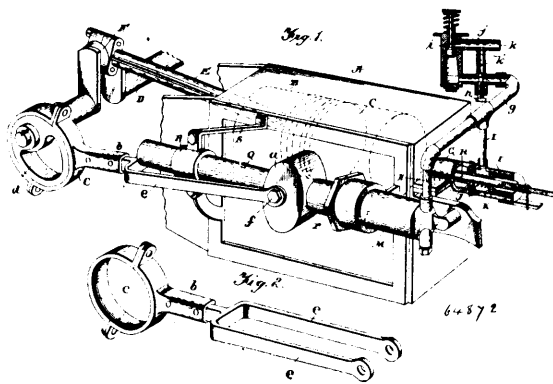
64871

Alexander Winton, Cleveland, Ohio, U.S.A., 11th November 1899; 6 years. (Filed 1st September, 1899.)

Claim.—1st. A lubricating device, comprising a cylinder, a piston therein, a closed oil chamber in communication with the cylinder, a valve controlling said oil communication, a passage in communication at one end with the cylinder at a point in advance of the said oil communication, and its opposite end in communication with the valve and the oil chamber, whereby the valve is lifted from its seat by pressure from the cylinder, substantially as described. 2nd. A lubricating device, comprising a cylinder, an oil cup or chamber, an oil passage-way in communication at its upper end with the lower portion of the chamber, and at its lower end with the engine cylinder, a valve adapted to close and open the upper end of said passage-way, a tube having its upper end in communication with the upper portion of the chamber, its lower end in communication with said passage-way, and a passage E in communication at one end with the cylinder at a point in advance of the oil passage-way, and in communication at its upper end with the oil passage-way, substantially as described. 3rd. A lubricating device, comprising a cylinder, having an oil passage-way through one side thereof and at a point about at the outward limit movement of the piston, a piston therein, a closed oil chamber in communication with said opening, a valve for said communication, a pipe having its upper end in communication with the upper end of the oil chamber, and at its lower end with the said communication at a point below the said valve, and a passage-way in the cylinder having its inner end in communication therewith at a point inside of the outward limit of movement of the piston, and its upper end in communication with said cylinder opening, the parts adapted to operate as described. 4th. A lubricating device, comprising an engine cylinder, a piston therein, a closed oil chamber, a communication between the said oil chamber and the interior of the cylinder at a point outside of the outward limit of movement of the piston, a passage E having its inner end in communication with the cylinder at a point inside of the outward limit of the said piston and its upper end in communication with said oil cup communication, a ball valve adapted to close the upper end of said communication, and a vertically projecting tube within the oil chamber and enclosing the said ball valve, substantially as described. 5th. A lubricating device, comprising a cylinder, a piston therein, an oil cup or chamber, a communication with the interior of the cylinder at a point outside of the outward limit of movement of the said piston and with the interior of the said oil cup or chamber, a passage-way having communication with the cylinder at a point inside of the outward limit of movement of the piston and at its upper end with the said communication, a ball valve adapted to close the upper end of the said communication, a vertically disposed tube having oil passage-ways and enclosing the said ball valve, and a vertically adjustable member within the tube for regulating the upward movement of the ball valve, and a pipe F having communication at its upper end with the upper portion of the oil chamber or cup, and at its lower end with the communication at a point below the ball valve, substantially as described.

6th. A lubricating device, comprising a cylinder, a closed oil chamber in communication with said cylinder, a valve controlling said communication, a piston within the said cylinder, and a pressure passage having its upper end in communication with the said oil chamber, and with the said valve and its lower end in communication with the cylinder at a point in advance of the said oil communication, whereby the valve is raised from its seat by pressure from within the cylinder for permitting the oil to feed, substantially as described.

No. 64,872. Explosive Engine. (*Machine explosive.*)

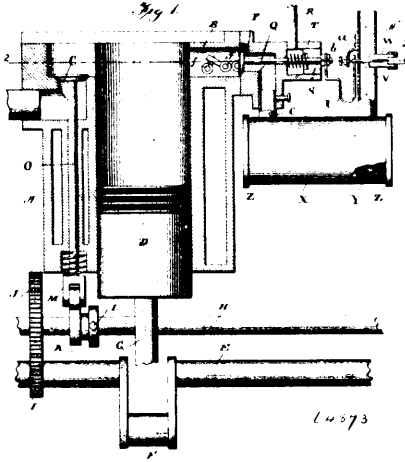


64872

Alexander Winton, Cleveland, Ohio, U.S.A., 11th November, 1899
6 years. (Filed 1st September, 1899.)

Claim.—1st. An engine comprising a cylinder, an inlet port therefor, an inlet port valve, a pressure regulating member connected with the inlet port valve, a pump in communication with the pressure regulating member, a drive shaft, a pitman connected with the drive shaft and with the engine piston, a piston for said pump, a weight connected with the piston, the drive shaft having a crank or eccentric arranged in opposition to the pitman, and the connection between the crank or eccentric and the pump piston and thereby the balance weight, substantially as described. 2nd. An engine comprising a cylinder, a piston, an inlet port, an inlet port valve, the pressure regulating member connected with the inlet port valve, a crank shaft, a pitman connected with the crank shaft and with the engine piston, an eccentric upon the crank shaft in opposition to the crank, a pump, a pump piston having an extension, a balance weight secured to said extension, and a connection between the eccentric and the piston, and thereby the weight, substantially as described. 3rd. An engine comprising a cylinder having an inlet port valve, a piston for said cylinder, a crank shaft, a pitman connecting the crank shaft and the piston, the crank shaft having an eccentric arranged thereon in opposition to said crank, an inlet port valve for the inlet port, a pressure actuated member connected with the said inlet port valve, a pump in communication with the pressure regulated member, a piston for said pump having an extension, a bearing for the extension of said piston, a balance weight connected with the pump piston between the bearing and the pump, and a connection between the eccentric and the balance weight, substantially as described. 4th. An engine comprising a cylinder, a piston therein, a crank shaft, a pitman connecting the piston and the crank, an eccentric upon the shaft in opposition to the said crank, the cylinder having an inlet port valve, a valve for said port, a pressure actuated member connected with said valve, a pump in communication with the pressure actuated member, a piston for said pump having an extension, and a vertically disposed balance weight secured to the pump piston, and a connection between the weight and said eccentric, substantially as described. 5th. An engine comprising a cylinder, a piston therein, a crank shaft, a pitman connecting the crank of the shaft and the said engine piston, an eccentric upon the shaft in opposition to said crank, an inlet port for the cylinder, a valve for said port, a pressure actuated member connected to the said valve, a pump in communication with the pressure actuated member, an escape pipe in communication with the pump and with the pressure actuated member, the escape pipe having the valves *h* and *i* provided with escape openings communicating with a single escape opening, substantially as and for the purpose described. 6th. An engine comprising a casing, a cylinder within the casing, a piston within the cylinder, a crank shaft, a pitman connected with the piston cylinder and with the crank shaft, an eccentric disposed upon the shaft in opposition to the crank, the cylinder having an inlet port, a valve therefor, a pressure actuated member connected with the valve, a pump in communication with the pressure actuated member, a piston for said pump, a balance weight secured to the piston and arranged parallel with the sides of the said casing, and a connection between the eccentric and the pump piston, substantially as described.

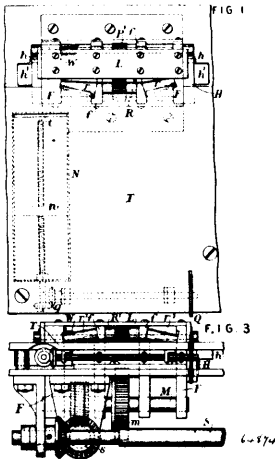
No. 64,873. Explosive Engine Regulator. (Régulateur de machines explosives.)



Alexander Winton, Cleveland, Ohio, U.S.A., 11th November, 1899; 6 years. (Filed 1st September, 1899.)

Claim.—1st. In an explosive engine, the combination of an explosive inlet port, a valve therefore, a variable means for regulating the distance the valve shall open and thereby serving its movement, an air supply, an oil supply, a valve for the oil supply, a yielding connection between the valve, and a regulating stop for the oil supply valve whereby the oil supply has a uniform movement irrespective of the varied movements of the inlet port valve, substantially as described. 2nd. An oil and air mechanism for explosive engines comprising an inlet port valve having a variable movement, an oil inlet valve, a spring serving as the only means of uniting the two valves, and a regulating stop for the oil valve, whereby the oil valve has a uniform movement irrespective of the variable movement of the inlet port valve, substantially as described.

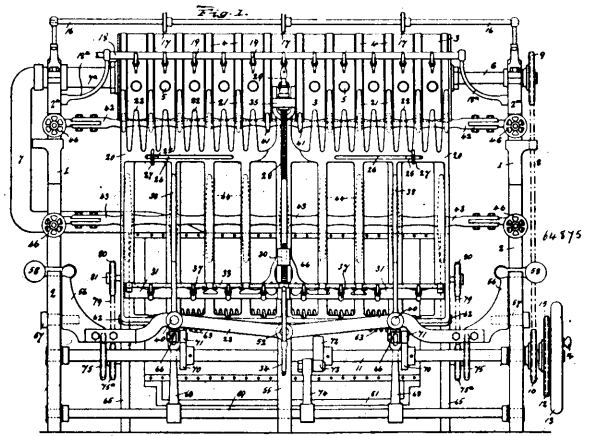
No. 64,874. Cigar Making Machine. (Machine à faire les cigars.)



Duke William Bullard, 2 Colonial Avenue, London, England, 11th November, 1899; 6 years. (Filed 26th April, 1899.)

Claim.—1st. In a cigar making machine having rollers each made in parts of its length the driving connection of these parts consisting of a cylindrical coupler having mortices in its ends at right angles to each other, these ends entering holes bored longitudinally in the ends of the roller parts and engaging pins fixed across these holds, substantially as described. 2nd. In a cigar making machine the gear for driving the rollers consisting of a toothed wheel driving the two lower rollers a pair of pinions gearing these to the two side rollers and a pinion gearing one of these to the upper or lid roller, substantially as described. 3rd. The combination of the lid pivoted on the axes of the pinion which gears the upper roller to the side roller, the wire spring on the said axes and the spring catches for holding the lid down, substantially as described. 4th. In combination with the table and its slot the paste box with its piston and its advancing gear, substantially as described.

No. 64,875. Machine for Feeding Sheets of Paper to Printing Machines. (Alimentateur de feuilles de papier aux machines à imprimer.)



William Carter, Glasgow, Scotland, 11th November, 1899; 6 years. (Filed 5th May, 1899.)

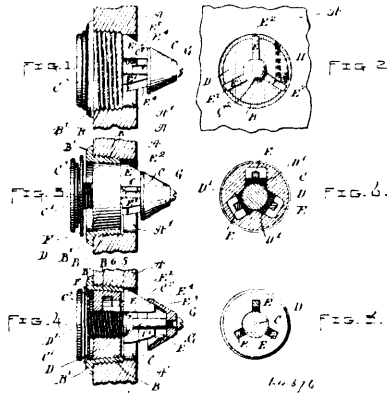
Claim.—1st. A pneumatic feeder for feeding sheets of paper, having a sheet holder, a suction device for removing the sheets from the holder, and a suction producer (bellows or pumps) in which the suction producer is caused, by the action of weights or a cam, to produce a sudden and decided suction at certain times so as to suddenly suck up and withdraw a paper sheet from the holder at such times, substantially as described. 2nd. A pneumatic feeder for feeding sheets of paper, having an inclined sheet holder, a suction device for removing the sheets from the holder, and a suction producer (bellows or pumps) in which the sheet holder is pulled automatically forward by means of weights or springs so as to press the sheets of paper against pinching bars or a pinching board and thereby open them out at their upper ends, and is automatically moved backwards at intervals of time by the action of cam and rack mechanism or gravity so as to relieve the pressure on the sheets at such times and enable a sheet to be withdrawn from the holder, substantially as described. 3rd. A pneumatic feeder for feeding paper sheets, having pinching bars (42, 43) or a pinching board (161), against which the body of the pile of sheets is pressed by the action of a reciprocating sheet holder so as to open out the sheets at their upper ends and thereby facilitate their removal one at a time, substantially as described. 4th. A pneumatic feeder for feeding paper sheets, having a cradle upon which the sheet holder is carried, said cradle being capable of being rocked so as to lower the sheet holder into a horizontal or nearly horizontal position for the insertion of the sheets to be fed and then raise it to a position which is tangential to the suction feed cylinder, substantially as described. 5th. A pneumatic feeder for feeding paper sheets, having a sheet holder which is provided with rests which can be raised or lowered by means of a screw (28) so as to adapt the holder for different sizes of sheets, said rests being also provided with blowers (37) for blowing upon and opening the under edges of the sheets, substantially as described. 6th. In pneumatic mechanism for feeding paper sheets, the combination of a reciprocating sheet holder and a rockable cradle upon which the holder reciprocates, substantially as set forth. 7th. In pneumatic mechanism for feeding paper sheets, the combination of a reciprocating sheet holder, means for reciprocating the holder, and a rockable cradle upon which the holder reciprocates, substantially as set forth. 8th. In pneumatic mechanism for feeding paper sheets, the combination of a reciprocating sheet holder, means for reciprocating the holder, a rockable cradle provided with pivots at each side and with guides upon which the holder reciprocates, substantially as set forth. 9th. In pneumatic mechanism for feeding paper sheets, the combination of a reciprocating sheet holder, means for reciprocating the holder, a rockable cradle provided with pivots at each side, guides upon which the holder reciprocates, and a cross bar with rocking block which rocks upon a supporting frame connected with the machine, substantially as set forth. 10th. In pneumatic mechanism for feeding paper sheets, the combination of a reciprocating sheet holder, means for reciprocating the holder, a rockable cradle provided with pivots at each side, guides upon which the holder reciprocates, a cross bar with rocking block which rocks upon a supporting frame, and hinged weighted levers for locking the cradle in position, substantially as set forth.

No. 64,876. Bung. (Bondon.)

Maurice Whelan Shannan, Worcester, Massachusetts, U.S.A. 11th November, 1899; 6 years. (Filed 16th May, 1899.)

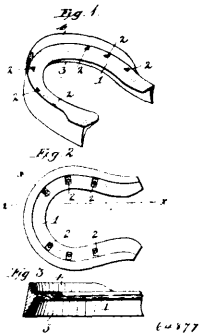
Claim.—1st. A bung or stopper, provided with radial grooves with radially extending plates carried by said grooved bung and a screw threaded spindle held in the bung and having a tapered section by which the clamping plates are forced radially outward to engage

the inner side of the cask, whereby the bung is held from withdrawal, substantially as and for the purpose set forth. 2nd. A bung, or



stopper, having radial grooves, clamping plates capable of outwardly radial movement carried by said grooved bung, a screw threaded spindle having a tapered section by which the clamping plates are forced radially outward to engage the interior of the barrel, and a head adapted to be drawn against the interior of the barrel as said clamping plates are moved radially outward, substantially as and for the purpose set forth. 3rd. A bung, or stopper, comprising radially moving clamping plates to engage the interior of the cask, said plates being provided with tapered edges, a hollow conical shell adapted to be drawn over the tapered edges of the clamping plates to force them radially inward and out of engagement with the cask, substantially as and for the purpose set forth. 4th. In a bung, or stopper, the combination of a body portion having a screw threaded opening and forming a nut and having T-shaped grooves, clamping plates provided with T-shaped shaped shanks which are held in said grooves and having shoulders adapted to engage the inside of the cask, a screw threaded spindle held in said nut and provided with a head and a tapering section by which said plates are crowded radially outward, substantially as and for the purpose set forth.

No. 64,877. Horse Shoe. (*Fer à cheval.*)



Jacob Werntz, Akron, Ohio, U.S.A., 11th November, 1899; 6 years. (Filed 10th October, 1899.)

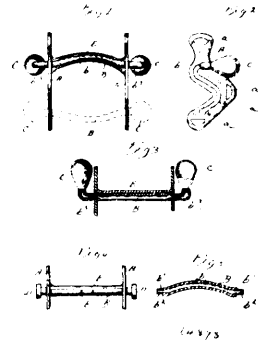
Claim.—As an improved article, a horseshoe having formed integral therewith a downwardly extending continuous calk having a bevelled edge, and an upwardly extending flange formed integral with and extending nearly the entire length of shoe, and the upper or inner face of shoe bevelled inwardly from said flange, substantially as described.

No. 64,878. Bit for Driving and Administering Medicine to Horses. (*Mors de bride pour administrer des médicaments aux chevaux.*)

John A. Lemons, Abondale, Alabama, U.S.A., 11th November, 1899; 6 years. (Filed 11th October, 1899.)

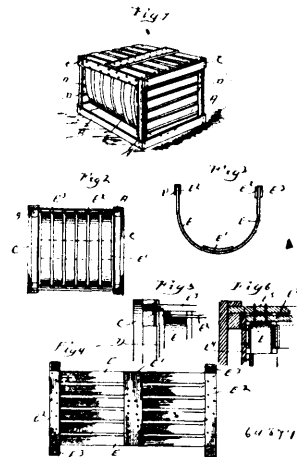
Claim.—1st. In a combined driving and medical bit, the combination with the side bars provided with openings for the attachment of various parts of the harness, a curved bar upon the ends of which are rigidly mounted the said side bars, said curved bar being smooth and convex at one side and concave upon the opposite side, a movable bar cylindrical in cross section and curved to fit the hollowed out portion of the stationary bar, said movable bar being hollow throughout its length and provided with apertures, and means for closing the ends of the movable bar, substantially as described. 2nd. In a combined driving and medical bit, the combination of two side bars provided with openings for the attachment

of portions of the harness, and each side bar being provided with a curved slot, a stationary bar attached to the side bars near one end



of each of the slots, said bar being curved, and being smooth and convex upon one side and concave upon its opposite side, and the curved movable bar adapted to fit in the concave portion of the stationary bar, and with its ends engaging the curved slots of the side bars and movable therein, said movable bar being hollow and provided with apertures near its centre, the end of said bar being screw threaded, and screw threaded devices for closing the ends of the said hollow bar, substantially as described. 3rd. In a combined driving and medical bit, the means for administering medicine, which consists of a movable medicine bit cylindrical in cross section and hollow throughout, said bar being provided with apertures near its centre and screw threaded ends combined with screw threaded extensions adapted to engage said ends, and hollow thumb lobs adapted to contain medicine and to engage said extensions, substantially as described. 4th. In a combined driving and medical bit, the combination of side bars each provided with apertures for the reception of parts of the harness, and with a curved slot, a stationary bar rigidly connecting the two side bars near one end of the respective slots, said stationary bar being curved, smooth and convex upon one side and concave upon its opposite side, a sliding bar curved to fit the concavity of said stationary bar, and cylindrical in cross section, adapted to engage the concave portion of the stationary bar, said sliding bar being hollow throughout and provided with apertures near its centre, said sliding bar having also reduced portions engaging the slots in the side bars and having screw threads at its ends, screw threaded extensions adapted to engage said ends, and medicine holding devices attached to said extensions, substantially as described.

No. 64,879. Shipping Crate. (*Boîte à marchandises.*)

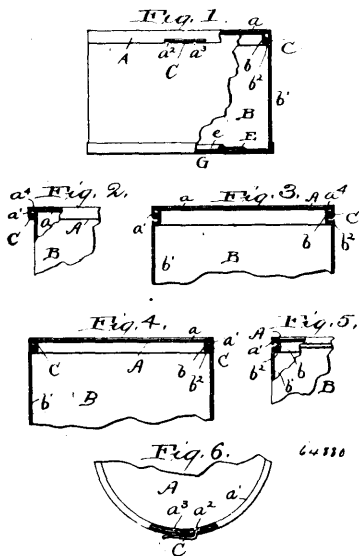


Arthur E. Hinman, Sparta, Michigan, U.S.A., 11th November, 1899; 6 years. (Filed 11th October, 1899.)

Claim.—1st. In a shipping plate, the combination with a rigid frame comprising a series of flexible strips connected at the ends by cross strips, said cross strips being adapted to fit in the slits of the corner posts, the end slots connecting the corner posts, and forming the ends of the inner receptacle, substantially as shown and described. 2nd. In a shipping crate, the combination with a rigid frame, of a series of flexible strips U-shaped in cross section connected at their ends by cross strips E² and E, and transverse strips extending across the end of the rigid frame and the end U-shaped strips, substantially as described. 3rd. In a shipping crate, the combination with a rigid frame, of a series of flexible strips connected at their ends to the cross strips E² and E³, whereby a swinging flexible receptacle is formed U-shaped in cross section, and flexible strips extending across the

ends of the rigid frame and U-shaped receptacle, said cross strips adapted to fit in the slits of the corner posts, substantially as described.

No. 64,880. Packing Vessel. (*Vaisseau d'emballage.*)



George W. Vaillant, Boston Massachusetts, assignee of Herbert H. Hull, Cleveland, Ohio, U.S.A., 13th November, 1899; 6 years. (Filed 3rd October, 1899.)

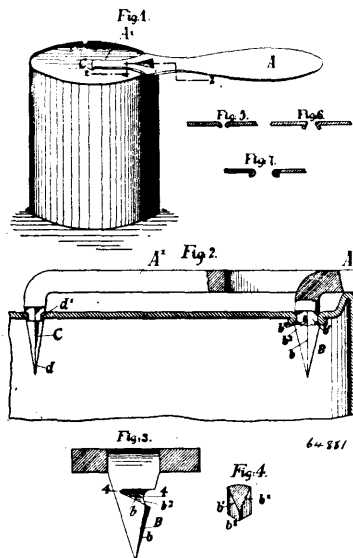
Claim.—1st. A cap for closing the end of a packing vessel, which cap consists of an end plate and an annular flange whose lower edge is rolled inward and has two notches $a^2 a^2$, and a ripping wire embraced by said rolled edge, which wire extends across one of said notches around the cap and out through the other notch, substantially as and for the purpose specified. 2nd. The combination of a can and a cap therefor which has an annular flange fitting over the outside surface of the can, said flange having its lower edge rolled inward and having two notches in said edge and a ripping wire embraced by said rolled edge which wire extends across one of said notches around the cap and out through the other notch whereby the same solder which holds the cap to the can may hold the end of the ripping wire within the cap so that a pull on the wire may cut the cap, substantially as and for the purpose specified. 3rd. In a packing vessel, the combination of a can having a neck of smaller diameter than the body and having the annular flange upwardly concave shoulder b^2 , with a cap having an annular flange with an inwardly rolled lower edge, which flange embraces the neck of the can and its lower edge fits said concave shoulder and is soldered thereto, and a ripping wire embraced by said rolled edge and extending out through a notch therein, substantially as and for the purpose specified. 4th. A cap consisting of a plate having at its edge an outwardly and upwardly bevelled head and an annular flange depending therefrom and having its lower edge rolled inward, and a ripping wire embraced by said rolled edge and extending out through a notch therein, combined with a can having a reduced neck which extends upward substantially parallel with the sides of the can and when the cap is forced down on to the can bends the edge of said neck outward beneath the bevel of the cap, substantially as and for the purpose specified. 5th. In a packing vessel, the combination of a can having a neck of smaller diameter than the body, said neck continuing substantially parallel with the sides of the can and having an annular flange with an inwardly rolled lower edge the external diameter of said flange being substantially that of the can and the length of the flange being sufficient for said rolled lower edge to fit against the shoulder formed by the neck with the body of the can, there being within said rolled lower edge a ripping wire one end of which is extended out beyond the cover, substantially as and for the purpose specified.

No. 64,881. Can Opener. (*Machine à ouvrir les boîtes métalliques.*)

William Vogel, New York, City, New York, U.S.A., and Johann Carl Christoph Hacke, Hainburg, and Alice Bertha Sophie P. Foerster, Gross Flottbek, both in the Empire of Germany, 13th November, 1899; 6 years. (Filed 13th October, 1899.)

Claim.—1st. In a can opener, a puncturing cutter, having at its top tapering rearwardly extending side grooves, forming a V-shaped neck between them, said neck having a forward cutting, substantially as set forth. 2nd. In a can opener, a puncturing cutter, having a

beveled point and above the same near its top tapering rearwardly extending side grooves, forming a V-shaped neck between them



said neck being provided with a curved forward cutting edge, substantially as set forth.

No. 64,882. Watch Dial. (*Cadre de montre.*)



Marrion E. Shutterly, Mount Pleasant, Pennsylvania, U.S.A., 13th November, 1899; 6 years. (Filed 12th May, 1899.)

Claim.—1st. A watch dial provided with grooves or slots having enlargements, and headed fastening pins having their heads slidably received within the grooves or slots and adapted to be positioned and removed through the enlargement thereof, substantially as and for the purpose set forth. 2nd. A watch dial having grooves or slots formed therein, each slot or groove being provided with a transverse branch or passage communicating with an enlargement of the slot or groove, and headed fastening pins having their heads slidably received within the slots or grooves and adapted to be positioned and removed through the enlargements, substantially as shown and described. 3rd. A watch dial having arcuate slots or grooves formed therein, each slot having at one end an inwardly extending transverse extension or branch forming a passage communicating with an offset enlargement of the slot or groove, and headed fastening pins slidably received within the arcuate slots or grooves and adapted to be positioned and removed through the offset enlargements thereof, substantially as shown and described.

No. 64,883. Art of Generating Heat.

(*Art de générer la chaleur.*)

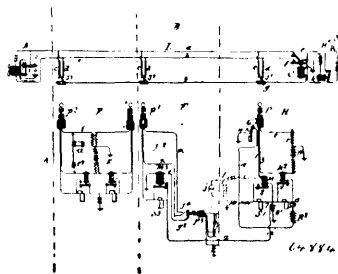
Gustav Detsnyi, Budapest, Hungary, 13th November, 1899; 6 years. (Filed 7th June, 1899.)

Claim.—1st. The method of producing heat which consists in submitting a gas or vapour to the action of a catalytic substance. 2nd. The method of producing heat which consists in oxidizing a gas or vapour by the action of a catalytic body. 3rd. The method of producing heat, which consists in submitting the gas or vapour to the action of an incandescing material treated with a catalytic substance. 4th. The method of producing heat which consists in submitting a gas or vapour to the action of a porous, absorbent, refractory substance impregnated with a catalytic material. 5th. The method of producing heat which consists in passing a gas or vapour over a

porous, absorbent, refractory substance treated with a catalytic material. 6th. The method of producing heat which consists in passing a gas or vapour over a porous, absorbent, refractory and preliminarily heated substance charged with catalytic material. 7th. The method of producing a catalytically acting body, which consists in treating a porous absorbent and refractory substance with a catalytic material. 8th. The method of producing a catalytically acting body, which consists in treating a porous, absorbent and refractory substance with a solution of a catalytic material, then drying the said substance and then firing it. 9th. The method of producing a catalytically acting body, which consists in treating a porous, absorbent and refractory substance with a solution containing the salts of metals of the platinum group, then drying the said substance and then firing it. 10th. The method of producing a catalytically acting body, which consists in treating a porous, absorbent and refractory substance with a solution of a metal salt, not in the platinum group, then treating said substance with a solution of a catalytic material, then drying said substance and then firing it. 11th. A catalytically acting body consisting of a porous, absorbent, refractory substance and a catalytic material. 12th. A catalytically acting body consisting of a porous, absorbent and refractory substance charged with a catalytic material.

No. 61,884. Telephone Switch Board Circuit.

(Circuit d'échange de téléphone.)



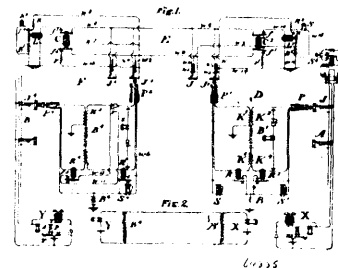
The Bell Telephone Company of Canada, assignee of Thomas Crane Wales, jr., Newton, Massachusetts, U.S.A., 13th November, 1899; 6 years. (Filed 29th August, 1899.)

Claim.—1st. The combination with a main telephone circuit, switch sockets or spring jacks therefor at the several sections of a multiple switchboard, and a fixed portion of a test circuit uniting the test rings of said sockets, of a source test current, a special switch plug, and a test conductor uniting the said source to a test ring engaging contact of the said plug, all at one of the said sections a local signal circuit, a plug seat switch operated by the said special plug controlling the same, a supervisory signal in said local circuit, and a shunt therefor, all at the same section, a relay in circuit with the test conductor of said special plug controlling the said signal shunt, and switch plug devices at another switch board section organized to establish a union between the said main circuit and any other, to establish the busy test there, and to simultaneously short circuit the said relay, and thereby operate the supervisory signal of the first section. 2nd. The combination with a telephone line and multiple spring jacks thereof in different sections of a switch board, and a test circuit for the said spring jacks of a source of test current, and means for connecting the same with the test circuit of the line at one of said sections consisting of a switch plug carrying a contact forming a terminal of said source, an electro magnetic signal at the same section, and means for associating it with the line coincident with the connection of the test current, said means consisting of a grounding plug seat switch, and a relay in series with the said plug contact terminal, means for shunting the said signal consisting of the said relay and its armature, means for closing the test circuit at a second section of the switchboard to obtain a test signal, and other means at the said section made operative in establishing connection with the line, to display said supervisory signal, as set forth. 3rd. The combination with a substation telephone relay controlled main circuit, multiple spring jacks thereof in different sections of the switchboard, and a normally open test conductor uniting the test rings of the spring jacks, of a source of test current, a plug having a contact terminal, adapted to make connection with the said test rings in series with a relay, and with said source of current the relay when the plug is so connected being in series with the cut off relay of the said line, a supervisory signal, and a conductor including the signal, connected between the said relay and source of current, the said signal being short circuited when the plug is in a spring jack, with means at a second section for testing the line to determine the presence of the test current, a plug for making connection with the line at the said second section and when connected to shunt the said relay, and a source of current in circuit with said plug adapted to be brought into circuit with the supervisory signal in making said connection, as set forth. 4th. The combination with a substation main telephone circuit, multiple spring jacks thereof in different sections of a central station switch board, and a test circuit for the said spring jacks, of a special supervisory signal at one of said sections, means at such section for associating it with the sub-

station circuit and for utilizing it, means at the substation for operating the same, a source of test current, means for connecting the same with the test circuit of the line, a second supervisory signal at the said section, and means for associating it with the line, coincident with the connection of the test current, means for closing the test circuit at a second section of the switchboard to obtain a test-signal, and other means at the said section made operative in establishing connection with the line, to display said second supervisory signal, as set forth. 5th. The combination with a substation main telephone circuit, multiple spring jacks therefor in different sections of the central station switchboard, and a test circuit for the spring jacks, of a special supervisory signal at one of said sections, and means at such section for associating it with the substation circuit and for utilizing it, means at the substation for operating the same, a source of special test current, a switch plug for connecting the same, with the test circuit of the line at the said section, an electro magnetic signal at the said section, means for associating it with the line coincident with the connection of the test current, said means consisting of a circuit closing plug seat switch, and a relay in series with the said plug terminal, means for shunting the said signal consisting of the said relay and its armature, means for closing the test circuit at a second section of the switchboard to obtain a test signal and other means at the said second section made operative in establishing connection with the line, to display said supervisory signal, as set forth. 6th. In combination with substation main telephone circuits, a special cord circuit provided with one plug only, normally resting in a grounding plug seat switch, the line conductor terminals of said plug being in series with each other and with a retardation coil, a battery, and a relay, and the test conductor terminal of the plug being in series with a second relay and a battery, the said battery having two normally open independent branches to the plug seat switch, each having in series a supervisory signal and a resistance coil, the respective armatures of the said relays being each adapted to short circuit one of the said signals, as set forth.

No. 61,885. Telephonic Trunk Circuit.

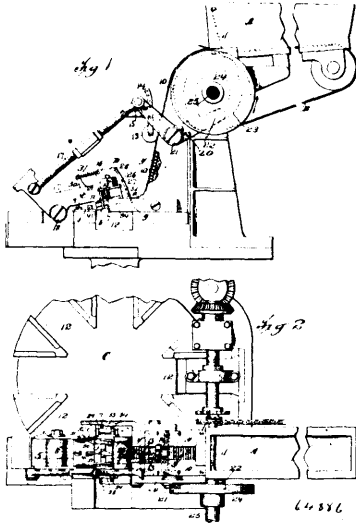
(Circuit intermédiaires de téléphones.)



The Bell Telephone Company of Canada, Montreal, Quebec, assignee of Thomas Crane, Wales, Newton, and Henry Middlestock Crane, Boston, Massachusetts, U.S.A., 13th November, 1899; 6 years. (Filed 31st August, 1899.)

Claim.—1st. In a telephone switching system, the combination of a trunk circuit, extending between two multiple switch boards, adapted for reciprocal operation, and provided with multiple switch connections at each switchboard, means actuated by the operation of any of the said switch connections at either switchboard for establishing a determinate electrical condition at the remaining switch connections of both switchboards, and means at each switch connection of both switchboards for testing the said electrical condition, whereby it may be ascertained at any switch connection of the said trunk circuit at either switchboard, whether the said trunk is or is not already employed at any other switch connection of the said two switch boards, substantially as set forth. 2nd. The combination, substantially as hereinbefore described, of a reciprocally operated interswitchboard telephone trunk circuit provided with multiple switch connections upon the switchboards at both of its ends, with a busy test system adapted to establish a special and abnormal electrical condition as long as the said trunk is switched at any one of its multiple connections, at either end thereof, in and upon the switch sockets at all of the remaining switch connections of both switchboards. 3rd. In a telephone exchange system, the combination of the herein described reciprocally operated trunk circuit extending between two independent switchboards, two subscribers' circuits extending to the switchboards respectively from different subsections, where their electrical condition is controlled by a switch, a correcting switchboard circuit at each switchboard uniting the said substation circuits with the two ends of the said trunk respectively, a condenser in one branch of the switch cord at one end of the switchboards, and a shunt circuit therefor, a relay in the other branch of the said switch cord responsive to the operation of the substation switch and controlling the continuity of the said shunt circuit, and a signal in the cord circuit at the other switchboard responsive to the shunting or unshunting of the said condenser, substantially as and for the purposes specified.

No. 64,886. Packing Mechanism.

(Mécánisme d'empaquetage.)

The American Tobacco Company, assignee of Oluf Tyberg, all of New York City, New York, U.S.A., 13th November, 1899; 6 years. (Filed 11th January, 1899.)

Claim.—1st. The combination of a carrier pivoted to swing vertically between its receiving and delivering positions, and adapted to receive a row of cigarettes or similar articles on a surface inclined in the direction of movement of the cigarettes into the carrier, supports for the cigarettes in the carrier, and means for withdrawing said supports to deliver the cigarettes, substantially as described. 2nd. The combination of a carrier pivoted to swing vertically between its receiving and delivering positions, and adapted to receive a row of cigarettes or similar articles on a surface inclined in the direction of movement of the cigarettes into the carrier, supports in the carrier having a withdrawal movement substantially parallel to the surface on which the cigarettes are delivered, a presser plate in the carrier, and means for actuating said supports and giving said carrier a further movement toward the cigarettes after the supports are withdrawn, substantially as described. 3rd. The combination of a carrier pivoted to swing vertically between its receiving and delivering positions, and adapted to receive a row of cigarettes or similar articles on a surface inclined in the direction of movement of the cigarettes into the carrier, supports in the carrier having a withdrawal movement substantially parallel to the surface on which the cigarettes are delivered, means for actuating said supports and giving said carrier a further movement independently of the supports after the latter are withdrawn, and a presser plate pivoted in said carrier and having a movement independently of the carrier to bring the presser plate into position parallel with the delivered cigarettes, substantially as described. 4th. The combination of a carrier pivoted to swing vertically between its receiving and delivering positions, and adapted to receive a row of cigarettes or similar articles on a surface inclined in the direction of movement of the cigarettes into the carrier, supports in the carrier having a withdrawal movement substantially parallel to the surface on which the cigarettes are delivered, a presser plate pivoted in the carrier, and means for swinging the presser plate independently of the carrier to bring the presser plate into position parallel with the delivered cigarettes, substantially as described. 5th. The combination with a carrier pivoted to swing vertically between its receiving and delivering positions, and adapted to receive a row of cigarettes or similar articles on a surface inclined in the direction of movement of the cigarettes into the carrier, of means for actuating said carrier with long and short movements to deliver superposed rows of cigarettes, supports in the carrier for the cigarettes, means for withdrawing said supports to deliver the cigarettes, means for giving the carrier a further movement toward the cigarettes independently of the supports after the latter are withdrawn, and a presser plate in the carrier having a movement independently of the carrier to bring the presser plate into position parallel with the delivered cigarettes, substantially as described. 6th. The combination with a carrier pivoted to swing vertically between its receiving and delivering positions, and adapted to receive a row of cigarettes or similar articles on a surface inclined in the direction of movement of the cigarettes into the carrier, of means for actuating said carrier with long and short movements to deliver superposed rows of cigarettes, supports in the carrier for the cigarettes, means for withdrawing said supports to deliver the cigarettes, means for giving the carrier a further movement toward the cigarettes independently of the supports after the latter are withdrawn, and a presser plate in the carrier having a movement independently of the carrier to bring the presser plate into position parallel with the delivered cigarettes, substantially as described. 7th. The combination with a carrier pivoted to swing vertically between its receiving and delivering positions, and

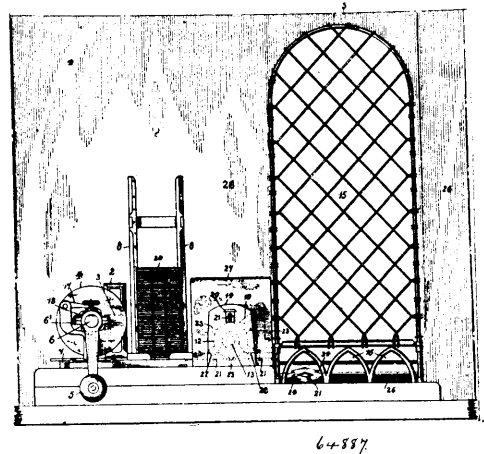
adapted to receive a row of cigarettes or similar articles, of means for actuating said carrier with long and short movement to superpose rows of cigarettes, supports for the cigarettes in the carrier, means for withdrawing said supports to deliver the cigarettes, a presser plate pivotally mounted in the carrier, and means for moving said presser plate independently of the supports after the latter are withdrawn to bring the presser plate into a position parallel with and pressing upon the delivered cigarettes, substantially as described. 8th. The combination with a raceway for feeding cigarettes or similar articles by gravity, of a carrier receiving the cigarettes from the raceway and pivoted to oscillate vertically between the receiving and delivering positions, and a curved guard plate on the carrier for closing the raceway during the movement of the carrier, substantially as described. 9th. The combination with a carrier having an inclined receiving surface for cigarettes or similar articles, of a raceway adapted to secure the feed of the cigarettes to the carrier by gravity and having the bottom surface of its lower end curved to substantially a horizontal plane from which the cigarettes are delivered to the inclined receiving surface, substantially as described. 10th. The combination with a carrier adapted to receive cigarettes or similar articles, and pivoted to oscillate vertically, of a raceway adapted to secure the feed of the cigarettes to the carrier by gravity and having the bottom surface of its lower end curved to substantially a horizontal plane from which the cigarettes are delivered to the inclined receiving surface, and a guard plate on the carrier for closing the raceway during the movement of the carrier, substantially as described. 11th. The combination with a carrier having an inclined receiving surface for cigarettes or similar articles, of a raceway adapted to secure the feed of the cigarettes to the carrier by gravity and having the bottom surface of its lower end curved to substantially a horizontal plane from which the cigarettes are delivered to the inclined receiving surface, and a guard plate on the carrier for closing the raceway during the movement of the carrier, substantially as described. 12th. The combination with a carrier adapted to receive a row of cigarettes or similar articles on an inclined surface, and an inclined raceway for feeding cigarettes or similar articles to the carrier by gravity, of a roller pressing against the cigarettes in the raceway and acting to support the cigarettes in the upper part of the raceway, substantially as described. 13th. The combination with an inclined way for feeding cigarettes or similar articles, of a roller pressing against the cigarettes as they pass down the way, substantially as described. 14th. The combination of a packing carrier provided with supports for the material or articles to be packed having a delivery movement substantially parallel with the surface on which the material or articles are delivered, and means for withdrawing said supports for delivery, substantially as described. 15th. The combination of a packing carrier provided with supports for the material or articles to be packed and pivoted to secure a delivery movement substantially parallel with the surface on which the material or articles are delivered, and means for withdrawing said supports for delivery, substantially as described. 16th. The combination of a packing carrier provided with pivoted supports having their axis transverse to the line of movement of the carrier and mounted to swing in an arc of such radius as to secure a delivery movement of the supports substantially parallel with the surface on which the material or articles are delivered, and means for withdrawing said supports for delivery, substantially as described. 17th. The combination of a packing carrier provided with supports for the material or articles to be packed, means for withdrawing said supports for delivery, and means for giving the carrier a further movement independently of the supports after the supports are withdrawn, substantially as described. 18th. The combination of a packing carrier provided with supports for the material or articles to be packed, means for withdrawing said supports for delivery, and a presser plate for the material or articles having a further movement independently of the supports after the supports are withdrawn, substantially as described. 19th. The combination of a packing carrier provided with supports for the material or articles to be packed, means for withdrawing said supports for delivery, a presser plate mounted in the carrier, and means for giving the carrier a further movement independently of the supports after the supports are withdrawn and moving said presser plate independently of the carrier to position it relatively to the surface on which the material or articles are delivered, substantially as described. 20th. The combination of a packing carrier pivoted to swing vertically between its receiving and delivering positions and provided with supports for the material or articles to be packed, means for withdrawing said supports for delivery, a presser plate pivoted in the carrier, and means for giving said presser plate a further movement after the supports are withdrawn and swinging said presser plate on its pivot in the carrier to bring the presser plate into position parallel with and pressing upon the delivered material or articles, substantially as described. 21st. The combination with a carrier, of slides mounted in the carrier supports pivotally mounted on said slides to swing transversely to the direction of movement of the carrier and spring pressed into supporting position, and fixed abutments for moving the supports against the spring pressure for delivery and holding the slides stationary while the carrier completes its delivering movement, substantially as described. 22nd. The combination with a carrier, of slides mounted in the carrier, supports pivotally mounted on said slides to swing transversely to the direction of movement of the carrier and spring pressed into supporting position, fixed abutments for moving the

supports against the spring pressure for delivery and holding the slides stationary while the carrier completes its delivering movement, catches carried by the slides and acting to hold the supports withdrawn, and means for tripping the catches for the return of the supports to supporting position after the return movement of the carrier has moved the supports out of position to engage the delivered material or articles, substantially as described. 23rd. The combination with the carrier D pivoted to swing vertically, and slides 29 mounted in the carrier and spring pressed in the direction of the delivery movement of the carrier, of supports carried by said slides and pivoted to swing transversely to the line of movement of the carrier, and fixed abutments for withdrawing the supports and holding the supports and slides stationary during the latter part of the delivering movement of the carrier, substantially as described. 24th. The combination with the carrier D pivoted to swing vertically, and slides 29 mounted in the carrier and spring pressed in the direction of the delivery movement of the carrier, of supports carried by said slides and mounted to swing transversely to the line of movement of the carrier, fixed abutments for withdrawing the supports and holding the supports and slides stationary during the latter part of the delivering movement of the carrier, presser plate *c* pivoted in the carrier, and means for swinging said presser plate in the carrier, substantially as described. 25th. The combination with the carrier D pivoted to swing vertically, and slides 29 mounted in the carrier, of supports mounted in said slides to swing transversely to the line of movement of the carrier, fixed abutments for withdrawing the supports and holding the supports and slides stationary during the latter part of the delivering movement of the carrier, presser plate *c* pivoted in the carrier, lever 37 mounted in the carrier and connected to the presser plate, and a fixed abutment engaging said lever 37 during the latter part of the delivering movement of the carrier to swing the presser plate in the carrier, substantially as described. 26th. The combination of the carrier D pivoted to swing vertically, means for actuating said carrier with long and short strokes to superpose articles successively delivered by the carrier, supports in the carrier for the articles, means for withdrawing the same, a presser plate pivoted in the carrier, and means for swinging the presser plate in the carrier to bring the presser plate into position parallel with the articles delivered at successive movements of the carrier substantially as described. 27th. The combination, with a carrier provided with supports for the material or articles carried, of means for actuating said carrier and withdrawing said supports for delivery, and means for holding said supports withdrawn during the return movement of the carrier until the supports are moved beyond the delivered material or articles, substantially as described. The combination, with a vertically moving carrier provided with supports for the material or articles to be carried, of means for withdrawing said supports for delivery and giving said carrier a further movement independently of the supports after the latter are withdrawn, substantially as described. 29th. Carrier D having the side plates 16 provided with slots 28, slides 29 mounted to move in said slots, spring pressed arms 32 pivoted in said slides and carrying supports *b*, and abutments for withdrawing said supports, substantially as described. 30th. Carrier D having the side plates 16 provided with slots 28, slides 29 mounted to move in said slots, spring pressed arms 32 pivoted in said slides and carrying supports *b*, spring pressed catches *d* for holding the supports when withdrawn, and abutments for withdrawing said supports and tripping said catches to permit the return of the supports, substantially as described. 31st. The combination of a carrier having a plurality of supports for holding separate articles arranged in the line of delivery, and means for withdrawing said supports for the delivery and packing together of the separate articles, substantially as described. 32nd. The combination of a carrier having a plurality of supports for holding separate articles arranged in the line of delivery, means for withdrawing said supports for the delivery and packing together of the separate articles, and a presser plate acting upon the delivered articles after the supports are withdrawn, substantially as described. 33rd. The combination of a carrier having a plurality of supports for holding separate articles arranged in the line of delivery, and means for simultaneously withdrawing said supports for the simultaneous delivery of the articles, substantially as described. 34th. The combination of a vertically moving carrier having a plurality of supports arranged one above the other for holding separate articles and means for actuating said carrier and withdrawing said supports for the delivery of the articles superposed, substantially as described. 35th. The combination of a carrier pivoted to swing vertically between its receiving and delivering positions and having a plurality of supports arranged one above the other for holding separate articles, means for actuating said carrier and withdrawing said supports for the delivery of the articles superposed, and a presser plate in the carrier moving toward the articles after the supports are withdrawn, substantially as described. 36th. The combination of a carrier pivoted to swing vertically between its receiving and delivering positions, and provided with a plurality of supports arranged one above the other and each adapted to receive a row of cigarettes or similar articles on a surface inclined in the direction of movement of the cigarettes into the carrier, and means for actuating said carrier and withdrawing said supports for the delivery of the rows of cigarettes superposed, substantially as described. 37th. The combination of a carrier pivoted to swing vertically between its receiving and delivering

positions, and provided with a plurality of supports arranged one above the other and each adapted to receive a row of cigarettes or similar articles, and means for moving said carrier intermittently to bring the successive supports into position to receive the cigarettes and to carry the superposed rows of cigarettes to delivering position and withdraw the supports for the delivery of the cigarettes superposed, substantially as described. 38th. The combination of a carrier having a plurality of supports for holding separate articles arranged in the line of delivery, means for withdrawing said supports for the delivery and packing together of the separate articles, and means for holding said supports withdrawn during the return movement of the carrier until the supports are moved beyond the delivered articles, substantially as described. 39th. The combination of a carrier pivoted to swing vertically between its receiving and delivering positions, and having a plurality of supports arranged one above the other for holding separate articles, means for actuating said carrier and withdrawing said supports for the delivery of the articles superposed, said carrier having a further movement toward the articles independently of the supports after the latter are withdrawn, and catches for holding the supports withdrawn and tripped for the return of the supports, substantially as described. 40th. A carrier having the supports *b, b'* arranged one above the other and carried by arms pivoted to swing on a horizontal axis, and means for actuating said carrier and swinging said arms to withdraw the supports, substantially as described. 41st. The combination with a vertically moving carrier having the supports *b, b'* arranged one above the other and carried by arms pivoted to swing on a horizontal axis, of slides having a vertical movement in the carrier and in which said arms are mounted, and means for actuating said carrier and swinging said arms to withdraw the supports with the carrier moving independently of the slides after the supports are withdrawn, substantially as described.

No. 64,887. Check Registering and Issuing Machine.

(Machine à enregistrer et émettre les chèques.)

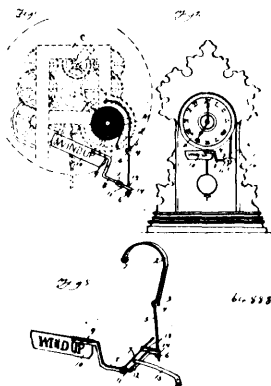


Edward March, 59 Burton Crescent, London, W.C., England, 13th November, 1899; 6 years. (Filed 23rd January, 1899.)

Claim.—1st. In a machine for registering and issuing checks of the kind herein referred to, a flat slide traversed in guides by a disc crank and slot motion, or mechanism, over a platen or plane surface on which the checks are placed, adapted to push before one or more of the said checks, substantially as described and illustrated. 2nd. In a machine for registering and issuing checks of the kind herein referred to, a flat slide traversed in guides by a crank and connecting rod motion, or mechanism over a platen or plane surface on which the checks are placed, adapted to push before it one or more of the said checks, substantially as described. 3rd. In a machine for registering and issuing checks of the kind herein referred to, the combination of a flat slide traversed in guides by a disc crank and slot motion or mechanism over a platen or plane surface on which the checks are placed, adapted to push before it one or more of the said checks, and a revoluble toothed wheel mounted transversely across the path of and rotated by the said checks in their said movement, substantially as described and illustrated. 4th. In a machine for registering and issuing checks of the kind herein referred to, the combination of a flat slide traversed in guides by a crank and connecting rod motion or mechanism over a platen or plane surface on which the checks are placed, adapted to push before it one or more of the said checks, and a revoluble toothed wheel mounted transversely across the path of and rotated by the said checks in their said movement, substantially as described and illustrated. 5th. In a machine for registering and issuing checks of the kind herein referred to, the combination of flat side traversed over a platen, bearing the checks, the toothed wheel mounted transversely across the path of the checks and operated by the checks, the revolution counter actuated by the spindle of the said toothed wheel, the wire trellis guard, the issuing slot in the skirting thereof

situated so as to receive the checks direct from the feed wheel, substantially as described. 6th. In a machine for registering and issuing checks of the kind herein referred to, the combination of the toothed wheel operated by the check and the revolution counter actuated by the spindle of the said toothed wheel, substantially as described.

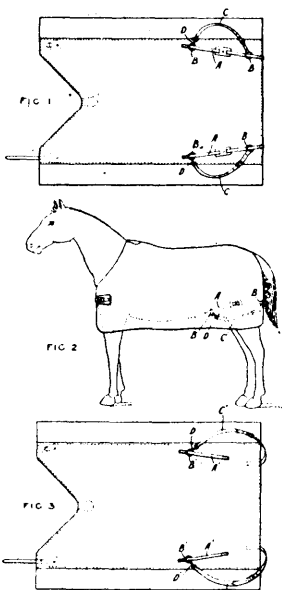
No. 64,888. Clock Winding Indicator.
(Indicateur pour monter les horloges.)



Joseph Torker, Brockway, Minnesota, U.S.A., 13th November, 1899; 6 years. (Filed 13th September, 1899.)

Claim.—1st. In a clock winding alarm, the combination with the clock mechanism including the mainspring and dial attached to the clock frame, of a spring connected at one end with the frame and curving over the mainspring, a screw attached to the other end of this spring and having a nut thereon, a shaft in the frame, and an arm pivotally mounted on said shaft and having at one side thereof a sign normally hidden by the dial and at the other side thereof an eye loosely embracing the screw above its nut, as and for the purpose set forth. 2nd. In a clock winding alarm, the combination with the clock mechanism including the mainspring and dial attached to the clock frame, of a spring connected at one end with the frame and curving over the mainspring, and a rod attached thereto and having a stop, a shaft in the frame, an arm having a sign at one end normally hidden by the dial, with its body journaled on said shaft and extending alongside the same and then turned outward, an eye also journaled on the shaft and attached to the outwardly bent portion of the arm with its eye surrounding said rod above its stop, and a spring bearing normally downward on that portion of the arm which stands parallel with the shaft, as and for the purpose set forth.

No. 64,889. Horse Cover Fastening.
(Attache pour couvertes à cheval.)

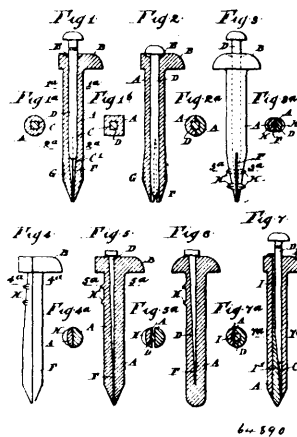


George Alfred Montgomery, Springfield, Canterbury, New Zealand, 13th November, 1899; 6 years. (Filed 7th July, 1899.)

Claim.—1st. The combination with a cover for horses and other animals, of two straps A, each secured at both ends and in the

centre to the underside of the cover in such position as to be adjacent to each hind leg respectively of the animal when the cover is put on, each said strap being provided with two rings or slides B to which the leg strap C is fastened, substantially as and for the purpose herein described and illustrated in Figs. 1 and 2 of the accompanying drawings. 2nd. The combination with a cover for horses and other animals of two straps A¹ each secured at both ends to the underside of cover, in such position as to be adjacent to each hind leg respectively of the animal when the cover is put on, each said strap being provided with a ring or slide B¹ to which the leg strap C¹ after being passed round the animal's leg is fastened substantially as and for the purpose herein described and illustrated in Fig. 3 of the accompanying drawings.

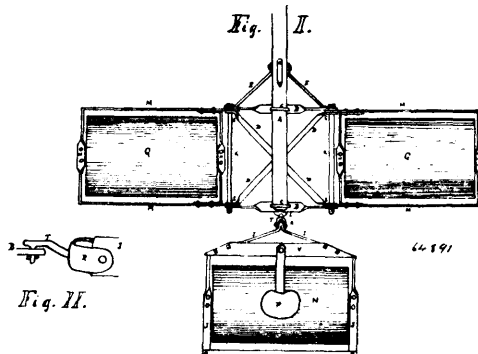
No. 64,890. Spike, Stud or Bolt.
(Cheville, clou ou boulon.)



Frederick Baker, Maylands, Kambrook Road, Caulfield, near Melbourne, Victoria, Australia, 13th November, 1899; 6 years. (Filed 12th October, 1899.)

Claim.—1st. A holding down spike split longitudinally and formed with central longitudinal hole tapering at its lower end in combination with a locking piece or key adapted to be driven into said hole after the spike is in position so as to expand its lower end substantially as herein described and explained. 2nd. A holding down spike split longitudinally and having a central hole for the reception of locking piece or key the upper end of said hole being recessed (as at E) substantially as herein described and explained. 3rd. A holding down spike split longitudinally at its lower end and having an axial hole made tapering at its lower end said spike being formed with projecting teeth in combination with a key or locking piece, substantially as herein described and explained. 4th. A holding down spike split longitudinally at its upper end to receive a tapering key or locking piece for expanding said upper end substantially as herein described and explained. 5th. A holding down spike and locking piece or key in combination with a filling piece (as I) having a tapering or inclined surface (as I¹) substantially as herein described and explained. 6th. The herein described nut-lock for railway and other purposes comprising a bolt having its lower end split longitudinally and having an axial hole formed in it from end to end, with the lower end of said hole tapering to receive a pin or key whereby the lower end of the bolt can be expanded in combination with a nut having a tapering hole, substantially as and for the purposes herein described and explained and as illustrated in Figures 8 to 17 of the accompanying drawing.

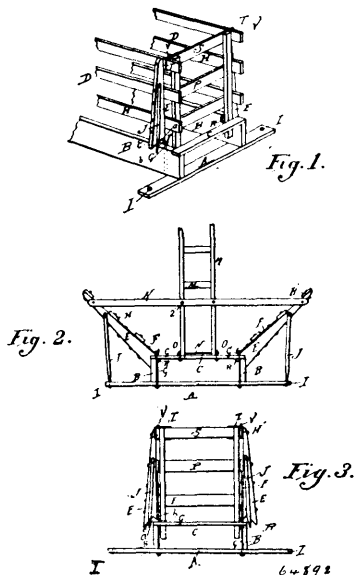
No. 64,891. Land Roller. (Rouleau d'agriculture.)



John Mitchell Cavan, Durham, Ontario, Canada, 13th November, 1899; 6 years. (Filed 12th October, 1899.)

Claim.—1st. The attaching of the front roller frame to the central frame on the inner sides of the roller frame by a rod in such a manner as to form a hinge at the point of connection, substantially as and for the purposes hereinbefore set forth. 2nd. The attaching of the rear roller frame to the central frame by a swivel joint or hook with a head or rim to prevent binding, substantially as and for the purposes hereinbefore set forth.

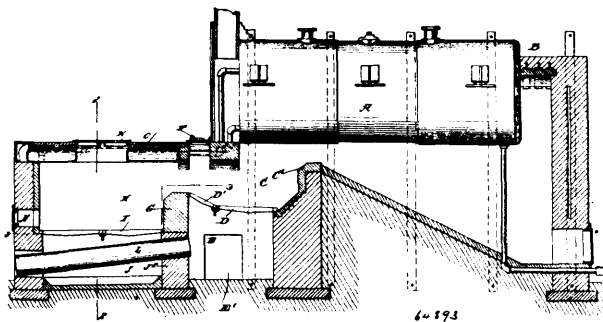
No. 64,892. Hay and Stock Rack. (Ratelier à foin.)



William Hahn, Heidelberg, Ontario, Canada, 13th November, 1899; 6 years. (Filed 12th October, 1899.)

Claim.—1st. A combined hay and stock rack constructed with the sleepers A, projecting from outer sides of sills B, and cross bars C¹, the arms E, pivotally connected to upper edges of sills B and having recesses a, forming walls b and C¹, adapted to rest on and against upper and outer edges of sills B, respectively, and also having attached thereto backs J, tapered and adapted to fit in hole I, in sleepers A, and traverse bars K, adapted to be bolted to arms E, all substantially as hereinbefore set forth. 2nd. A combined hay and stock rack constructed with the sleepers A, projecting from outer sides of sills B, and cross bars C, the arms E, pivotally connected to upper edges of sills B, and having recesses a, forming walls b and c¹, adapted to rest on and against upper and outer sides of sills B, respectively, and also having attached thereto braces J, tapered and adapted to fit in holes I in sleepers A, and traverse bars K, adapted to be bolted to arms E, the end racks P, arranged to rest between sills B and having loops T, formed to pass over raves H, all substantially as hereinbefore set forth.

No. 64,893. Boiler Furnace. (Fournaise de chaudière.)

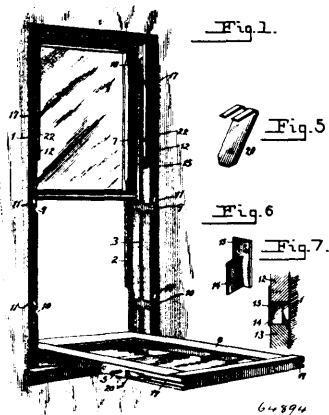


Samuel W. Butterfield, Three Rivers, Quebec, Canada, 13th November, 1899; 6 years. (Filed 13th October, 1899.)

Claim.—1st. A boiler furnace provided with a boiler, a fire box under the front end of the boiler and in close proximity to the boiler, a second fire box in front of the first named fire box and outside of the front of the boiler and having communication with the inner fire box over a bridge wall located between the fire boxes, the grate of the inner fire box being on a higher level than that of the outer fire box, substantially as described. 2nd. A boiler furnace provided with a boiler, a fire box under the front end of the boiler and in close proximity thereto, a second fire box in front of the fire

box and outside of the front of the boiler and having communication with the inner fire box over a bridge wall located between the fire boxes, the grate of the inner fire box being on a higher level than that of the outer fire box, each fire box having an independent fuel feed, and an air supply at its ash pit, substantially as shown and described. 3rd. A boiler furnace provided with a boiler, a fire box under the front end of the boiler and in close proximity thereto, a second fire box in front of the first named fire box and outside of the front of the boiler, and having communication with the inner fire box over a bridge wall located between the fire boxes, the grate of the inner fire box being on a higher level than that of the outer fire box, a door at the front of the ash pit of the outer fire box for admission of air, and draft pipes or flues opening at the front of the ash pit of the outer fire box and extending into the ash pit of the inner fire box, substantially as shown and described. 4th. A boiler furnace provided with a boiler, a fire box in close proximity to the boiler and under the front end thereof, a second fire box located in front of the first fire box and outside of the front of the boiler, a bridge wall between the fire boxes and over which the products of combustion pass from the outer fire box to the inner fire box, the grate of the inner fire box being on a higher level than that of the outer fire box and located at or near the top of the bridge wall, each fire box having an independent fuel feed, an air inlet at the front of the ash pit of the outer fire box, and inclined draft pipes extending from the front of the furnace through the outer ash pit and the bridge wall to the ash pit of the inner fire box, substantially as described.

No. 64,894. Window. (Fenêtre.)



John Barton Marshall, Fresno, California, U.S.A., 13th November, 1899; 6 years. (Filed 14th October, 1899.)

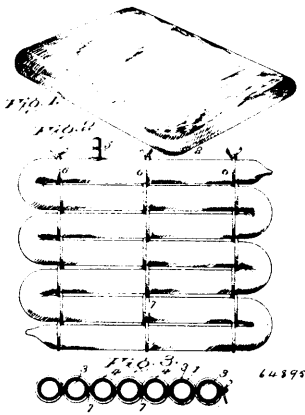
Claim.—1st. In a window, the combination of a window frame provided with vertical grooves arranged in pairs at opposite sides thereof, said window frame having upper and lower horizontal grooves located near the middle of the sash and at a point above the lower ends of the grooves, the upper and lower sashes provided with rigid horizontal studs adapted to slide in the vertical grooves and to pass through the horizontal grooves, the lower studs of both the sashes forming pivots and adapted to permit the sashes to swing downward to a horizontal position upon the bottom of the window frame when the upper portions of the sashes are detached from the sash cords and when the upper studs are disengaged from the grooves, and the beads arranged at opposite sides of the window frame and having removable sections adapted to permit the sashes to swing downward to a horizontal position, substantially as described. 2nd. In a window, the combination with upper and lower sashes provided with horizontal studs, of a window frame provided at opposite sides with vertical grooves to receive the studs and having horizontal grooves intersecting the vertical grooves, beads arranged at opposite sides of a window frame and composed of upper and lower sections having registered kerfs, and the T-shaped plates secured to the heads and having their webs or flanges fitting in the kerfs, substantially as described.

No. 64,895. Mattress. (Matelas.)

Daniel Howard Swartzwelder, Charlesville, Pennsylvania, U.S.A., 13th November, 1899; 6 years. (Filed 14th October, 1899.)

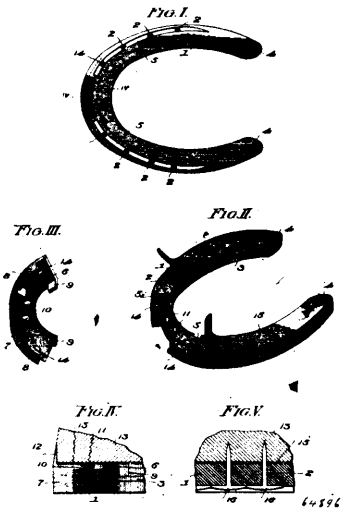
Claim.—1st. A device of the nature set forth, consisting of a single length of flexible tube formed into a coil and provided with a valved stem for attachment thereto of an inflating device, and warp strands connecting the folds of the tube, and a casing receiving the coil, substantially as described. 2nd. In a device of the character described, a single length of flexible tube formed into a coil and provided with a valved stem for attachment therewith of an inflating device, and warp strands connecting the folds of the tube and interlocked between adjacent folds or woof elements, substantially as set forth. 3rd. The herein specified device for the purpose set forth, the same consisting of a single length of flexible

tube provided with a valved stem for attachment therewith of an inflating device, a sheathe receiving the tube, the tube and sheathe



being formed into a coil, warp strands connecting the folds at and intermediate of their ends, and connected between adjacent strands and prevented from outward displacement by the terminal folds, and a casing receiving the device, substantially as described.

No. 61,896. Horse Shoe. (Fer à cheval.)

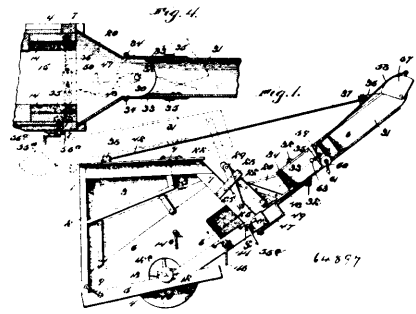


Enoch B. Evans, Washington, District of Columbia, U.S.A. 13th November, 1899; 6 years. (Filed 14th October, 1899.)

Claim.—1st. A composite horse shoe, consisting of a body part of india rubber, or the like, and a toe piece comprising an underlying segmental base, a calk projecting from the forward edge thereof, and flange extensions on the base extending from opposite ends of the calk, substantially as set forth. 2nd. A composite horse shoe, consisting of a body part of india rubber, or the like, and a toe piece comprising an underlying segmental base, a calk projecting from the forward edge thereof, and flanged extensions on the base narrower than the calk, and extending from opposite extremities thereof, substantially as set forth. 3rd. A composite horse shoe, consisting of a body part of india rubber, or the like, and a toe piece comprising an underlying segmental base, a front flange projecting from the base and independent lugs projecting from the base near its inner extremities, and extending partially across the vertical wall of the body part, substantially as set forth. 4th. A composite horse shoe, consisting of a body part of india rubber, or the like, and a toe piece comprising an underlying base, a front flange projecting therefrom, a spring plate embedded in the body part from its inner side, and lugs projecting from the rear side of base and extending to the plate, substantially as set forth. 5th. A composite horse shoe, consisting of a body part of india rubber, or the like, provided with series of nail holes, of a spring metal plate embedded within the body part, and extending from the inner surface partially across the same, whereby the nail holes are formed exclusively in the soft material of the body part, substantially as set forth.

No. 61,897. Wind Straw Stacker.

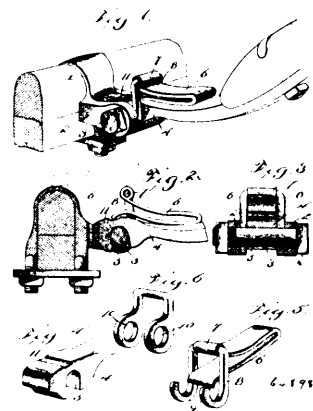
(Appareil pneumatique à amonçonner la paille.)



Samuel D. Felsing and Elias G. Gustatson, both of Maplebag, Minnesota, U.S.A., 13th November, 1899; 6 years. (Filed 16th October, 1899.)

Claim.—1st. In a pneumatic straw stacker, the combination with a casing and a wind trunk, of a link hinge connection between said wind trunk, and casing and having its parts joined above the line of contact or bearing of the wind trunk against the stacker casing, whereby the weight of the wind trunk seats the stacker firmly against the stacker casing, substantially as described. 2nd. In a pneumatic straw stacker, the combination of a stacker casing provided with a seat around the delivery opening therein, a foldable wind trunk arranged to be fitted firmly to said seat a loose hinge connection between the wind trunk and said seat a loose hinge connection between the hinge connection against spreading under the load of the wind trunk, substantially as described. 3rd. The combination with a threshing machine and a blast fan, of the vertically adjustable wind trunk arranged to be seated by gravity around the blast mouth or opening a link hinge connection to sustain the wind trunk and permit it to be elevated for folding upon the threshing machine, a stacker tube on the wind trunk, a transverse bar fixed to the deck of the threshing machine and provided with the guide pulleys, a winding shaft, and a hoisting cable connected to the stacker tube and carried around the guide pulleys to the winding shaft, said hoisting cable spinning the joint between the stacker tube and the transverse bar on the deck of the threshing machine, substantially as described. 4th. In a pneumatic straw stacker, the combination with a casing, of a wind trunk, a stacker tube, link connections between the wind trunk and said casing, and means to limit the movement of the links with relation to the casing, and the wind trunk, substantially as and for the purpose described. 5th. In a pneumatic straw stacker, the combination with the casing a wind trunk, and a stacker tube, of the slotted arms fixed on said casing, the arms extending from the wind trunk, and links fitted in slotted arms and having their respective ends pivoted to the casing and the arms on the wind trunk, substantially as and for the purpose described. 6th. The combination with a threshing machine, a hinged wind trunk and a stacker tube carried thereby, of a bracket fixed to the stacker tube, a slotted cross rail fixed to the threshing machine, and provided with guide rollers, a cable fixed at one end to the cross rail and passing through the bracket and around the guide rollers and an adjusting shaft to which said cable is fastened, substantially as and for the purpose described.

No. 61,898. Thill Coupling. (Arnon de limonière.)

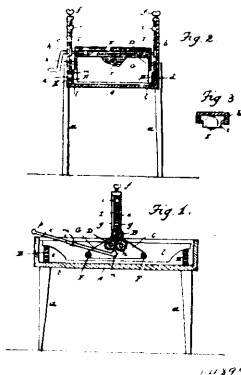


Presley W. Morehead, New Market, Virginia, U.S.A., 13th November, 1889; 6 years. (Filed 16th October, 1899.)

Claim.—1st. A device of the class described, comprising an axle clip having a transverse pivot, a thill iron having an open eye or

hook detachably receiving the pivot and adapted to be disconnected from the axle clip without withdrawing the said pivot, a loop connected with the pivot and straddling the thill iron, and a spring interposed between the transverse portion of the loop and the thill iron and retaining the latter in engagement with the pivot and located at a point opposite the mouth or entrance of the eye or hook of the thill iron, substantially as described. 2nd. A device of the class described, comprising an axle clip having a transverse pivot, a thill iron having an open eye or hook receiving the pivot, a loop straddling the thill iron and connected with the pivot, and a spring interposed between the loop and the thill iron, having one side hinged to the transverse portion of the loop and having its other side engaging the top of the thill iron, whereby the latter is retained in engagement with the pivot, substantially as described. 3rd. A device of the class described, comprising an axle clip having a transverse point, a thill iron provided with an open eye or hook receiving the pivot, a substantially U-shaped loop straddling the thill iron and provided with hooks detachably engaging the pivot, and a spring hinged to the loop and engaging the top of the thill iron whereby the latter is retained in engagement with the pivot, substantially as described. 4th. A device of the class described, comprising an axle clip, a pivot, a thill iron having an open eye or hook to receive the pivot and provided at its upper face with a recess, a loop straddling the thill iron and connected with the pivot, and a substantially V-shaped spring having one side hinged to the loop and its other side engaging the thill iron, substantially as described. 5th. A device of the class described, comprising an axle clip, a transverse pivot carried by the same, a thill iron having an open eye or hook detachably receiving the pivot, the mouth or entrance of the eye or hook being at the bottom of the thill iron, and a hinged spring located at the top of the thill iron, engaging the same at that point and adapted to be swung out of such engagement, whereby the thill iron may be uncoupled without removing the pivot, substantially as described.

No. 61,899. Washing Machine. (*Machine à laver.*)



Egbert C. Goodrich, Detroit, Michigan, U.S.A., 13th November, 1899; 6 years. (Filed 16th October, 1899.)

Claim.—1st. In a washing machine, the combination of a tub, the side pieces W^1 , within said tub, rollers journaled in said side pieces adapted to unite therewith to form an auxiliary frame within the tub, standards arising from said tub, vertical moving blocks held within said standards, the roller B, journaled within said vertical adjustable blocks, springs adapted to normally hold said roller B, in its lowermost position, springs arranged to flexibly support said auxiliary frame, an endless belt arranged to travel upon said rollers, whereby the articles of clothing being washed are carried between three of said rollers, two of which are journaled in said side pieces, and the third being carried in said vertical adjustable blocks, and a brake arranged to check the movement of the said two rollers, substantially as described. 2nd. In a washing machine, the combination of the tub A, and the auxiliary frame having side pieces l , and l^1 , said side pieces being united by the corrugated rollers C and D, and guide rollers E and F, all of which are journaled within said side pieces, the endless fabric belt G, adapted to pass around said rollers, a third corrugated roller B, mounted upon a shaft, sliding blocks h and h^1 , adapted to form journals for said shaft, one end of which is carried out and terminated in the form of a crank, the springs l, l^1 , arranged above said blocks, means for adjusting the tension of said springs, the brake lever K, pivoted to the side piece l^1 , of said auxiliary frame, having the wedge-shaped end h , at its inner end, adapted to engage between the said corrugated rollers C and D, and the springs h, h^1 , adapted to flexibly support said auxiliary frame, substantially as described.

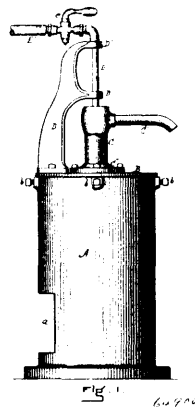
No. 61,900. Apparatus for Clarifying Milk.

(*Appareil à clarifier le lait.*)

Charles Henry Newton, Southboro, Massachusetts, U.S.A., 14th November, 1899; 6 years. (Filed 1st June, 1899.)

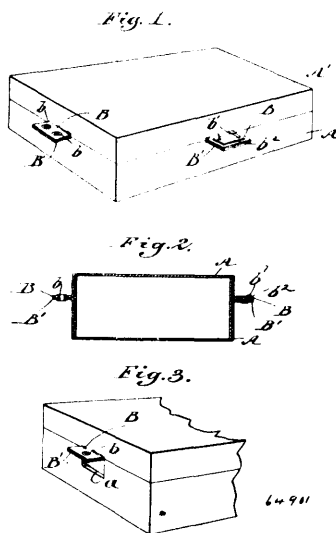
Claim.—1st. In an apparatus for clarifying milk, the case A provided with the opening a , the cylinder F mounted within said case

and adapted to rotate horizontally therein, the blades or partitions L secured to the wall of said cylinder and extending non-radially



inward toward points a trifle on opposite sides of the centre thereof a stationary supply pipe extending down vertically through the cover of the case and centrally within the cylinder, and an outlet tube extending upward from said cylinder around the supply pipe and leaving an annular space between said pipe and tube, substantially as described. 2nd. The herein-described improved apparatus for clarifying milk, comprising the case A provided with the opening a and cover B, and cylinder F F^1 mounted in said case and adapted to rotate horizontally therein, the cover H H^1 on said cylinder, the cross bar K extending horizontally across the cylinder near its upper end and provided with the downwardly extending collar K^1 , the supply tube E supported by the case and extending down vertically through the covers B and H and said collar centrally into the cylinder, the upright tube H^1 extending up from the cover H through the cover B and around the inlet tube, leaving an annular space between said tubes, the tubular post C provided with the chamber C^1 and spout C^1 , and the blades or partitions L secured to the wall of the cylinder and extending inward toward the centre thereof, substantially as set forth.

No. 61,901. Box. (*Boite.*)

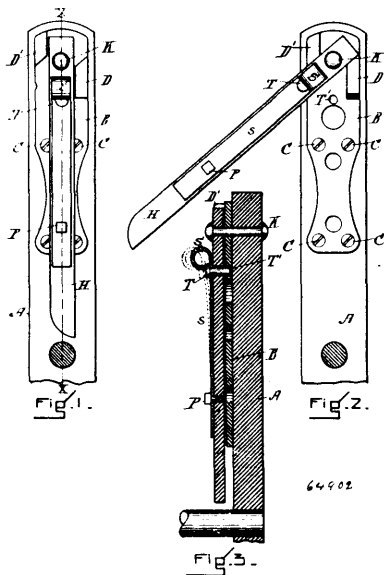


Michael Thompson Vogle, Du Bois, Pennsylvania, U.S.A., 14th November, 1899; 6 years. (Filed 16th October, 1899.)

Claim.—1st. A box having a series of flaps extended from the upper edge of its outer surface, in combination with a lid having a series of flaps extended from its lower edge, the flaps of the box and of the lid adapted to register with each other when the box is closed, and means for fastening the flaps together, whereby the box cannot be opened without breaking or destroying the flaps, substantially as shown and described. 2nd. In a box, the combination with a box proper having a series of flaps extended outwardly therefrom, and a lid having a similar series extended therefrom, the two said series adapted for engagement with each other when the box is closed, and means for fastening the said flaps together, substantially as shown and described. 3rd. As a box, the combination of a box body having flaps forming integrally therewith and extended at right angles therefrom, with a lid having a similar number of flaps formed integrally therewith and extended at right angles therefrom,

the said flaps adapted for engagement with each other when the lid is closed, and fastening means for securing the flaps together, substantially as shown and described.

No. 64,902. Ladder Hoop. (*Crochet d'échelle.*)



Charles Henry Grant, Boston, Massachusetts, U.S.A., 14th November, 1899; 6 years. (Filed 17th October, 1899.)

Claim.—1st. A ladder hook, consisting of a base plate attached to the side rail of a ladder, and having lugs to engage with and hold the hook proper, and a hook pivoted to said plate and supported by the said lugs, substantially as and for the purpose set forth. 2nd. A ladder hook, consisting of a base plate having lugs, and a pivoted hook adapted to be supported by said lugs when open, and a spring latch having a pin adapted to hold the said hook in place either open or closed, substantially as and for the purpose set forth.

No. 64,903. Treatment of Metallic Ores. (*Traitement de minéral métallique.*)

Stanley Charles Cuthbert Currie, 14th November, 1899; 6 years. (Filed 3rd March, 1899.)

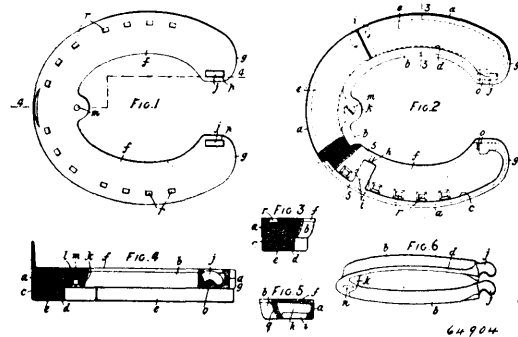
Claim.—1st. The process of extracting metal from their ores which consists in treating the ore in a solution containing free chlorine and a hypochlorite, the former being in excess of the chlorine in the latter, substantially as described. 2nd. The process of extracting metals from their ores, which consists in treating the ore with a weak caustic solution which has been saturated with chlorine, whereby the free chlorine is in excess of the chlorine in the hypochlorite, substantially as described. 3rd. The process of extracting metals from their ores, which consists in treating the ore with a solution containing free chlorine, a hypochlorite and a chloride, the free chlorine being in excess of the chlorine in the hypochlorite, and also in excess of the chlorine in the chloride, substantially as described. 4th. The new combination of matter, useful as a solvent of metals and metallic ores, consisting in a solution containing essentially free chlorine and a hypochlorite, the former being in excess of the chlorine in the latter, substantially as described. 5th. The new combination of matter, useful as a solvent for metals and metallic ores, consisting in a solution containing free chlorine, a hypochlorite, and a chloride, the free chlorine being in excess of the chlorine in the hypochlorite, and also in excess of the chlorine in the chloride, substantially as described. 6th. The new combination of matter, useful as a solvent for metals and metallic ores, consisting in an aqueous solution containing free chlorine and a hypochlorite, in which the proportion of the former to the chlorine in the latter is not less than three parts to one, substantially as described.

No. 64,904. Horse Shoe. (*Fer à cheval.*)

John George Lemon, 33 Palace Street, Buckingham Gate, London, S. W. England, 14th November, 1899; 6 years. (Filed 18th October, 1899.)

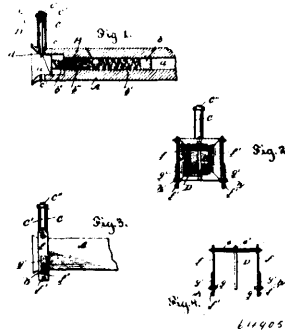
Claim.—A horse shoe, consisting of a metal frame and renewable pads of india rubber or equivalent elastic material, the frame being of channelled section and having walls provided with inwardly directed flanges adapted to retain the rubber pads, the inner wall

of the channel being a removable piece which engages the main portion of the frame by hook like tenons on its heel ends, entering



slots in the main portion of the frame and interlocking with cross pins thereon and which is retained in place by a screw applied towards the front of the shoe, substantially as specified.

No. 64,905. Car Coupling. (*Attelage de chars.*)



Thomas Cusick, Cogswell, North Dakota, U.S.A., 14th November, 1899; 6 years. (Filed 18th October, 1899.)

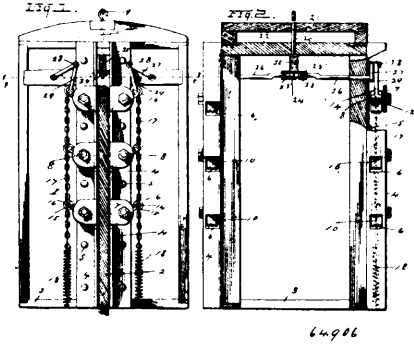
Claim.—1st. In a car coupler, the combination with a draw head, a spring therein, a plunger against which the spring abuts for suspending the pin out of operative position adapted to be lengthened or shortened to regulate the tension of the spring, comprising one member having an elongated internal screw threaded portion, and a second member having an elongated screw threaded stem adapted to be adjusted in the first member, substantially as described. 2nd. In a car coupler, the combination with a draw head, a spring therein, a plunger in front of the spring, comprising adjustable sections adapted to regulate the tension of the spring, and a pin limited in its upward movement to project slightly below the upper plane of the plunger to constitute the means for retaining the several parts in operative relation to the draw head, substantially as described. 3rd. In a car coupler, the combination with a coupling head, of a coupling pin passing therethrough, arms projecting from the pin to each side of the coupling head, and spring fingers on the arms for locking the pin in coupled position, substantially as described. 4th. In a car coupler, the combination with a coupling head, a coupling pin, a plunger for supporting the pin, and means for limiting the vertical movement of the pin whereby its end projects downwardly below the upper plane of the plunger and constitutes a stop for retaining the plunger in the head, substantially as described.

No. 64,906. Elevator. (*Élévateur.*)

Gottfried Schulze, Mayville, Wisconsin, U.S.A., 14th November 1899; 6 years. (Filed 18th October, 1899.)

Claim.—1st. In a safety elevator, the combination with an elevator cage and a pair of vertical slide rails, of a pair of elongated vertical angle irons forming guides secured to each of the two opposite sides of said cage and provided with a series of suitably disposed openings, a series of ears formed integral with the said guides, a spring actuated suspending rod loosely mounted in the said cage, a suspending cord or cable connected to the said rod, a pair of bell cranks journaled in the cage and connected to the said supporting rod, a series of grips or catches pivotally connected to the said guides and ears and adapted to operate through said openings, a spring actuated chain or cable connected to the said grips and cage, and connections between the bell cranks and said chain or cable, substantially as set forth. 2nd. In a safety elevator, the combination with an elevator cage and a pair of vertical slide rails, of a pair of elongated vertical angle irons forming guides secured to each of the two opposite sides of said cage and provided with a series of suitably disposed openings, a series of ears formed integral with the

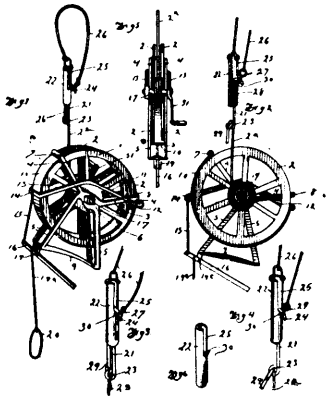
said guides, a series of grips or catches pivotally connected to the said guides and ears and each formed with an eye on its outer end,



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a pin or bolt secured in the said eye, a spring actuated chain connected to the said pin or bolt and the said cage, a pair of bell cranks mounted in the said cage, connections between the said cranks and the said chain, a plate connected to the said cranks and a spring actuated supporting rod connected to the said plate, substantially as set forth. 3rd. In a safety elevator, the combination with an elevator cage and a pair of vertical slide rails, of a pair of elongated vertical angle irons forming guides secured to each of the two opposite sides of said cage and provided with a series of openings, a spring actuated supporting rod loosely mounted in the said cage, a suspending cord or cable connected to said rod and adapted to normally support the cage, a pair of bell cranks journaled in the cage, a plate connecting said bell cranks to the supporting rod, a series of grips or catches pivotally mounted in the said guides and adapted to operate through said openings, and a spring actuated chain connecting the grips or catches to the supporting rod, substantially as set forth. 4th. In a safety elevator, the combination with an elevator cage and a pair of vertical slide rails, of guides secured to two opposite sides of said cage and provided with a series of vertical openings adjacent to the slide rails, a spring actuated supporting rod loosely mounted in said cage, a suspending cord or cable connected to said rod, a pair of bell cranks journaled in the cage near the top thereof, a plate mounted on said supporting rod and engaging said bell cranks, a series of inclined grips or catches pivotally mounted in said guides and disposed vertically on each side of the slide rails adjacent to the opening therein, chains connecting the grips or catches on each side of the slide rails together, springs connected to the lower ends of said chains and to the cage, and connections between the upper ends of said chains and the bell cranks whereby the free ends of the grips or catches are thrust through the openings in the guides and into impingement with the slide rails upon the removal of the weight of the cage from the supporting rod and cable, substantially as described.

No. 64,907. Fire Escape. (Sauveteur d'incendie.)



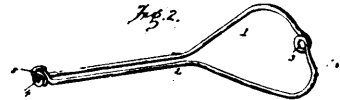
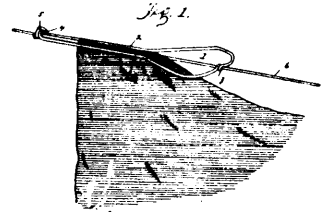
64907

Jesse Y. Shallenberger, Strasburg, Illinois, U.S.A., 14th November, 1899; 6 years. (Filed 18th October, 1899.)

Claim.—1st. A fire-escape, comprising a frame composed of two sides, and a connecting bottom piece forming a grip, a pulley or drum journaled in the frame, a line connected with the drum, a brake, and an operating lever for the brake fulcrumed on the frame and arranged adjacent to the grip, whereby it may be grasped simultaneously with the said grip, substantially as described. 2nd. A fire-escape, comprising a frame composed of two sides, having upper diverging arms connected at their outer ends, a pulley or drum journaled within the frame, a band-brake consisting of a band extending around a portion of the pulley or drum, and having

one end connected with the frame at one pair of the upper arms, a brake-lever composed of two sides fulcrumed on the frame and connected with the other end of the band, an operating lever connected with the brake-lever, and a line connected with the lever, substantially as described. 3rd. In a fire escape, the combination of a casing, a plunger arranged within the casing and having a projecting portion, a flexible loop connected with the casing, and adapted to engage the projecting portion of the plunger, a spring for actuating the plunger to disengage the projecting portion from the loop, and means for setting and tripping the plunger, substantially as described. 4th. In a fire-escape, the combination with a line, of a flexible loop connected at one end with the line, a locking device for detachably connecting the other end of the loop with the line, and means for setting and tripping the locking device, substantially as described. 5th. In a fire-escape, the combination of a casing having an arm or projection, a plunger mounted in the casing and having a hook, a loop having one end connected with the casing, its other end being adapted to engage the hook of the plunger, and means for setting and tripping the plunger to disengage the hook from the loop, substantially as described. 6th. In a fire-escape, the combination of a casing having an arm or projection, a spring actuated plunger mounted in the casing, and having a hook arranged to extend over the arm or projection, a loop connected with the casing and adapted to engage the hook, and a trigger mounted on the plunger and adapted to engage the casing to hold the plunger extended, substantially as described.

No. 64,908. Clothes Pin. (Epinglet à linge.)



64908

Elijah F. Reser, Optima, Oklahoma, U.S.A., 14th November, 1899; 6 years. (Filed 18th October, 1899.)

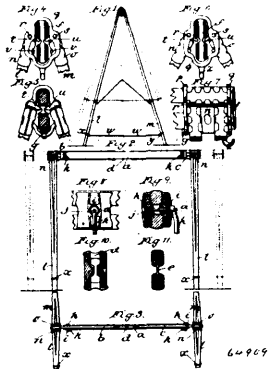
Claim.—1st. A clothes pin having a loop and a pair of spring jaws, all in the same plane, the space within the loop communicating with the space between the spring jaws, the loop facilitating the engagement of the pin with the article to be suspended, and means located at the opposite ends of the pin, whereby the latter may be attached to the clothes line, substantially as and for the purpose set forth. 2nd. A clothes pin having a loop and a pair of spring jaws, all disposed in the same plane, the space within the loop communicating with the space between the spring jaws, the loop and one of the jaws being provided with eyes respectively, the opening of the eyes being aligned longitudinally with the space between the spring jaws, whereby the pin may be fitted to the clothes line, substantially as shown and described. 3rd. A clothes pin formed from a single length of spring wire, bent intermediate its ends into a loop and a pair of spring jaws, all disposed in the same plane, the loop having an eye twisted therein, the free extremity of one of the jaws being twisted into an eye which is aligned with the eye of the loop, and the free extremity of the other jaw being engaged with the eye of the former jaw, substantially as and for the purpose set forth.

No. 64,909. Hammock Support. (Support de hamac.)

Isaac Emerson Palmer, Middletown, Connecticut, U.S.A., 14th November, 1899; 6 years. (Filed 20th October, 1899.)

Claim.—1st. The combination with a ridge pole, of supporting legs, the members of a pair of supporting legs being hinged to swing toward and away from each other to grip and release the ridge pole and means for holding the legs in their closed adjustment, substantially as set forth. 2nd. The combination with a ridge pole and collars arranged to loosely embrace the ridge pole, of supporting legs hinged to the collars to swing into and out of gripping contact with the ridge pole and means for holding the legs in their closed adjustment, substantially as set forth. 3rd. The combination with the top and bottom bars of one of the end sections of a ridge pole, of a bracket for rigidly spacing the top and bottom bars apart at their outer ends, the said brackets being provided with seats, a collar arranged to loosely embrace the top and bottom bars and a pair of legs hinged to the said collar, the said legs being provided with brackets having inwardly extended shoes adapted to engage the said seats for clamping the legs to the end section, substantially as

set forth. 4th. In a hammock support, an end section of the ridge pole comprising top and bottom bars, a bracket for rigidly spacing



the inner ends of the top and bottom bars apart and a second bracket for rigidly spacing the outer ends of the top and bottom bars apart, substantially as set forth. 5th. In a hammock support, a bifurcated supporting leg and a bracket for rigidly spacing the bifurcated ends of the legs apart, the said brackets having sockets arranged to snugly embrace the said ends, substantially as set forth. 6th. A backbone for a hammock support, comprising a middle section, two extensible end sections, the middle section consisting of two side bars rigidly spaced apart about midway their length, for receiving between them end sections and clamping devices at the ends of the middle section for clamping the end sections to the middle section in different longitudinal adjustments, substantially as set forth. 7th. A backbone for a hammock support comprising a middle section and two extensible end sections fitted to be clamped thereto, each end section comprising top and bottom bars rigidly spaced apart at their opposite ends, substantially as set forth. 8th. A backbone for a hammock support comprising a middle section and two extensible end sections, the middle section comprising two side bars rigidly spaced apart at a point intermediate their ends and having longitudinal ribs on their inner faces, the end sections each consisting of top and bottom bars fitted to be guided in their inward and outward sliding movements by the said ribs on the middle section, substantially as set forth. 9th. A backbone for a hammock support comprising a middle section and end sections, the middle section comprising two longitudinal side bars and a bracket for spacing the side bars rigidly apart at a point intermediate their ends, said bracket having two vertical positions extending along the inner sides of the side bars, a web connecting the vertical portions, and top and bottom extensions which embrace the top and bottom edges of the said side bars, substantially as set forth. 10th. The combination with the middle section of the backbone of a hammock support, said middle section comprising two side bars, and an end section fitted to slide between the said side bars, of a clamping device for securing the two sections together, consisting of clips secured to the outer sides of the two side bars of the middle section, a screw bolt passing through the clips and side bars, said bolt having its head engaged with one of the clips and its screws threaded and projecting through the other clip, and a clamping nut engaging said screw threaded end, substantially as set forth. 11th. The combination with a backbone, a collar fitted to loosely embrace the end of the backbone, swinging legs hinged to the said collar in position to engage the back bone when swung toward each other for clamping the legs to the backbone and stops carried by the legs in position to engage the collar for limiting the outward swinging movements of the legs, substantially as set forth. 12th. The combination with a backbone and a collar arranged to loosely embrace the end of the same, a pair of swinging legs hinged to the collar in position to engage the backbone when swung toward each other and means for holding the legs in their closed adjustment comprising a pair of sleeves arranged to slide along the legs and a flexible connection between the sleeves, substantially as set forth. 13th. In combination a stationary upright, a swinging bolt hinged thereto, a canopy frame carried by the swinging bolt and means for clamping the swinging bolt to the stationary upright in different tilted adjustments, substantially as set forth. 14th. In combination a stationary upright, a swinging bolt hinged thereto, said bolt being provided with an elongated slot concentric with its hinge pivot, a canopy frame carried by the swinging bolt and a clamping bolt passing through the said stationary upright for clamping the swinging bolt in different tilted adjustments, substantially as set forth. 15th. In combination, a bolt, a canopy frame comprising a central socket piece carried by the bolt, ribs hinged to the socket piece and a lock washer carried by the bolt and fitted to slide into position to lock the ribs in their extended position, substantially as set forth. 16th. The combination with the ridge pole of a hammock support, of a pair of stationary supporting uprights carried thereby, a swinging bolt hinged between the uprights, said bolt being provided with an elongated groove concentric with its hinge pivot, a canopy frame carried by the swinging bolt and a clamping device comprising a bolt passing through the said elongated slot and the two supporting

uprights and a clamping nut engaging the said bolt for clamping the swinging bolt in different tilted adjustments, substantially as set forth.

No. 64,910. Iron Bedstead. (*Lit de fer.*)

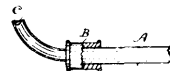
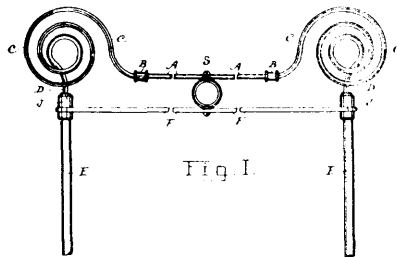
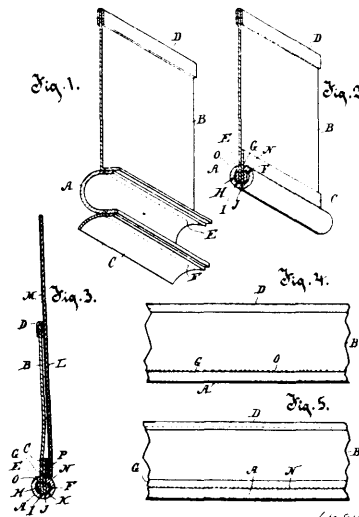


Fig. II

William Hess, Niagara Falls, Ontario, Canada, 14th November, 1899; 6 years. (Filed 21st October, 1899.)

Claim.—1st. In an iron bedstead of the character described, an ornamental transverse rod, scroll springs with ends provided with sockets at right angles to each other, the sockets at outer extended ends of said springs retaining the rod in position, and the bed posts secured to the sockets at the inner and downwardly extended ends of the springs. 2nd. In an iron bedstead of the character described, scroll springs with ends provided with sockets, vertical bedposts secured to the sockets formed at the inner and downwardly extended ends of the said scroll springs, an ornamental transverse upper rod secured in the sockets at the outer extended ends of the scroll springs, and retained in position by the inherent resiliency of said springs. 3rd. In an iron bedstead, ornamental scroll springs, having upper and lower extended ends provided with sockets, the vertical bed posts to fit into the lower sockets, a transverse rod to fit into the upper sockets, and held in position by the inherent resiliency of said springs, and means for securing the central part of said rod to the ornamental part of the upper rail of the bedstead to prevent side depression, as described.

No. 64,911. Skirt Bindings. (*Bordure de jupes.*)

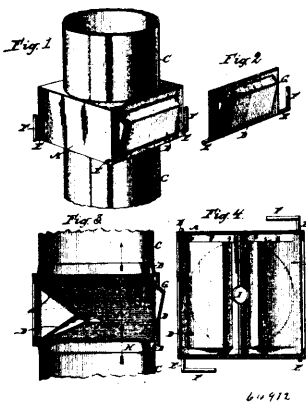


William J. Hay, Oshkosh, Wisconsin, U.S.A., 14th November, 1899; 6 years. (Filed 23rd October, 1899.)

Claim.—1st. A skirt binding, comprising a binding portion, a facing portion, and a supplemental portion, said binding portion consisting of a longitudinally folding piece forming a loop, said loop having its upper edges turned inwardly and downwardly, the inwardly extending portions forming outstanding, lateral shoulders, and the downwardly extending portions extending into the loop and forming projecting lips extending downwardly in the loop to the bottom or substantially the bottom of said loop, and said facing and supplemental portions also extending downwardly into the loop between the downwardly extending lips and to the bottom or substantially the bottom of said loop, said downwardly extending lips and the downwardly extending portions of the facing and supple

mental portion within the loop forming a filling for the loop, both transversely and vertically of said loop, and the lateral shoulders forming guards to prevent the skirt and the facing portion from contacting with the ground, of stitch lines uniting the several parts. 2nd. A skirt binding, comprising a binding portion, a facing portion and a supplemental portion, the latter secured near one edge to the binding portion, near the edge of said binding portion, and said binding portion consisting of a longitudinally folded piece forming a loop, said loop having its upper edges turned inwardly and downwardly, the inwardly extending portions forming outstanding lateral shoulders, and the downwardly extending portions extending into the loop and forming projecting lips extending downwardly into the loop to the bottom or substantially the bottom of said loop, and said facing and supplemental portions also extending downwardly into the loop between the downwardly extending lips and to the bottom or substantially the bottom of said loop, the said downwardly extending lips and the downwardly extending portions of the facing, and supplemental portion within the loop forming a filling for the loop both transversely and vertically of said loop, and the lateral shoulders forming guards to prevent the skirt and facing portions from contacting with the ground, of stitch lines uniting the several parts. 3rd. A skirt binding comprising a binding portion, a binding portion, and a supplemental portion, said facing portion and the binding portion being secured together near adjacent edges, and the binding portion and the supplemental portion being secured together near adjacent edges, and said binding portion consisting of a longitudinally folded piece forming a loop, said loop having its upper edges turned inwardly and downwardly, the inwardly extending portions forming outstanding lateral shoulders, and the downwardly extending portions extending into the loop and forming projecting lips extending downwardly into the loop to the bottom or substantially the bottom of said loop, and said facing and supplemental portions also extending downwardly into the loop between the downwardly extending lips and to the bottom or substantially the bottom of said loop, the said downwardly extending lips and the downwardly extending portions of the facing and supplemental portion within the loop forming a filling for the loop both transversely and vertically of said loop, and the lateral shoulders forming guards to prevent the skirt and facing portion from contacting with the ground, of stitch lines uniting the several parts.

No. 64,912. Draft Regulator, Damper and Ventilator.
(Régulateur de ventilation et tirage.)



Earl Vincent Coulston, Chicago, Illinois, U.S.A., 14th November, 1899; 6 years. (Filed 24th October, 1899.)

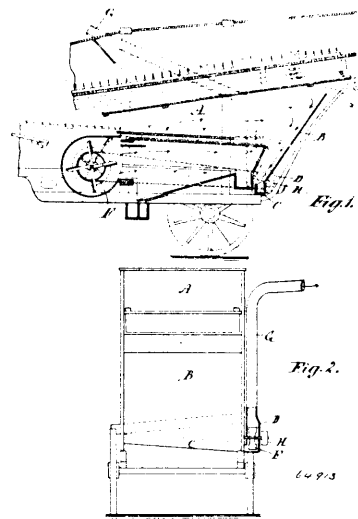
Claim.—In a device of the character stated, a casing having its opposite sides respectively closed and opened, and independent doors adapted to cover and uncover the open sides, in combination with lugs on the inner faces of the closed sides of the casing, forming common seats for the free ends of said doors when in closed position.

No. 64,913. Pneumatic Attachment to Grain Separators.
(Attache pneumatique pour séparateurs de grain.)

John Histand, Ayr, Ontario, Canada, 14th November, 1899; 6 years. (Filed 23rd October, 1899.)

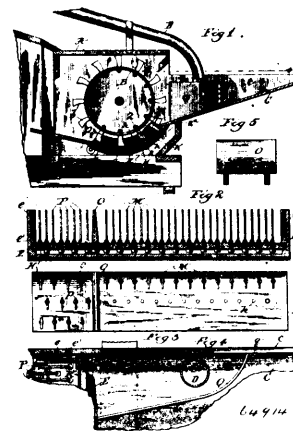
Claim.—An attachment to a grain separator for collecting chaff and conveying it pneumatically to a distant place, consisting of a plate B located inclinedly at the tail end of a grain separator to arrest the chaff prior to being blown from the machine, a spout or chute collecting the arrested chaff and attached to a shaker, a fan

case or blower D receiving the discharge from said chute, a fan within said case and driven by a belt and pulley, and a tube or pipe



G connecting with said fan case or blower and terminating at a desired locality, as set forth.

No. 64,914. Clover Huller for Threshing Machines.
(Appareil à canner le trèfle pour machines à battre.)



Festus P. Sutton, Lowell, Indiana, U.S.A., 14th November, 1899; 6 years. (Filed 23rd October, 1899.)

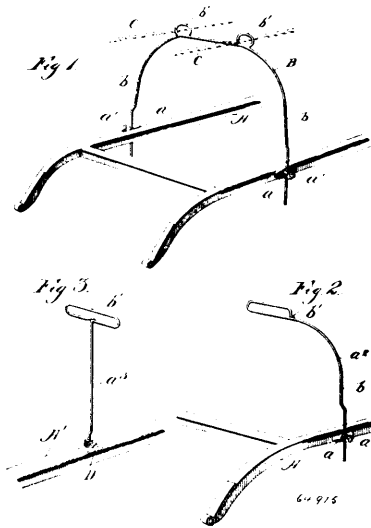
Claim.—1st. As an article of manufacture, a concave for threshing machines having a transverse rib longitudinally adjustable thereupon, and being provided with teeth on each side of the rib. 2nd. In a clover huller, the combination with a toothed rotatable drum of a toothed concave for co-operating with the drum, and having a circumferentially disposed dividing rib longitudinally adjustable as to the concave, the teeth in one section of the concave being so disposed as to break the straw to loosen the heads therefrom, the teeth in the other section being so disposed as to effect the hulling of the seed, means for separating the loosened heads from the straw, and means for returning the heads to the hulling end of the concave.

No. 64,915. Rein Holder. (Porte-reins.)

James Matthews, Acon West, Ontario, Canada, 14th November, 1899; 6 years. (Filed 23rd October, 1899.)

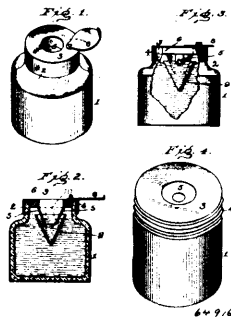
Claim. 1st. A rein holder, comprising a rod adapted to be adjustably supported in a suitable clip, and provided with a loop for retaining the reins in an elevated position, substantially as

described. 2nd. A rein holder, comprising a curved rod having depending arms adjustably engaging suitable clips, said rod being



provided with loops arranged upon the upper portion thereof through which the reins are adapted to pass, substantially as described.

No. 64,916. Ink Well. (Encrier.)



Stephen G. Baldwin, Marion, Indiana, U.S.A., 14th November 1899; 6 years. (Filed 19th September, 1899.)

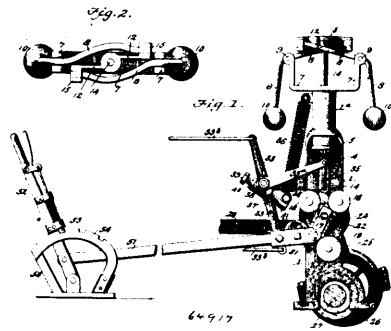
Claim.—1st. An inkstand having a top or cap carrying an inverted conic frustum, an elastic packing between the top of the inkstand, and a fixed closed inverted conic ink receptacle supported by the upper part of the inkstand and into which the conic frustum extends, passageways being formed between the inverted cone and the top of the inkstand whereby the ink may be thrown into the inverted cone by an upward toss of the inkstand, as set forth. 2nd. An inkstand comprising a cap or covering, means for securing and sealing said cap, there being a conical pen opening therein, a rim formed in the interior of the inkstand, a box loosely resting on said rim, there being an opening in the top of said box slightly larger than the conical pen opening into which said pen opening extends a short distance and an inverted cone formed in the bottom of said box directly under the pen opening forming a dip, substantially as described. 3rd. The combination of an inkstand of a top having a central inverted frustum open at its bottom, sealing means to make a tight joint between the top and the inkstand, an inverted frustum of a cone closed at its bottom and means entirely located near the top of the inkstand to support said frustum, all arranged as set forth. 4th. The combination in an inkstand of a top having a central inverted, conical frustum open at its bottom, a packing between said top and the inkstand to form a tight joint, an inverted frustum of a cone closed at its bottom and means entirely located near the top of the inkstand to support said frustum, all arranged as set forth.

No. 64,917. Governor Cut-Off. (Détente de gouverneur.)

Martin Olson Arnegard, Hillsboro, North Dakota, U.S.A., 15th November, 1899; 6 years. (Filed 27th July, 1899.)

Claim.—1st. In an automatic governor cut-off for steam engines, the combination with the governor proper and the vertically slidable shaft or stem, of the jointed extension of the latter, having lateral ears adapted for contact with the stem, and to form a practical continuation of its edges, as shown and described. 2nd. In an automatic governor cut-off for steam engines, the combination with the governor proper, its slidable shaft or stem and guide rollers

having grooves as specified of the pivoted bar constituting a flexible extension of said shaft, the same having ears between which the



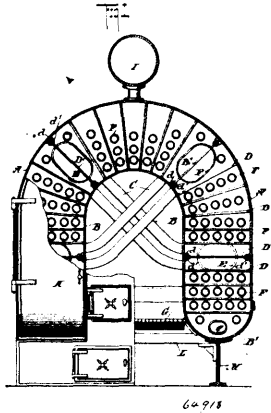
shaft is pivoted, and also provided with edges which are adapted to fit and work in the aforesaid grooves of the guide rollers and have the same thickness as those of the shaft, as shown and described. 3rd. In an automatic governor cut off for steam engines, the combination with the vertically slidable governor shaft, of a cross head having recesses in its ends, and pivoted governor arms or levers whose inner ends are adapted to work in said recesses, substantially as shown and described. 4th. In an automatic governor cut off for steam engines, the combination with the vertically slidable governor shaft, of a cross head therefor having recesses in its ends, and pivoted governor arms or levers whose inner ends are rounded, and slidable plates adapted to fit in said recesses and to receive the enlarged heads of the levers as shown and described. 5th. In an automatic governor cut-off for steam engines, the combination of the slidable governor shaft, and pivoted and weighted arms or levers, and the cross head fixed on said shaft and having lateral projections at its ends and on opposite sides, the same being provided with recesses or sockets adapted to receive the heads of the governor arms which latter are curved laterally, substantially as and for the purpose specified. 6th. In an automatic governor cut-off for steam engines, the combination with the slidable governor shaft or stem, of the pivoted lever for lifting the latter, two counter balance springs, and an adjusting device which connects them with said lever and regulates their tension, substantially as shown and described. 7th. In an automatic governor cut-off for steam engines, the combination with the slidable governor shaft or stem and a lever for lifting the same as specified, of two counter balance springs, and a device which connects said lever and springs and is adapted to regulate the distance between the springs and the pivot of said lever and to adjust the length and tension of the springs, substantially as shown and described. 8th. In an automatic governor cut-off for steam engines, the combination with the slidable governor shaft and a pivoted lever adapted for lifting it as specified, of a screw threaded sleeve which is rigidly attached to the lever, an adjusting screw or rod adapted to work in said sleeve, and the counter balance springs attached to one end of the screws substantially as described. 9th. In an automatic governor cut-off for steam engines, the combination with the slidable governor shaft and a pivoted lever adapted for lifting it as specified, of a screw threaded sleeve which is rigidly attached to the lever, and arranged at a downward inclination, an adjusting screw or rod adapted to work in said sleeve and consequently held inclined as shown, and the counter balance springs attached to the lower end of the screw, substantially as shown and described, whereby their tension may be adjusted and the speed of the engine changed without materially affecting the sensitiveness of the governor. 10th. In an automatic governor, the combination with the slidable governor shaft or stem and a pivoted T-shape lever which is shifted as specified, of a link 35 pivoted to and connecting said stem and the arm 33 of said lever, an adjustable screw or rod working in a fixed attachment of the lever, a block on the lower end of the latter, and springs attached to said block and the frame of the governor, as shown and described to operate as specified.

No. 64,918. Steam Boiler. (Chaudière à vapeur.)

Charles Lloyd, Chicago, Illinois, U.S.A., 15th November, 1899; 6 years. (Filed 5th August, 1899.)

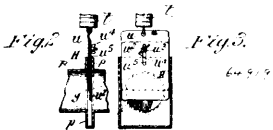
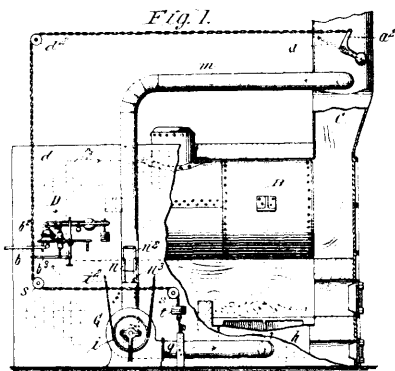
Claim. 1st. A boiler, having the body thereof formed of two concentric inverted U-shaped shells united at their bottoms and ends, and comprising a water containing chamber, the space between the legs of the boiler constituting the furnace and having a grate therein, water tubes extending diagonally upward from the lower part of each leg to the upper part of the opposite leg, and tubes extending lengthwise of the boiler through the water spaces and conveying the return gases, substantially as described. 2nd. A boiler, having fire flues or tubes extending through the body thereof, said flues being arranged in groups or bands, with spaces between which permit the entrance of a workman between the two, and manholes opening through the boiler end into said spaces, substantially as described. 3rd. A boiler, having separate water containing legs forming a furnace chamber between them, fire tubes or flues extending longitudinally through said legs and grouped in

bands having spaces between the bands adapted to permit the entrance of workmen to clean the tubes, manholes opening through



the end walls into said spaces, and water tubes extending diagonally upward from one of said spaces in each leg across the furnace to a similar space through the opposite leg, substantially as described. 4th. A boiler, with saddle limbs extending from head to head thereof enclosing a fire chamber of like length with water tubes from the lower level of each saddle to its opposite saddle limb near its upper level, and cross tubes from the lowest edges of the saddle limbs, substantially as described. 5th. A boiler, with saddle limbs extending from head end to head end thereof enclosing a fire chamber of like length, with water tubes from a lower level of each saddle limb to its opposite saddle limb near its upper length, removable stay rods at the upper ends of said tubes, and manholes at the upper ends of said tubes and in line therewith and with said stay rods, substantially as described.

No. 64,919. Apparatus for Perfecting Combustion in Boiler Furnaces. (*Appareil pour perfectionner la combustion dans les fournaies de chaudières.*)

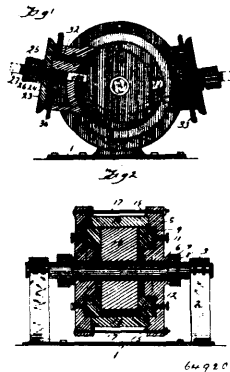


Louis St. Peter, Springfield, Massachusetts, U.S.A., 15th November, 1899; 6 years. (Filed 27th February, 1899.)

Claim - 1st. The combination with a furnace having the smoke stack and smoke damper therein, of a gate or valve movably applied in the discharge passage of a blower which is located adjacent to the furnace, and which discharge pipe enters the ash pit or chamber under the furnace grate, and a connection between the smoke damper and the said gate whereby, as the damper is opened or closed, the said blower gate will be simultaneously moved in its opening or closing position, and means for varying the relative opening or closing movement of said gate and damper, substantially as described. 2nd. The combination with a furnace, having the smoke stack and a smoke damper therein, and a steam-operated automatic regulator having an operative connection with the smoke damper, of a blower having the discharge pipe thereof leading into the ash pit of the furnace and provided with the gate or valve adapted to open or close said blower discharge pipe, and connections whereby said gate may be adjusted in conjunction with and relative to the steam-operated regulator and smoke damper, substantially as described. 3rd. The combination with a furnace

having the smoke stack and smoke damper therein, and a steam-operated automatic regulator having an operative connection with the smoke damper, of a blower having the discharge pipe thereof leading into the ash pit of the furnace, and provided with a gate or valve adapted to open or close said blower discharge pipe, a pipe leading from the smoke stack at a point back of the smoke damper to, and constituting, the air supply passage of the blower, and connections between the smoke damper and said gate, said gate and damper being adjustable in relation to each other, substantially as and for the purposes set forth. 4th. The combination with a furnace having a smoke passage, and a smoke damper therein, and automatic means for opening and closing the damper, of a blower having the discharge pipe thereof entered into the furnace and provided with a gate or valve adapted to open and close said passage, and formed in adjustable sections whereby it may be elongated or shortened to more or less nearly close said discharge passage, and connection between the said smoke damper and said gate, substantially as described. 5th. The combination with a furnace having a smoke passage and a smoke damper therein, and an automatic steam-operated regulator operatively connected with the smoke damper, of a blower having the discharge pipe thereof entered into the furnace and having the adjustable movable gate H, the pipe *m* leading from the smoke passage at a point back of the damper, to, and constituting, the air supplying passage of the blower, provided with the opening *n* and the adjustable door or cover *n*² therefor, and a flexible connection operating the said blower gate in conjunction with the operation of the smoke damper, substantially as described. 6th. The combination with a furnace having the smoke stack C, and the smoke damper *a* provided with the lever arm *a*², the automatic steam-operated regulator having a movable member *b*³, a sheave-guided flexible connection *d* between said member *b*³ and said arm *a*², of the smoke damper, of the blower G having the discharge pipe *g* leading into the ash pit of the furnace and provided with the gateway *p* and transversely arranged gate H consisting of the two sections *n* and *n*², the one being adjustable lengthwise relative to the other, and means for confining said sections, and the pipe *m* leading from the smoke stack at a point back of the smoke damper, to, and constituting, the supply passage of the blower and having the opening *n* and an adjustable door or cover therefor, all substantially as described and for the purposes set forth.

No. 64,920. Rotary Engine. (*Machine rotatoire.*)



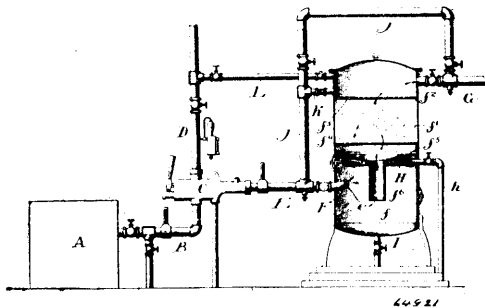
John H. Vandergrift, Allenport, Pennsylvania, U.S.A., 15th November, 1899; 6 years. (Filed 9th August, 1899.)

Claim - 1st. A rotary engine comprising a cylinder formed of two side plates engaging a rim, said side plates being provided on their inner face with circumferential recesses or grooves, adjustable packing rings engaging in said recesses or grooves, said side plates carrying pins arranged within the recesses or grooves and engaging the adjustable packing rings to prevent the same revolving, a power shaft plates a piston mounted on said shaft within the cylinder, said piston being substantially elliptical in form and being cut away at opposite sides of its periphery to provide two oppositely disposed steam receiving faces, steam chests arranged at opposite sides of the cylinder, inlet ports arranged above the said steam chests and communicating with the cylinder, said steam chests being provided with suitable exhaust ports, plungers or slide valves operating in said steam chests and protruding into the cylinder to be engaged by the piston, said plungers or valves being provided with grooves on their one face which when the port is open register with the steam chests and permit the inactive or dead steam to be exhausted into said chest, substantially as shown and described. 2nd. In a rotary engine, the combination of the cylinder formed of the side plates 5, and rim 16, suitable inlet ports for said cylinder, said side plates 5, being provided on their inner face with circumferential grooves or recesses, said grooves or recesses being adapted to receive adjustable packing rings which are provided on their one side with recesses 10*a*, said side plates 5, carrying pins located within the circumferential recesses or grooves to engage in the apertures provided therefor in the corresponding face of the packing rings, screws engaging through the side plates and engaging the packing rings for adjusting the same,

a power shaft journaled in the side plates, a substantially elliptical shaped piston mounted on said shaft within the cylinder, steam chests arranged at opposite sides of the cylinder and having suitable outlet ports, said steam chests being closed at their outer end by a plate provided with a central aperture to receive the stem of the slide valve or plunger operating in steam chest, said slide valves or plungers having grooves extending partially of their length, the grooves in one slide valve or plunger being on the opposite face to those of the opposite slide valve or plunger so that the inactive or dead steam will be simultaneously exhausted from the compartments of the cylinder while the live steam is being admitted, substantially as shown and described. 3rd. In a rotary engine, the combination of the cylinder formed of the side plates, and rim 16, a power shaft journaled in said side plates, a piston mounted on said power shaft, said piston being substantially elliptical in form and dividing the cylinder into two compartments, said side plates being provided on their inner face with circumferential grooves or recesses, adjustable packing rings engaging in said grooves or recesses, said plates carrying hubs on their outer face to receive packing for the power shaft, caps engaging said hubs to hold the packing in position, said piston being provided at two opposite points on its periphery with cut away portions which form steam receiving faces, steam chests arranged at opposite sides of the cylinder, inlet ports for said cylinder, said ports being so arranged as to admit the steam simultaneously into the two compartments of the cylinder, slide valves or plungers operating in said steam chests, said slide valves or plungers having grooves extending partially of their length and forming outlets for the inactive or dead steam which is exhausted into the steam chest simultaneously from both compartments and also simultaneously with the admission of live steam into contact with the steam receiving faces of the piston, the stems of said slide valves or plungers protruding through the outer plate of the steam chests and provided with suitable packing, substantially as shown and described.

No. 64,921. Feed Water Purifier.

(*Purificateur d'eau d'alimentation.*)



Norman L. Hayden, New York City, New York, U.S.A., 15th November, 1899; 6 years. (Filed 10th August, 1899.)

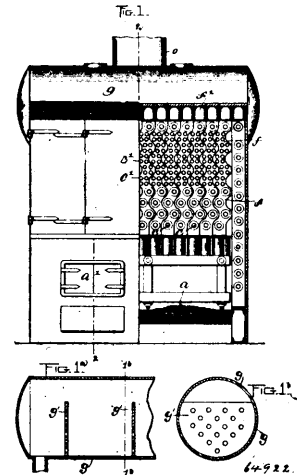
Claim.—1st. In a feed water purifier, a casing having a closed chamber, a central pipe extending downward into said chamber, a discharge pipe, for sediment, at the bottom of the chamber, a discharge pipe, for light impurities, leading from the upper part of the chamber, and an inlet pipe below the top of the casing and above the bottom of the outlet pipe, the distance of the inlet pipe below the top of the casing being sufficient to avoid forcing the floating impurities downward and to permit said impurities to gather in the top of the casing, and the extension of the outlet pipe below the inlet pipe being sufficient to compel the sediment in the water to travel in a downward direction before it can enter the outlet pipe, substantially as set forth. 2nd. In a feed water purifier, the combination with a casing having a closed chamber, of an outlet pipe extending centrally downward into said chamber, discharge pipes for impurities, leading, respectively, from the top and bottom of the chamber, and an inlet pipe below the top of the chamber and above the lower end of the outlet pipe, said inlet pipe being inclined, to give a cyclonic action on the water in the chamber, and its distance below the top of the chamber being sufficient to avoid forcing the floating impurities downward and to permit said impurities to gather in the top of the chamber, and the extension of the outlet pipe below the inlet pipe being sufficient to compel the sediment in the water to travel downward before it could enter the outlet pipe, substantially as set forth.

No. 64,922. Steam Generator. (*Générateur à vapeur.*)

Kennedy Park, Cambridge, Massachusetts, U.S.A., 15th November, 1899; 6 years. (Filed 18th August, 1899.)

Claim.—1st. A boiler or steam generator comprising a fire box, a series of tubes extending lengthwise over the fire box and across the bridge wall of the fire box, a partition extending across the series of tubes between their forward and rear portions, and extending partly over the forward portions of the tubes, said partition causing the products of combustion rising directly from the fire box to pass between the forward portions of the tubes, including their forward ends, an elevated space or chamber above the tubes to receive the

products of combustion from between the forward portions of the tubes, a lower space or chamber below the rear portions of the



tubes, an escape flue or stack, and connections between the stack, the lower chamber, and the elevated chamber, whereby the products of combustion received by the elevated chamber are conducted first downwardly and then upwardly, the said products being presented to the rear portions of the tubes in their passage from the elevated chamber to the stack. 2nd. A boiler or steam generator comprising a fire box, a series of tubes extending lengthwise over the fire box and across the bridge wall of the fire box, a partition extending across the series of tubes between their forward and rear portions and extending partly over the forward portions of the tubes, said partition causing the products of combustion rising directly from the fire box to pass between the forward portions of the tubes, including their forward ends, an elevated space or chamber above tubes to receive the products of combustion from between the forward portions of the tubes, a lower space or chamber below the rear portions of the tubes, an escape flue or stack, connections between the stack, the lower chamber, and the elevated chamber, whereby the products of combustion received by the elevated chamber are conducted first downwardly and then upwardly, the said products being presented to the rear portions of the tubes in their passage from the elevated chamber to the stack, and a feed water heater arranged to be acted on by the products of combustion rising from the rear portions of the tubes. 3rd. A boiler or steam generator comprising a fire box, a series of tubes extending lengthwise over the fire box and across the bridge wall of the fire box, a partition extending across the series of tubes between their forward and rear portions, said partition causing the products of combustion rising directly from the fire box to pass between the forward portions of the tubes, an elevated space or chamber above the tubes to receive the products of combustion from between the forward portions of the tubes, a lower space or chamber below the rear portions of the tubes, a supplemental casing or chamber above the rear portions of the tubes, an escape flue or stack, connected with the supplemental chamber, flues or uptakes connecting the ends of the lower chamber with the ends of the supplemental chamber, the arrangement being such that the products of combustion pass from the elevated chamber downwardly between the rear portions of the tubes to the lower chamber, and from thence through the uptakes to the supplemental chamber, and a feed water heater in the supplemental chamber. 4th. In a boiler or steam generator, a drum having a series of transverse semi-partitions extending from the bottom partly to the top of the drum and provided with perforations.

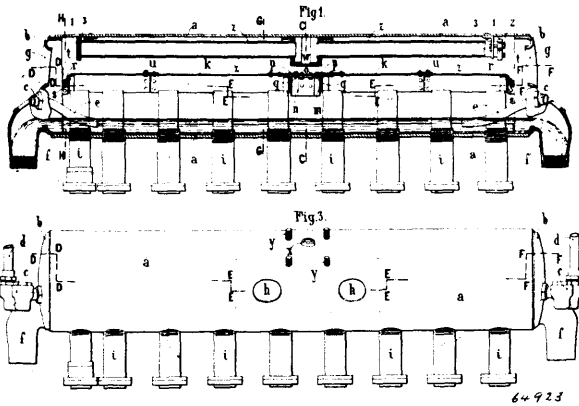
No. 64,923. Feed Water Heater and Purifier.

(*Réchauffeur et purificateur d'eau d'alimentation.*)

Louis Marie (Gabriel) Delamunay-Belleville, St. Denis, France, 15th November, 1899; 6 years. (Filed 7th September, 1899.)

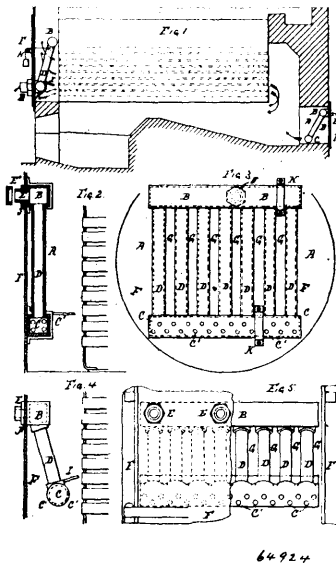
Claim.—1st. A combined steam purifier and feed water heater consisting of or comprising a cylindrical body with an inlet, or inlets, for feed water, a dome or inverted trough arranged above pipes or jets in communication with the vapourizing tubes of the boiler and perforated tube and chamber for the escape of steam, all substantially as hereinabove described and illustrated in the accompanying drawings. 2nd. In an apparatus of the kind claimed by the preceding claiming clause, a dome or inverted trough made in halves fastened at the centre of the apparatus to a support, common to the said halves, the sides of apparatus being provided with holes for access to the said support and fastening, and each of the said halves being connected and fastened at its other end to a support, the ends of the apparatus being provided with holes for access to these supports and fastenings and each of the said halves being made in parts secured together so that the said dome or inverted trough can be rapidly taken to pieces, substantially as hereinabove described

and illustrated in the accompanying drawings. 3rd. In an apparatus such as is claimed by the preceding first claiming clause a steam



supply tube made in two parts, one end of each part being conical and open and capable of being forced into openings in a steam chamber while each of the other ends is closed and provided with a flange which can be tightened by bolts connected to a bracket and enabling such steam supply tubes to be readily removed substantially as hereinabove described and illustrated in the accompanying drawings. 4th. The general arrangement and combination of parts constituting the apparatus substantially as hereinbefore described and illustrated in the accompanying drawings.

No. 64,924. Smoke Preventing Apparatus.
(*Arrête fumée.*)

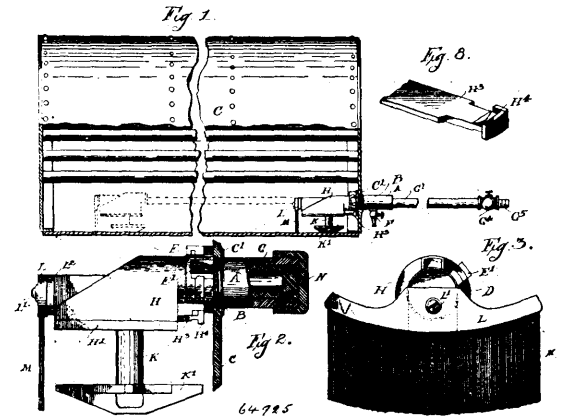


Robert Henry Burns, New York City, New York, U.S.A., 15th November, 1899; 6 years. (Filed 11th September, 1899.)

Claim.—1st. In combination with the front connection, and the front connection ends of the lower tubes of a horizontal tubular boiler, and enclosed chamber composed of inlet and outlet manifold compartments and a plurality of connecting compartments, substantially as and for the purpose set forth. 2nd. In combination with the lower tubes and front connection doors of a horizontal tubular boiler, an air receiving chamber composed of inlet and outlet manifold compartments and a plurality of connecting circulation compartments, and an inlet nozzle upon which the said air receiving chamber may be swung in any direction and to any position, substantially as and for the purposes set forth. 3rd. In combination with the lower tubes and front connection doors of a horizontal tubular boiler, an air receiving chamber composed of inlet and outlet manifold compartments and of a plurality of connecting circulation compartments, a plurality of passages through which the escaping products of combustion pass, to reach the chimney, an inlet nozzle upon which the said air receiving chamber may swing in any direction and to any desired position, and a guide plate to control the movement of the admitted air or combustion assisting medium in its passage to the lower boiler tubes, substantially as and for the purpose set forth. 4th. In combination with the draft passages or connection of a furnace, a chamber composed of inlet and outlet

manifold compartments and a plurality of circulation compartments, and a guide plate to control the movement of the air or combustion assisting medium after passing from its chamber, substantially as and for the purpose set forth. 5th. In combination with the draft passages or connections of a furnace, a chamber composed of inlet and outlet manifold compartments and a plurality of circulation compartments and provided with a plurality of passages or openings through which the escaping products of combustion may pass to reach the chimney, and an adjusting arm, lever or line, whereby the said chamber may be swung to and secured in any desired position, substantially as and for the purposes set forth. 6th. In combination with the draft passages or connection of a furnace, a chamber composed of inlet and outlet manifold compartments a plurality of circulation compartments, and a dividing plate or partition to affect an increased circulation of the contained medium, substantially as and for the purpose set forth.

No. 64,925. Boiler Cleaner. (*Nettoyeur de chaudières.*)



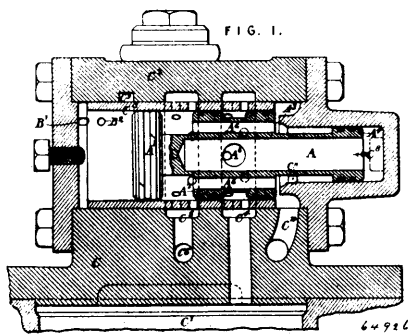
John J. Crall, Chamcey, Missouri, U.S.A., 15th November, 1899; 6 years. (Filed 13th September, 1899.)

Claim.—1st. The combination with a boiler, of an interiorly located sliding scraper or brush upon a valve block, a sliding sleeve projecting through a nipple screw threaded through an aperture in the mud head of the boiler, a gate valve located in said valve block, means as herein shown for opening said valve and effecting a blow out of the boiler through said valve and sleeve after the operation of scraping, and an outer sleeve, a valve thereon, and a supplemental exhaust valve or cork, all substantially as herein shown and described. 2nd. In a boiler cleaner, the combination with the boiler of an interiorly placed valve block, a gate valve therein, an oscillating brush head, a brush or scraper secured to said head, a nipple screw threaded through the end wall of the boiler, a sliding sleeve projected through said nipple and connected with said valve block, means for operating said gate valve in connection with a catch head thereon, and a projected slotted lug on said nipple, and a similar means for securing a valve block in close contact with said nipple, an outer sleeve in screw threaded connection with the sleeve first named, a globe valve mounted on the latter, and a supplemental valve or exhaust cock leading through the exterior portion of said nipple and adapted to register with an aperture in the first mentioned sleeve when the latter is outwardly drawn, all substantially as herein shown and described. 3rd. The combination with a steam boiler cleaner, of a valve block, a sliding foot secured thereto, a brush head loosely pivoted thereon, a depending brush or scraper secured to said head, a gate valve operating longitudinally upon said block between the bottom of same and a retaining plate, a nipple screw threaded through the mud head of the boiler, said nipple being provided with an outer screw threaded end and an inner shoulder, a sliding tubular sleeve projected through said nipple having its inner end interiorly and its outer end interiorly screw threaded and provided with a shoulder next the inner end, a catch head upon said gate valve adapted to be engaged by a slotted lug upon the annular shoulder of said nipple, adapted to be engaged by another slotted lug upon the shoulder of said nipple, an outer sleeve having both its ends screw threaded and adapted for attachment to said first mentioned sleeve, a valve intercepting said outer sleeve, and a supplemental valve or cock in said nipple adapted to register with an aperture in the inner or first mentioned sleeve when the same is in its most outwardly drawn position, all substantially as herein shown and set forth. 4th. The combination with a steam boiler, of a cleaner therefor, consisting of a nipple screw threaded through the mud head of the boiler, a sliding tubular sleeve projected through said nipple, an annular shoulder adjacent to the inner end thereof, a screw threaded inner end having secured thereto, a valve block, a gate valve secured within said block provided with a catch head, a slotted lug projected from the inner portion of said nipple adapted to engage the catch head of said valve when the valve block is rotated by means of the outwardly projected sleeve, a bevelled lug formed upon the periphery of the annular

shoulder of said sleeve adapted to be engaged by another slotted lug on the inner portion of the said nipple, whereby the valve block is locked in an abutting position against the inner end of the nipple, a recessed sliding foot secured to said valve block, an oscillating brush head also secured upon the inner end of said block a depending brush, an outer screw threaded tubular sleeve in connection with that first herein mentioned, a globe or other valve intercepting the same adjacent to the outer screw threaded end, and an auxiliary exhaust cock leading through said nipple adapted to register with an aperture in the first mentioned sliding sleeve when the same is in its most outwardly drawn position, the whole constructed, arranged and adapted for operation, substantially as herein shown and set forth. 5th. The combination with a steam boiler, of a cleaning device therefor, consisting of a nipple A, projected through a head C, a sliding valve G, a valve cock H, secured thereon a gate valve H², an oscillating brush head L, a brush or scraper M, means as shown for operating said valve consisting of a catch head H³, co-acting with the slotted lug E¹, means for securing said valve block and nipple together, consisting of a lug I, co-acting with slotted lug E, an outer sleeve G¹, a globe valve G², an exhaust cock F, adapted to register with an aperture F¹, when said sleeve G, is in a certain position, the whole constructed, arranged and adapted to operate substantially as and for the purposes set forth.

No. 64,926. Valve for Engines and Pumps.

(*Soupppe de machines à vapeur et pompes.*)

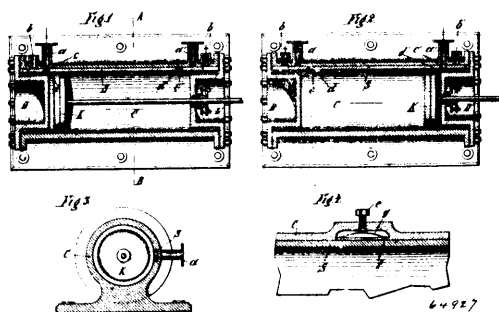


James Macara Christie, Glebe Point, and Richard Rock, Burwood, both near Sydney, New South Wales, Australia, 15th November, 1899; 6 years. (Filed 7th March, 1899.)

Claim.—In combination with the cylinder of a direct acting fluid pressure engine, a main slide valve having two pistons adapted to govern ports leading to the two ends of the cylinder, and having at its ends a larger and a smaller piston, the smaller always subject to the pressure of the working fluid, and the larger subjected to that pressure as determined by the movement of a secondary valve which has three pistons and is adapted to be moved up and down by the piston of the main cylinder as it approaches the ends of its stroke, and thus to govern ports communicating with the main valve casing, substantially as described.

No. 64,927. Valve for Steam Engines.

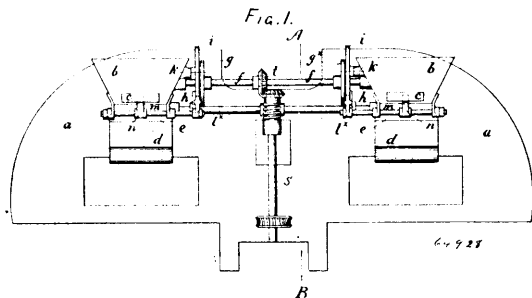
(*Soupppe pour machines à vapeur.*)



Johannes Dambos, 30 Mählendamm, Hamburg, Germany, 15th November, 1899; 6 years. (Filed 20th March, 1899.)

Claim.—1st. Slide valve gear for steam and other motive power engines which consists of a slide valve recessed into the wall of the cylinder and moved directly by the piston to open and close the inlet and outlet passages, substantially as described. 2nd. In slide valve gear of the kind referred to in the first claiming clause hereof, a slide valve S provided with projections d, d¹ and ports e, e¹, and sliding in a dovetail shaped groove in the wall of the cylinder, the cylinder covers being suitably dished or recessed to avoid clearance space at the ends of the cylinder, substantially as described.

No. 64,928. Stoker Mechanism. (*Chauffeur mécanique.*)



James Proctor, Hammer Street Iron Works, 15th November, 1899; 6 years. (Filed 19th April, 1899.)

Claim. 1st. In mechanical stokers of the class above referred to and fitted with a radial shovel or shovels, the improved means as hereinbefore described and illustrated by figs. 1, 2, 3, 3a, 4, 4a, 5, 6 and 7 of the annexed drawings for giving reciprocating motion to the ram or rams from the lantern wheel or wheels by which the radial shovel or shovels is or are actuated. 2nd. In mechanical stokers of the class above referred to and fitted with a radial shovel or shovels, the combination of the rocking shaft on which the shovel swings of a pair of springs acting against each other so as to yield to the action of the tappets whilst the shovel is being withdrawn and acting in concert so as to return the shovel quickly when released, substantially as hereinbefore described and illustrated by fig. 8 of the annexed drawings. 3rd. In mechanical stokers of the class above referred to fitted with a sliding shovel or shovels, the combination with the sliding shovel bar of a pair of springs acting against each other so as to yield to the action of the tappets whilst the shovel is being withdrawn, and acting in concert so as to return the shovel quickly when released, substantially as hereinbefore described and illustrated by fig. 9 of the drawings annexed.

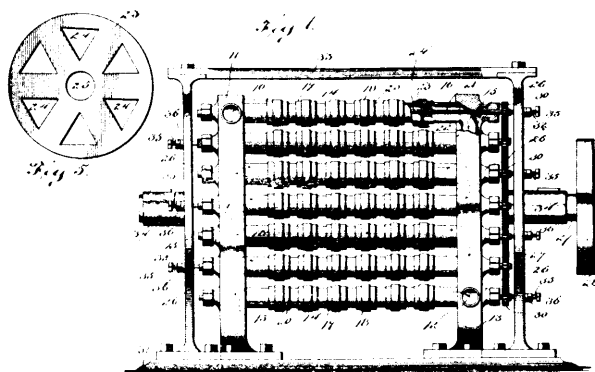
No. 64,929. Preserved Egg.

(*Procédi pour préserver les œufs.*)

James Meededy, Brick Court, Temple, London, England, 15th November, 1899; 6 years. (Filed 13th April, 1899.)

Claim. 1st. The process for producing preserved concentrated egg, consisting in blending the contents of the eggs and incorporating therewith a mixture of phosphate of sodium and chloride of sodium, and evaporating the blended egg in vacuo to a semi-fluid condition, substantially as described and for the purpose specified. 2nd. The process of producing preserved concentrated egg, consisting in blending the contents of the eggs and incorporating therewith a mixture of phosphate of sodium and chloride of sodium, desiccating the blended egg to a solid flaky condition, and granulating the solid flaky substance, substantially as described and for the purpose specified. 3rd. The process of producing preserved concentrated egg, consisting in blending the contents of the eggs and incorporating therewith a mixture of phosphate of sodium and chloride of sodium, evaporating the blended egg in vacuo to a semi-fluid condition, placing the semi-fluid egg on greased or oiled paper or similar substance, desiccating the semi-fluid egg by means of hot air to a solid flaky condition, and granulating the said flaky solid, substantially as described and for the purpose specified.

No. 64,930. Rotary Engine. (*Machin rotatoire.*)



Alexander Hastings Canning, Toronto, Ontario, Canada, 15th November, 1899; 6 years. (Filed 15th May, 1899.)

Claim. 1st. In a rotary engine, the combination of a manifolded cylinder, pistons arranged respectively in the folds or members of the cylinder, a common driven element, and means for communi-

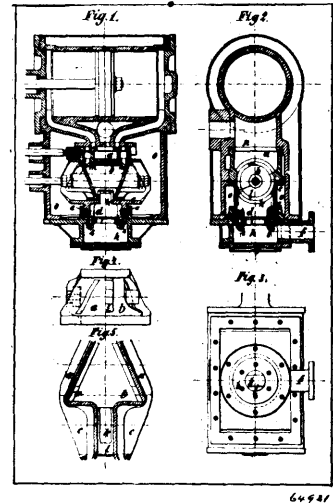
ating motion from the pistons to said driven element, substantially as specified. 2nd. In a rotary engine, the combination of a manifolded cylinder, a plurality of pistons arranged in each fold or member of the cylinder and having a common shaft or spindle, a common driven element, and means for communicating motion from the piston shafts or spindles to said driven element, substantially as specified. 3rd. In a rotary engine, the combination of a manifolded cylinder, a plurality of pistons arranged in each fold or member of the cylinder and having a common shaft or spindle, a common drive shaft, and gearing for communicating motion from said piston shafts or spindles to the drive shaft, substantially as specified. 4th. In a rotary engine, the combination of a manifolded cylinder, a plurality of pistons arranged in each fold or member of the cylinder, and having a common shaft or spindle, a common drive shaft, a gear carried by said shaft, and pinions carried respectively by the piston shafts or spindles and meshing with said gear, substantially as specified. 5th. In a rotary engine, the combination of a manifolded cylinder having its folds or members arranged in series to form a continuous conveyor, inlet and exhaust ports being arranged respectively at opposite ends of the series, pistons arranged respectively in the folds or members of the cylinder, and means communicating motion from the pistons to a driven element, substantially as specified. 6th. In a rotary engine, the combination of a manifolded cylinder having a plurality of tubular members, and heads connecting said members at their extremities and provided with passages in communication therewith to connect them interiorly in series, pistons arranged in the folds or members of the cylinder, and means for communicating motion from said pistons to a driven element, substantially as specified. 7th. In a rotary engine, the combination of a manifolded cylinder having a plurality of tubular members, and heads connecting said members at their extremities and provided with passages in communication therewith to connect them interiorly in series, said heads being provided in alignment, respectively with the folds or members with shaft bearings and stuffing boxes, pistons arranged respectively in the folds or members of the cylinder, and having their shafts mounted in said bearings, and means for communicating motion from the shafts or spindles to a driven element, substantially as specified. 8th. In a rotary engine, the combination of a manifolded cylinder, pistons arranged respectively in the folds or members of the cylinder, those pistons in each fold or member having a common shaft or spindle, thrust pins for receiving the longitudinal thrust of the piston shafts or spindles, and means for communicating motion from the shafts or spindles to a driven element, substantially as specified. 9th. In a rotary engine, the combination of a manifolded cylinder, pistons arranged respectively in the folds or members of the cylinder, those pistons in each fold or member having a common shaft or spindle, thrust pins consisting of adjustable bolts arranged in alignment respectively with the piston shafts or spindles to receive the end thrust thereof, and means for communicating motion from the shafts or spindles to a driven element, substantially as specified. 10th. In a rotary engine, the combination of a cylinder, and a piston arranged axially parallel with the advance of motive agent through the cylinder and having radial oblique faced blades, substantially as specified. 11th. In a rotary engine, the combination of a cylinder, and a piston arranged axially parallel with the advance of motive agent through the cylinder, and having radial flat faced wings, and oblique faced blades, and free edges of the blades overlapping the adjacent edges of the wings, substantially as specified. 12th. In a rotary engine, a cylinder and a piston arranged axially parallel with the direction of movement of motive agent through the cylinder, and provided with flat faced wings and oblique faced blades, in combination with a port wall or partition arranged adjacent to the plane of the flat faces of the wings and provided with ports for allowing application of pressure to the oblique faced blades, substantially as specified. 13th. In a rotary engine, a cylinder and a piston arranged axially parallel with the direction of movement of motive agent through the cylinder, and provided with flat faced wings and oblique faced blades, in combination with a port wall or partition arranged adjacent to the plane of the flat faces of the wings and provided with ports for allowing application of pressure to the oblique faced blades, the area of each flat faced portion of a wing exceeding that of a port in the wall or partition, substantially as specified. 14th. In a rotary engine, the combination of a cylinder comprising axially aligned sections, couplings for connecting the sections in series, port walls or partitions arranged between the abutting extremities of cylinder sections, pistons arranged respectively adjacent to said walls or partitions and having oblique faced blades for exposure to fluid pressure in the cylinder applied through the ports in said walls or partitions, and a shaft or spindle common to a plurality of pistons in the aligned cylinder sections, substantially as specified.

No. 64,931. Valve. (*Soupape.*)

Olof Magnus Hofwolt, Rostock, Patriotischer Weg 106, Mecklenburg, German Empire, 15th November, 1899; 6 years. (Filed 18th May, 1899.)

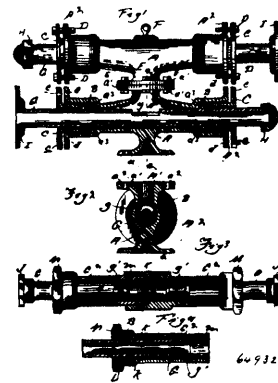
Claim.—A relieved bottom and expansion slide valve, its characteristic feature being a semi-cylindrical relief plate *c* provided with

hollow piston *d*, this plate being closely applied to the bottom slide *a* as well as to the closed hollow expansion slide *b* and being adjust-



ably so secured externally by means of a hollow piston *d*, arranged on the relief plate, which said hollow piston *d* tightly closes against the slide casing and conveys the steam into the hollow expansion slide *b*, that the said relief plate will keep off the steam pressure from the slides.

No. 64,932. Steam Joint. (*Joint à vapeur.*)



James Barker Wade, Little Rock, Arkansas, U.S.A., 15th November, 1899; 6 years. (Filed 27th May, 1899.)

Claim.—The combination of two inversely arranged like parts, each embodying an outer portion with interior shoulder near the end, and a central portion at right angles to its length formed with a flange, means securing the two flanges together and permitting communication between the interior of the two parts, an expansion tube in each of the said parts, each tube having a port, means at the ends of the said tubes for pipe connection, and packing at opposite ends of the outer parts confined between shoulders on the inner wall of the other part and tubular portions around the expansion tubes, all substantially as shown and described.

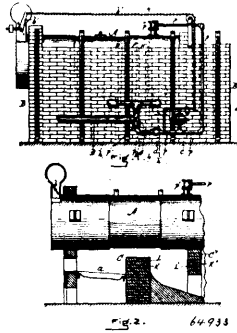
No. 64,933. Steam Boiler Furnace.

(*Fournaise de chaudière à vapeur.*)

Edwin James Elms, Chelsea, Massachusetts, U.S.A., 15th November, 1899; 6 years. (Filed 19th July, 1899.)

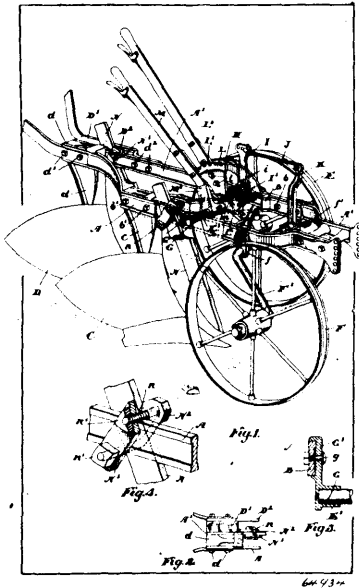
Claim.—1st. In a steam boiler furnace, a pipe leading from the external air through the masonry of the furnace, a plurality of small jet pipes connecting said pipe with the combustion chamber under the boiler at or near the bridge wall, a steam pipe connected with the boiler and extending outside of the furnace to said air pipe, a nozzle extending from said steam pipe into the air pipe, and a damper regulator intermediate of the damper and the steam pipe, whereby a plurality of small jets of air are automatically forced into the combustion chamber, substantially as set forth. 2nd. In a steam boiler furnace, in combination, the boiler, and masonry provided with the bridge wall *C* and back arch *C'*, the pipes *K*, *K'* extending substantially horizontally into said bridge wall and back arch, a plurality of small jet pipes leading from said pipes *K*, *K'* into the combustion chamber, the pipes *H*, *H'* connected with the

outer ends of the pipes K, K', the pipe E connected at its upper end with the pipes H, H' and with its lower end open, the feed pipe D



supplying said pipe E with external air, the pipe P provided with the nozzle P' extending into the lower end of said pipe E, the opposite end of said pipe P connecting with the boiler, and means for regulating the injection of the steam into said pipe E, substantially as described.

No. 64,934. Gang Plough. (Charruc à disque.)

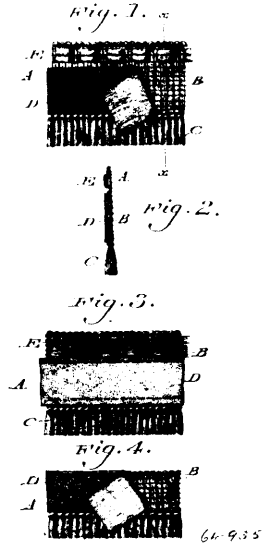


The Verity Plough Company, Brantford, assignee of Archibald McDermid, Ridgetown Post Office, and George Wilkinson, Brantford, both in Ontario, Canada, 16th November, 1899; 6 years. (Filed 18th October, 1899.)

Claim.—1st. In a gang plough, the combination with the frame, the furrow wheel and crank axle thereof and land wheel and crank axle thereof suitably journaled in the frame, of the arm secured on the crank axle of the furrow wheel, the quadrant secured to the frame, the quadrantal lever connected by a link to the arm and the lever swung on the crank axle of the land wheel and provided with a quadrantal and designed to mesh with the quadrantal lever, as and for the purpose specified. 2nd. In a gang plough, the combination with the frame, the furrow wheel and crank axle thereof and land wheel and crank axle thereof suitably journaled in the frame, of the arm secured on the crank axle of the furrow wheel, the quadrant secured to the frame, the quadrantal lever connected by a link to the arm, the arm on the land wheel axle provided with a quadrant at the lower end meshing with the quadrant on the quadrantal lever, and a quadrant at the upper end, the lever secured to the arm, the supplemental lever secured to the crank wheel axle and having the plunger thereof extending into the quadrant of the aforesaid arm, as and for the purpose specified. 3rd. The combination with the side bar A' provided with a suitable bracket, and the side bar A provided with a socket bracket, and the land wheel having the crank axle thereof extending through the bracket in the bar A' into the socket secured to the bracket a, of means as specified to prevent the longitudinal displacement of the crank axle, as and for the purpose specified. 4th. The combination with the side bars A A' provided with the ploughs and shanks suitably secured to the side bars, of the supplemental bar secured to the side bar A' at the rear, the interchangeable block D' arranged to take the place of the shank of the rear plough when it

is changed to increase the width of the furrow, as and for the purpose specified. 5th. The combination with the side bar and coulter, of the clip bolt passing around the coulter and the eccentric straight sided washer N² so placed to abutt the coulter or side bar, as and for the purpose specified.

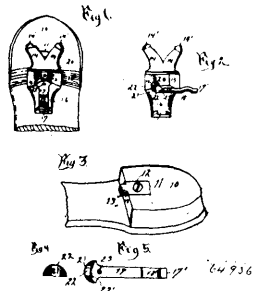
No. 64,935. Skirt Protector. (Protecteur de jupes.)



The Hensel-Colladay Company, assignees of George Simon Hensel, all of Philadelphia, Pennsylvania, U.S.A., 16th November, 1899; 6 years. (Filed 17th October, 1899.)

Claim.—1st. In a skirt protector, a separate piece of facing material superior to the heading of said protector secured to said heading on the side thereof. 2nd. A skirt protector, consisting of a head, a brush pendant therefrom, and a separate facing of material on the side of said head secured to the same.

No. 64,936. Ice Creeper. (Grappin.)

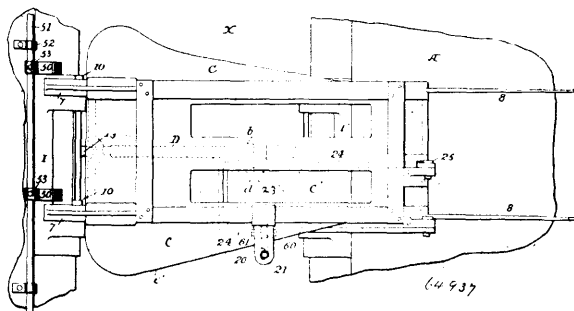


Henry Guenthee, assignee of Charles Feather and Arthur T. Saxton, both of Jamestown, New York, U.S.A., 16th November, 1899; 6 years. (Filed 18th October, 1899.)

Claim.—1st. A detachable ice creeper consisting of a plate fastened to the shoe heel and having a hooked projection extending beyond the inner edge of the heel and turned up toward the instep, a detachable plate provided with spurs, and having a lever for clamping said detachable plate to the shoe under said hooked plate, substantially as shown. 2nd. In combination with a detachable ice creeper, a metal production from the shoe heel, a lever having an eccentrically curved head for clamping under said projection to hold the creeper in place, substantially as shown. 3rd. In combination with a detachable ice creeper, a metal projection from the shoe heel, a lever having a cam shaped end and a cam shaped flange for clamping the creeper rigidly under said projection with a double draw, substantially as shown. 4th. A detachable ice creeper, consisting of metal plate fastened to the shoe heel and having a hooked projection in front of the heel, an angular plate provided with spurs and an opening for said projection, a lever fastened to said angular plate and means for locking said lever, an eccentrically curved head on said lever for clamping said angular plate to the shoe, substantially as shown and described. 5th. A detachable ice creeper, consisting of metal plate 11 and means for fastening to the shoe, projection 13 from plate 11, metal plate 14, 15, 16 provided with spurs 14', 14'', to engage the ice and opening 20 to receive projection 13 and the head of a clamping lever, spring lever 17 provided with cam shaped end 21 and cam shaped flange 22 for

clamping under said projection with a double draw, and a notch 19 for locking said lever, substantially as shown and described and for the purpose set forth.

No. 64,937. Mail Bag Gripping and Delivering Device.
(*Attrappe-sac de maille.*)

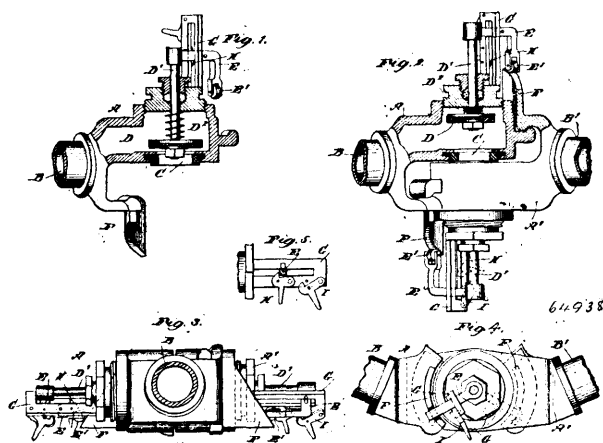


Simon Rice Patten and Alfred Millard, both of Omaha, Nebraska, U.S.A., 16th November, 1899; 6 years. (Filed 16th October, 1899.)

Claim.—1st. A bag gripping device for attachment to a mail car consisting of a hinged frame and a cross bar, a spring for throwing the frame inward toward the bar, a detent for holding the frame away from the bar, and a check piece adapted for attachment to the jaws of an opening in the car, substantially as set forth. 2nd. The combination with a car having a side opening, of a bag gripping device comprising a hinged frame, a cross bar, a spring arranged to throw the frame inward toward to bar, and a detent for holding the frame outward, arranged to be struck by the pouch passing along the inner face of the frame, substantially as set forth. 3rd. The combination with the cross bar D, of the frame C for engaging a pouch supported by a crane, a support to which the frame is pivoted and a flange 9 at the pivoted end of the frame, substantially as set forth. 4th. The combination of a car having an opening, a bar extending across said opening, and a pouch engaging frame pivoted at one side of said opening, and provided near its pivoted point with a bearing face for receiving the impact of the pouch, substantially as set forth. 5th. The combination of a car having an opening, a bar extending across said opening, and a pouch engaging frame pivoted at one side of said opening, and provided near its pivoted point with a bearing face extending inward from the pivot, substantially as set forth. 6th. The combination with a car having a side opening, of a bag gripping device comprising a hinged frame, means for limiting the outward movement of the frame, a cross bar, a spring arranged to swing the frame inward toward the bar, and a detent for holding the frame in proper position, substantially as set forth. 7th. The combination with a car having a side opening, a hinged frame C, and actuating spring, of a cross bar and means on the car for supporting the same movably in its position, substantially as set forth. 8th. The combination with a car having a side opening, of a gripping frame pivoted to the car at one side of the opening, a gripping bar pivoted at one side of the opening to swing horizontally across it, a detent for holding the frame in its outward position, and spring for swinging the frame inward, substantially as set forth. 9th. The combination with a car having a side opening, of a frame pivoted at one side of said opening and provided with projecting arms 8, 8, and a bar extending across the opening, substantially as and for the purpose set forth. 10th. The combination with a car having a side opening, of a bolt or detent arranged to engage a link attached to a pouch to be delivered at the station, a trigger arranged to make contact with a pouch supported in position to be delivered to the car, and connections between said trigger and said detent, substantially as set forth. 11th. The combination with a pouch engaging frame and means for delivering the pouch to a car, of a detent carried by the frame and arranged to engage a link connected to a pouch, and a trigger, also carried by the frame in position to be operated by a pouch engaged by the frame and connected to operate said detent, substantially as set forth. 12th. The combination with the pivoted frame C, of a bar pivoted to said frame and consisting of two sections, one tubular to receive the other and a spring arranged within the tube and bearing upon the section sliding therein, substantially as set forth. 13th. The combination with the frame C, of a bar D pivoted thereto and provided with a sliding section 16 having an end adapted to a socket upon the frame of the door, a spring bearing on the sliding section, and means for drawing back the latter, substantially as set forth. 14th. The combination with the crane and its supporting arms, of pivoted blocks each provided with a rigid clip, substantially as set forth. 15th. The combination with a crane arranged adjacent to the track, of a receiving trough having the rear portion inclined in respect to the receiving end, substantially as described. 16th. The pouch receiving trough having the inclined sides 41, 41, substantially as described. 16th. The combination of the frame C, spring for throwing it inward and locking devices for retaining it in its inner position, substantially as described. 18th. The combination with

the check pieces I, the frame C, hinged thereto, and the flanges 7 on the frame, of the blocks, the vertically movable rod to which the blocks are secured, and means to move the rod and blocks vertically, substantially as and for the purpose set forth. 19th. The frame C combined with the bar D and provided with an incline c, substantially as described. 20th. An attachment for the arms of a bag supporting crane consisting of blocks provided with hooks and pivots or bearings adapted for application at an angle to the arms, substantially as described. 21st. A crane comprising an upright, lower and upper arms connected to and extending laterally from the upright, a block with a bag engaging device at its lower end pivotally mounted adjacent to its upper end on the upper arm whereby it is free to swing on the arm and will normally rest with the said device depending, and a block with a bag engaging device at its upper end pivotally mounted adjacent to its upper end on the lower arm of the crane whereby it is free to swing on the arm and will normally rest with the engaging device uppermost, substantially as specified. 22nd. A crane comprising an upright, lower and upper arms connected to and extending laterally from the upright and having the downwardly and upwardly inclined end portions, respectively, a block with a bag engaging device at its lower end pivotally mounted adjacent to its upper end on the bent portion of the upper arm, and a block with an engaging device at its upper end pivotally mounted adjacent to its upper end on the bent portion of the lower arm of the crane, substantially as specified.

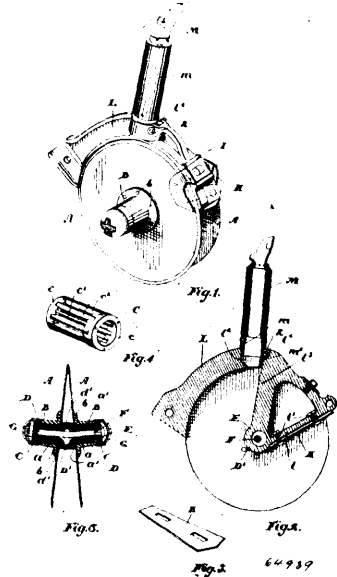
No. 64,938. Hose Coupling. (*Joint de boyau.*)



Walter G. Miller, William L. Harris and Fred Crisfield, all of Lodi, New York, U.S.A., 16th November, 1899; 6 years. (Filed 10th April, 1899.)

Claim.—1st. In a hose coupling, the combination of two members adapted to be locked together, and each provided with a valve, means for holding said valves open when the members are locked together, and means for allowing the valve in the forward member to completely close and in the rearward member to partially close, upon separation of the members, substantially as shown and described. 2nd. A hose coupling provided with a member having a valve seat, a spring pressed valve for said seat, an arm carried by the stem of the valve, and adapted to be engaged by an incline on the other member, whereby the valve will be open when the members are coupled, and have a tendency to completely close when the coupling between the members is broken and means for limiting the inward movement of said arm and that of the valve stem, to prevent said valve from completely seating itself, substantially as shown and described. 3rd. A hose coupling provided with a member having a valve seat, a spring pressed valve for said seat and having a stem extending to the outside of the member, an arm on said valve stem, a guideway for said arm, and a latch for engaging said arm and locking the latter and the valve in an outermost position, as set forth. 4th. A hose coupling, provided with a member having a valve seat, a spring pressed valve for said seat and having a stem extending to the outside of the member, an arm on said stem, a guideway for said arm and in which it is adapted to slide, and means for obstructing said guideway whereby to prevent said arm from sliding therein, as set forth. 5th. In a hose coupling, the member provided with a valve spring pressed upon said seat and having a stem extending to the outside of the member, a guideway on said member, a bent arm connected to said stem and inserted through said guideway, through said guideway, said arm being provided at its lower end with a roller adapted to ride upon an incline on the other member of the coupling to hold the valve open when the members are coupled, and latches on said guideway and arranged to be swung over the opening therein whereby to engage with said arm and prevent the seating of the valve when the members are uncoupled, as set forth.

No. 64,939. Apparatus for Converging Double Discs for Seeding Machinery. (*Appareil à converger les disques doubles pour semoirs.*)



The Massey-Harris Company, assignee of William F. Johnston and William John Clokey, and Charles McLeod, all of Toronto, Ontario, Canada, 16th November, 1899; 6 years. (Filed 23rd October, 1899.)

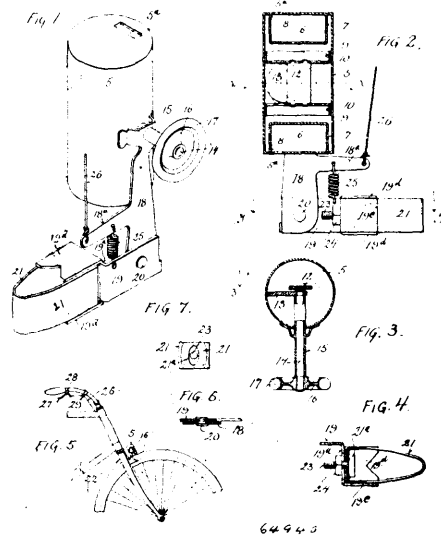
Claim.—1st. The combination, with a boot and downwardly extending arm and hollow deflected axle forming part thereof, of the converging discs abutting the shoulders at the centre of the axle, the hubs secured to the discs, the roller bearings interposed between the hollow axle and hubs and means for retaining such bearings in position, as and for the purpose specified. 2nd. The combination, with a boot and downwardly extending arm and hollow deflected axle forming part thereof, of the converging discs abutting the shoulders at the centre of the axle, the hubs secured to the discs, the roller bearings interposed between the hollow axle and hubs, the deflected bolt extending through the hollow axle and the end washers held in position thereby, as and for the purpose specified. 3rd. The combination, with a boot and downwardly extending arm and hollow deflected axle forming part thereof, of the converging disc abutting the shoulders at the centre of the axle, the hubs secured to the disc, and having the internal diameter greater than the central hole of the discs, so as to leave a shoulder, the roller bearing cages abutting the shoulder, the washer and deflected bolt extending through the hollow axle and designed to hold the washer in position, as and for the purpose specified. 4th. The combination, with the converging discs and boot, of the cross recess in the rear portion of the boot and the scrapers held therein and bent outwardly, so as to have their outer edges lying in proximity to the discs and a bolt extending through the scrapers and designed to hold the same in place on the boot, as and for the purpose specified. 5th. The combination, with the boot and arms attached to or forming part of the axle, the converging discs having bearings on the axle, the radial arm at the rear lower end of the boot and the straight tapered scraper plate and bolt securing it to the radial arm of the boot, as and for the purpose specified. 6th. The combination, with the boot having the radial arm attached to or forming part of the axle, the grain direct in orifice located in front of the arm of the boot and the telescopic grain spout having the lower end fitting into the orifice in the boot and means for holding the said lower end in position, as and for the purpose specified. 7th. The combination, with the boot and converging discs suitably journaled on the axle forming part of the boot, of the scrapers secured to the boot and extending so that the scraping edge is in proximity to the face of the discs near their periphery and the inner portion of the edge extends above the radial line from the centre of the axle to the outer corner of the edge of the scraper whereby the soil is thrown inwardly, as and for the purpose specified.

No. 64,940. Alarm Mechanism. (*Mécanisme d'alarme.*)

Thomas H. Bowles, Milwaukee, Wisconsin, U.S.A., assignee of James M. Butcher, Denver, Colorado, 16th November, 1899; 6 years. (Filed 5th August, 1899.)

Claim.—1st. An alarm mechanism, comprising a casing having a whistling chamber in each extremity communicating with the outer air by way of an orifice formed in the head of the casing, and communicating with the main chamber by another orifice, a piston having two separated members suitably connected, a revoluble disc located between said members and having its periphery in contact with both, a spindle journaled in the casing, the disc being eccen-

trically mounted on the spindle for the purpose set forth. 2nd. An alarm mechanism comprising a casing having a whistling chamber



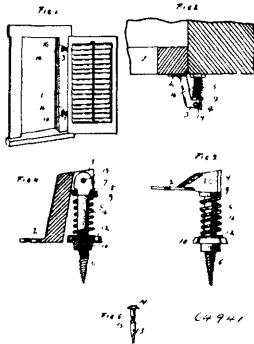
trically mounted on the spindle for the purpose set forth. 2nd. An alarm mechanism comprising a casing having a whistling chamber in each extremity communicating with the outer air by way of an orifice formed in the end of the casing and with the main chamber by another orifice, a piston having two separated members suitably connected, a revoluble disc located between said members, and having its periphery in contact with both members, a spindle journaled in the casing, the disc being eccentrically mounted on the spindle, and means for rotating the spindle, comprising an exterior friction wheel fast on the spindle, adapted to be brought in contact with the rotating part. 3rd. A bicycle alarm, comprising a casing having a whistling chamber communicating by an orifice with the outer air, and communicating by another orifice with the main chamber, a reciprocating piston composed of two separated members, a disc located between said members, which are operated by the engagement of its periphery, a spindle journaled in the casing, and upon which the said disc is eccentrically mounted, an exterior friction wheel fast on the spindle, a clamp arranged to fasten the device to the frame of a bicycle in proximity to one of the wheels, and a suitable connection between the casing and clamp, whereby the movement of the casing in the arc of a circle brings the friction wheel into contact with tire of the bicycle wheel. 4th. The combination with a casing constructed to produce a whistling sound as the air is forced out of it, a piston composed of two separated members located in said casing, a disc located between the said members and having its periphery in contact with both members, a spindle upon which the disc is eccentrically mounted, and means for rotating the spindle. 5th. In a bicycle alarm mechanism, the combination with a casing constructed to emit a whistling sound as the air is forced out from within, a reciprocating piston composed of two separated members, a disc located between the members, which are operated by the engagement of its periphery, a spindle journaled in the casing and upon which the said disc is eccentrically mounted, and an exterior friction wheel fast on the spindle, of a clamp adapted to connect the device with the bicycle frame, a depending arm attached to the casing and pivotally connected with the clamp arm, the depending arm being provided with a projection, a spring connecting said projection with the clamp arm, a lever mounted on the handle bar, and a flexible connection between said lever and the projection on the depending arm of the casing, whereby the pulling of the cord actuates the casing in the arc of a circle and throws the friction wheel into contact with the bicycle wheel.

No. 64,941. Spring Hinge. (*Gond à ressort.*)

Rollin P. Whipple, Greenfield, Massachusetts, U.S.A., 16th November, 1899; 6 years. (Filed 19th July, 1899.)

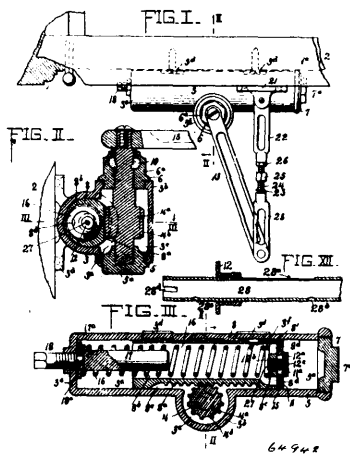
Claim.—1st. In a spring hinge, the combination with the leaf formed with integral lugs, the sides of which are bevelled, of the bracket adapted to be secured to the window frame, formed with a screw threaded hole, the shank having a flattened head at one end and the other end tapered and formed with wood screw threads and the cylindrical portion of said shank formed with square wood threads joining said wood screw threads, the adjusting nut engaging said square threads, the coiled spring and the pintle, substantially as described. 2nd. In a spring hinge, the combination with the leaf formed with integral lugs, the sides of which are bevelled, of the shank having a flattened head and formed with a tapering end formed with wood screws threads and with square threads joining

the same, the movable collar, the adjusting nut, the bracket having a screw threaded hole therein, the coiled spring, and the tapering



plunger having a head at one end and a curved or rounded peripheral groove intermediate the said tapered end and head, substantially as described.

No. 64,942. Door Check and Closer.
(*Fermeture de portes.*)



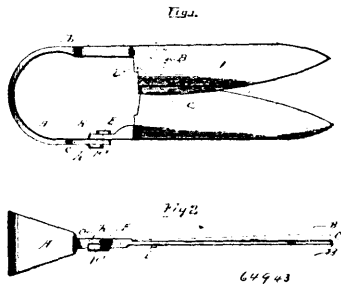
Pher J. Lemart, Stamford, Connecticut, U.S.A., 16th November, 1899; 6 years. (Filed 25th August, 1899.)

Claim.—1st. A combined door check and closer, comprising a casing constructed with a horizontal cylindrical body providing a plunger chamber, and with a transverse cylindrical projection providing a vertical spindle chamber, the plunger chamber and the spindle chamber being merged one into the other, a hollow valved plunger closely fitting in the plunger chamber, providing a spring chamber, and having a rack and a recess for the rack on the outer circumference of the plunger, and extending across the spindle chamber, and cutting off communication between the ends of the plunger chamber and the spindle chamber, whereby the liquid in the former is prevented from having free access to the latter, a rotary spindle having teeth meshing with the rack, and a closing spring, substantially as described. 2nd. A combined door check and closer, comprising a casing constructed with a horizontal cylindrical body providing a plunger chamber, and with a transverse cylindrical projection providing a vertical spindle chamber, the plunger chamber and the spindle chamber being merged one into the other, a hollow plunger closely fitting in the plunger chamber providing a spring chamber, and having a head provided with ports, and a rack on the outer circumference of the plunger and extending across the spindle chamber and cutting off free communication between the ends of the plunger chamber and the spindle chamber, a follower having a central port, a headed sleeve whereby the follower is secured to the head of the plunger, a rotary spindle having teeth meshing with the rack, and a closing spring, substantially as described. 3rd. A door check, comprising in its construction a spring actuated plunger, a spindle operatively connected with the plunger, a head loosely mounted on the plunger and adapted to slide thereon, and means for permitting the liquid to escape past the sliding head, substantially as described. 4th. A combined door check and closer, comprising a plunger constructed with a head having ports, a sliding follower or valve having a port adapted to control the passage of fluid through the head, and means whereby the follower or valve is loosely connected with the head, substantially as described. 5th. A combined door check and closer, comprising a plunger constructed with a head having ports

near its circumference, and a central opening, a sliding follower or valve having a central opening, and a tubular support connected with the central opening of the head, and on which the follower or valve is loosely mounted, substantially as described. 6th. A combined door check and closer, comprising a plunger constructed with a head having ports near its circumference and a screw threaded central opening, a sliding follower or valve having a central opening, and a screw threaded sleeve having a head adjustably connected with the central opening of the head of the plunger, the follower or valve being loosely mounted on the sleeve, substantially as described. 7th. A combined door check and closer comprising a casing having a horizontal body providing a plunger chamber, and a transverse projection providing a vertical spindle chamber, a hollow plunger providing a spring chamber and formed with a head having ports, and with a rack, and closely fitting chamber, the headed sleeve secured to the head of the plunger, the follower having a central port and friction ring and playing between the head of the plunger and the head of the sleeve, a spindle having teeth meshing with the rack, and a closing spring, substantially as described. 8th. A combined door check and closer comprising a casing having a horizontal body providing a plunger chamber and a transverse projection providing a vertical spindle chamber, a hollow plunger providing a spring chamber and formed with head and with a rack, and closely fitting in the plunger chamber, the tube having ports and extending through the head of the plunger, the headed sleeve, the follower, the rotatable rod having a longitudinal recess, a spindle having teeth meshing with the rack, and a closing spring, substantially as described. 9th. A combined door check and closer comprising a casing having a horizontal body providing a plunger chamber, and a transverse projection providing a vertical spindle chamber, a hollow plunger providing a spring chamber and formed with a head and with a rack and closely fitting in the plunger chamber, the tube having a longitudinal groove and a port, and extending through the head of the plunger, the rotatable screw threaded rod having a longitudinal recess, an adjustable screw threaded flange tube, mounted on the rod, a closing spring, means for rotating the rod to adjust the tube and spring, and a spindle having teeth meshing with the rack, substantially as described. 10th. A combined door check and closer comprising a casing, a spindle, a curved main arm extending from the spindle above the casing to a point below the casing, a bracket and a connecting arm providing a hinged connection between the main arm and the bracket, substantially as described. 11th. A combined door check and closer comprising a casing constructed with a horizontal body providing a plunger chamber, and with a transverse projection providing a vertical spindle chamber, a hollow plunger closely fitting in the plunger chamber, formed with a rack and providing a spring chamber and extending across the spindle chamber and cutting off communication between the ends of the plunger chamber and the spindle chamber, a spindle having teeth meshing with the rack, and a closing spring extending from one end of the plunger chamber into the spring chamber of the plunger, substantially as described. 12th. A combined door check and closer comprising a casing constructed with a horizontal body providing a plunger chamber, and with a transverse projection providing a vertical spindle chamber, a hollow valved plunger closely fitting in the plunger chamber, formed with a rack and providing a spring chamber, and extending across the spindle chamber and cutting off communication between the ends of the plunger chamber and the spindle chamber, a spindle having teeth meshing with the rack, a closing spring extending from one end of the plunger chamber into the spring chamber of the plunger, a rod supporting the spring and having a flange against which the end of the spring is adapted to bear and means whereby the rod is adjusted to control the tension of the spring, substantially as described. 13th. A combined door check and closer comprising a casing constructed with a horizontal body providing a plunger chamber, and with a transverse projection providing a vertical spindle chamber, a hollow valved plunger closely fitting in the plunger chamber, formed with a rack and providing a spring chamber, and extending across the spindle chamber and cutting off communication between the ends of the plunger chamber and the spindle chamber, a spindle having teeth meshing with the rack, a closing spring extending from one end of the plunger chamber into the spring chamber of the plunger, a screw threaded rod supporting one end of the spring, an adjustable screw threaded tube provided with a flange against which the end of the spring is adapted to bear, and means whereby the rod is rotated and the rod is rotated and the flanged tube adjusted to control the tension of the spring, substantially as described. 14th. A combined door check and closer comprising a casing constructed with a horizontal body providing a plunger chamber, and with a transverse projection providing a vertical spindle chamber, a hollow plunger closely fitting in the plunger chamber, formed with a rack and providing a spring chamber, and extending across the spindle chamber and cutting off communication between the ends of the plunger chamber and the spindle chamber, a spindle having teeth meshing with the rack, a closing spring extending from one end of the plunger chamber into the spring chamber of the plunger, a screw threaded rod supporting one end of the spring, an adjustable screw threaded tube provided with a flange against which the end of the spring is adapted to bear, and means whereby the rod is rotated and the rod is rotated and the flanged tube adjusted to control the tension of the spring, substantially as described. 15th. A combined door check and closer comprising a casing constructed with a horizontal body providing a plunger chamber, and with a transverse projection providing a vertical spindle chamber, a hollow plunger closely fitting in the plunger chamber, formed with a head having ports, and with a rack, and providing a spring chamber and ex-

tending across the spindle chamber and cutting off communication between the ends of the plunger chamber and the spindle chamber, a follower having a port, means whereby the follower is loosely connected with the head of the plunger, a spindle having teeth meshing with the rack, and a closing spring extending from one end of the plunger chamber into the spring chamber of the plunger, substantially as described. 16th. A combined door check and closer comprising a casing constructed with a horizontal body providing a plunger chamber, and with a transverse projection providing a vertical spindle chamber, a hollow plunger closely fitting in the plunger chamber, formed with a head having ports and with a rack, and providing a spring chamber and extending across the spindle chamber and cutting off communication between the ends of the plunger chamber and the spindle chamber, a follower having a port, a screw threaded sleeve whereby the follower is adjustably and loosely connected with the head of the plunger, a spindle having teeth meshing with the rack, and a closing spring extending from one end of the plunger chamber into the spring chamber of the plunger, substantially as described. 17th. A combined door check and closer comprising a casing constructed with a horizontal body providing a plunger chamber, and with a transverse projection providing a vertical spindle chamber, a hollow plunger closely fitting in the plunger chamber, formed with a head having ports, and with a rack, and providing a spring chamber, and extending across the spindle chamber and cutting off communication between the ends of the plunger chamber and the spindle chamber, a follower having a port, and a spring packing or friction ring surrounding the follower, means whereby the follower is loosely connected with the head of the plunger, a spindle having teeth meshing with the rack, and a closing spring extending from one end of the plunger chamber into the spring chamber of the plunger, substantially as described. 18th. A combined door check and closer comprising a casing constructed with a horizontal body providing a plunger chamber, and with a transverse projection providing a vertical spindle chamber, a hollow plunger closely fitting in the ends of the plunger chamber, formed with a head having ports and with a rack, and providing a spring chamber, and extending across the spindle chamber and cutting off communication between the ends of the plunger chamber and the spindle chamber, a follower having a port, a sleeve whereby the follower is loosely connected with the head of the plunger, a tube having a gradually deepening groove at one side and extending through the sleeve, a spindle having teeth meshing with the rack, and a closing spring extending from one end of the plunger chamber into the spring chamber of the plunger, substantially as described. 19th. A combined door check and closer comprising a casing constructed with a horizontal body providing a plunger chamber, and with a transverse projection providing a vertical spindle chamber, a hollow plunger closely fitting in the plunger chamber, formed with a head having ports, and with a rack, and providing a spring chamber and extending across the spindle chamber and cutting off communication between the ends of the plunger chamber and the spindle chamber, a follower having a port, a sleeve whereby the follower is loosely connected with the head of the plunger, a tube having ports on the opposite sides of the plunger head and extending through the sleeve, a rod having a longitudinal recess and extending into the tube for controlling the passage of the liquid through the port of the latter communicating with the spring chamber, a spindle having teeth meshing with the rack, and a closing spring extending from one end of the plunger chamber into the spring chamber of the plunger, substantially as described.

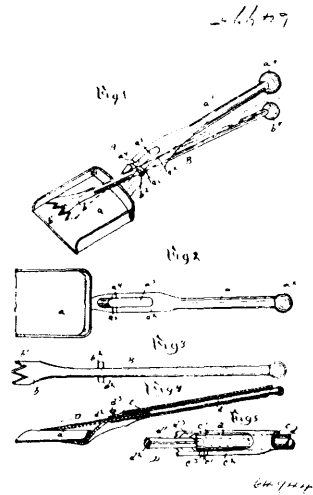
No. 64,913. Shears. (Forces.)



Frank Macri, Huntington, Oregon, U.S.A., 16th November, 1899; 6 years. (Filed 4th October, 1899.)

Claim.—In a pair of shears, composed of two distinct parts, the combination of the parts consisting of the spring bow A, provided with the handle or shank *b*, the blade B, the handle or shank *c*, the lip E, forming with the shank *c*, the groove *g*, with the part consisting of the blade C, provided with the shank *k*, the lip F, forming with the shank *k*, the groove *h*, which two said parts may be joined together and detached from one another by means of the joint produced by adjusting the shanks *c* and *k*, the grooves *g* and *h*, the lips E and F, and the blades B and C, substantially as described.

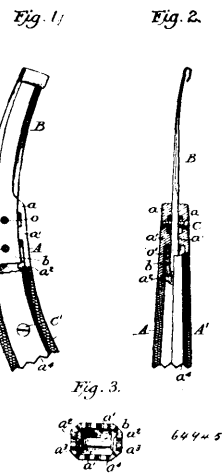
No. 64,944. Shovel, Poker and Tong. (Pelle, bisonnier et pinettes.)



Robert G. Cox, Urich, Missouri, U.S.A., 16th November, 1899; 6 years. (Filed 18th October, 1899.)

Claim.—1st. An implement comprising separate jaws and handle bars connected with said jaws, one of said bars having an outwardly curved longitudinally slotted portion, and depressions in the sides of said slot, grooved rearwardly in the line of direction of said handle, and pivots upon the other bar adapted to be seated in the grooved depressions of the opposing bar. 2nd. An implement comprising a scoop and its handle bar, said handle bar having an outwardly curved, longitudinally slotted portion connected with the scoop, and depressions in the sides of said slotted portion grooved rearwardly in the line of direction of said handle and a separate bar or poker in said slot extending to the said scoop, and pivots upon said poker adapted to be seated in the said grooved depressions in the handle bar.

No. 64,945. Knife. (Contour.)

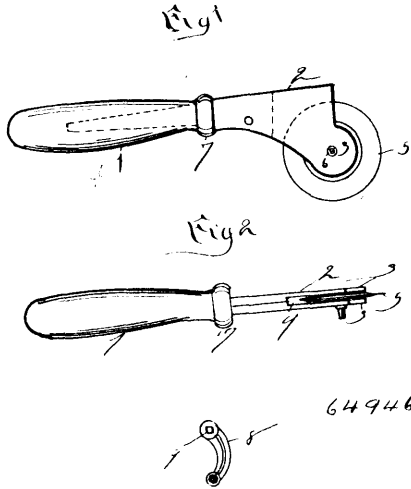


Tjerck J. Pope, Sanquoit, New York, U.S.A., 16th November, 1899; 6 years. (Filed 3rd October, 1899.)

Claim.—1st. A farrier's knife, consisting of the handle having one end serrated for the purpose set forth, and the blade secured within and projecting from the other end thereof, substantially as described. 2nd. In a knife, the combination with the blade having a transverse hole through its shank, of the hollow handle having in one end a recess for the reception of said shank and in its body

aligned holes at right angles thereto, and lugs so located within said body that when the end of the shank rests against them the hole therein aligns with those in the handle, and a screw removably inserted through these holes, as and for the purpose set forth. 3rd. In a knife, the combination with the blade B, having a plurality of holes *o o'* through its shank *b*, of the handle made in complimentary sections *A A'*, having meeting ribs *a a'* internally recessed for the reception of said shank, and meeting lugs *a''* adapted to abut against the end of the shank when in place, the length of the latter being such that when it is so located a fastening device C can be passed through one of its holes and through an aligned pair of holes in the handle, all as and for the purpose set forth.

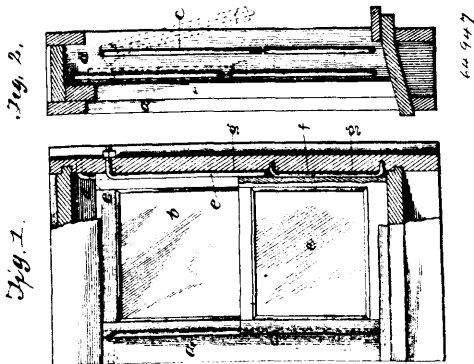
No. 64,946. Rotary Knife. (*Couteau rotatoire.*)



William L. Noble, Victor, West Virginia, U.S.A., 16th November, 1899; 6 years. (Filed 25th October, 1899.)

Claim.—1st. A hand rotary knife comprising a handle, a shaft journalled in said handle, a disc cutter fast on said shaft, and a crank arm on said shaft, for the purpose and substantially as described. 2nd. In a rotary knife adapted to be operated by hand, the shaft which carries the circular rotary knife extended outside of its bearing in the handle and squared on its extended end to adapt it to receive a detachable means for rotating the knife in contact with a whetstone, substantially as described. 3rd. As a new article of manufacture, a rotary knife comprising a handle for operating it, and a shaft journalled in said handle and carrying the circular knife fast thereon, said shaft projecting at one side outside of its bearing and being squared on said projecting end to adapt it to receive a removable crank-arm, substantially as described. 4th. As a new article of manufacture, a rotary knife comprising a suitable handle, a slotted shank secured in said handle, a shaft journalled in bearings in said shank and provided with a polygonally shaped projecting end, a cutter disc secured to said shaft to rotate with it, and a removable crank arm adapted to engage the projecting end of the shaft for rotating the cutter in contact with a grinding surface, all substantially as and for the purpose described.

No. 64,947. Window Stops. (*Arrête-fenêtr.*)

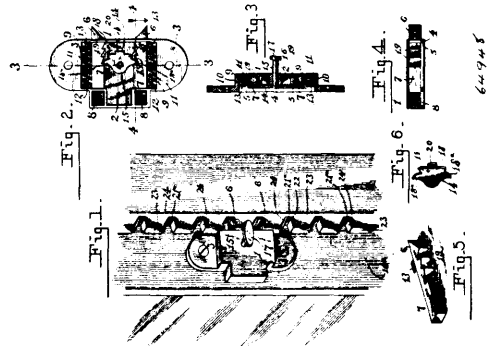


Harvey Keeler Doolittle, Watertown, New York, U.S.A., 16th November, 1899; 6 years. (Filed 31st August, 1899.)

Claim.—1st. In combination with a window frame, the combined stop and sash guide consisting of a suitable rod adapted to fit a groove in the sash and having one end pivoted to the window stile,

so that the stop guide may be placed either parallel with the frame to serve as a guide for the sash or swung out to enable the sash to be removed. 2nd. The combination with a window frame and sliding sashes, of independent stop guides for each sash, having a lower portion fixed to the frame and an upper portion pivoted, so as to enable the sash when moved on to such upper portion to be swung out of the frame, and whereby either sash may be so swung independently of the other, or both may be swung. 3rd. The combination with a window frame and a sliding sash, of stop guides engaging grooves in the outer edges of the sash stiles and extending the full length of the window opening exposing the sash, a portion of said stop guides being fixed at each end to the window stile, and the other portion having the upper end bent and swivelled to said stile, and the window frame constructed to form a pocket beyond the exposed opening, into which pocket the sash may be moved a sufficient distance to be disengaged from the fixed portion of the stop guide, so that the pivoted portion with the sash may be swung out. 4th. The combination with a window frame and a sliding sash, of combined fixed and pivotal stop guides engaging grooves in the outer edges of the sash stiles, the fixed portion having their ends bent and entering the window stiles, and the pivotal portion having their upper ends bent and entering said stiles, the window frame stiles having plain surfaces and the window frame constructed to form a pocket into which the sash may be moved to allow for its disengagement from the fixed stop guide, so that it may be swung out on the pivotal guide stops and removed therefrom.

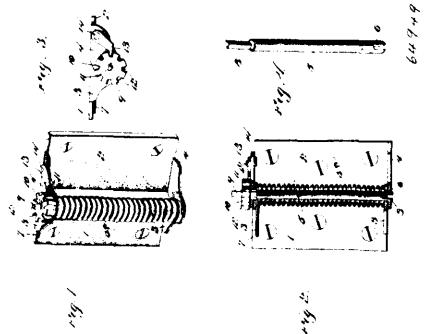
No. 64,948. Sash Fastener. (*Arrête-croisic.*)



Samuel J. Johnston, Leesburg, Virginia, U.S.A., 16th November, 1899; 6 years. (Filed 15th September, 1899.)

Claim.—1st. A sash fastener comprising a casing, a pair of spring-projected toothed locking bolts, slidably mounted in the casing in parallel planes, and an oscillatory toothed operating head mounted within the casing between the bolts, and normally engaged with both of the same, said operating head being provided at an intermediate point of its toothed portion with a stop tooth adapted to engage with either bolt to arrest the retraction thereof, substantially as set forth. 2nd. A sash fastener comprising a casing having aligned guides, a pair of sliding locking bolts mounted in the casing and working in the guides thereof, each of said bolts having an offstanding holding hook, and spaced from the adjacent wall of the casing, a retaining pin or stud arranged at one side of the recess between each bolt and the adjacent wall of the casing, and a coil spring located in the same recess at one side of the bolt, and respectively engaging with the retaining pin or stud and said holding hook, substantially as described.

No. 64,949. Spring Hinge. (*Peautre à ressort.*)

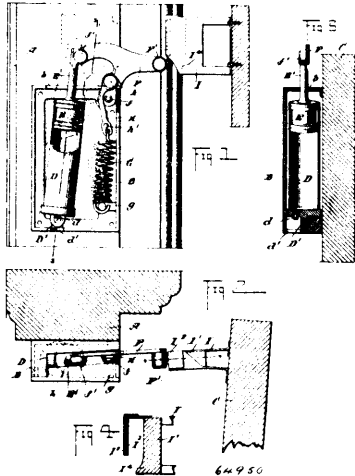


Philip R. Krause, Denny, Pennsylvania, U.S.A., 16th November, 1899; 6 years. (Filed 22nd September, 1899.)

Claim.—A spring hinge, comprising two leaves provided with overlapping horizontal eyes, a vertical pintle passing through the eyes and provided at its upper end with a non-circular portion and

having its lower end slotted, a coiled spring disposed on the pintle and having its lower end arranged within the slot of the pintle and resting upon one of the lower eyes whereby it is adapted to support the said pintle, a ratchet wheel arranged on the upper end of the pintle, and a pawl pivoted to one of the upper eyes and engaging the ratchet wheel, substantially as described.

No. 64,950. Door Check. (*Arrête-porte.*)



Charles Ernest Crabb and John William Bennet, both of Hensall, Ontario, Canada, 16th November, 1899; 6 years. (Filed 19th May, 1899.)

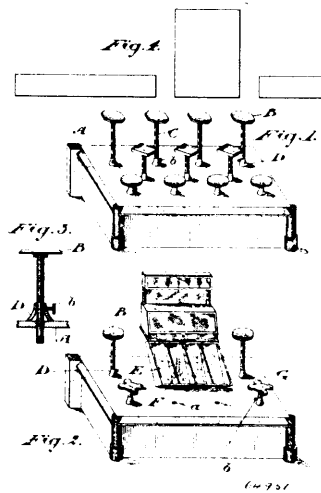
Claim.—1st. A door closing and check device, comprising a lever and means for positively engaging it with the door when it is closed, a dash pot connected with said lever, a spring connected with the lever and acting in opposition to the dash pot, and means for neutralizing the action of said spring when the lever is swung to a releasing position, substantially as described. 2nd. A door closing and check device, comprising two parts, one secured to the door and the other to the door jamb, one part having a pivoted lever adapted to lockingly engage the other part when the door is closed, and separate therefrom when the door is opened, a dash pot, and a spring connected with said lever and acting oppositely, and means for neutralizing the action of the spring when the lever is swung to the open position, substantially as described. 3rd. A door closing and check device, comprising two parts, one secured to the door and the other to the door jamb, one part having a slot extending substantially parallel with the plane of the door and opening at one end toward the side, the other part having a pivoted lever provided with a pin adapted to enter the slot in the other part when the door is closed, a dash pot, and a spring connected with said lever and acting oppositely, and means for neutralizing the action of the spring when the lever is swung to the open position, substantially as described. 4th. A door closing and check device, comprising two parts, one secured to the door and the other to the door jamb, one part having a slot extending substantially parallel with the plane of the door and opening at one end toward the side, the other part having a pivoted lever provided with a pin adapted to enter the slot in the other part when the door is closed, a dash pot, and spring connected with said lever and acting oppositely, the connection of the said spring with the lever being carried to or past the line through the lever pivot and the support for the other end of the spring when the door is opened, whereby the action of the spring is neutralized, substantially as described.

No. 64,951. Window Fitting. (*Arrangement de fenêtres.*)

George Kaitting, Galt, Ontario, Canada, 16th November, 1899; 6 years. (Filed 1st June, 1899.)

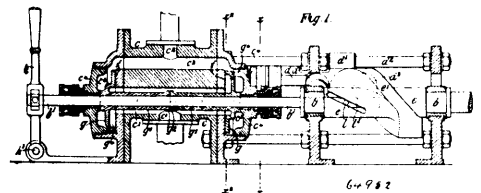
Claim.—1st. As a window fitting a table or goods receptacle carried by a vertical standard passing through the floor of the window and vertically adjustable to project to a greater or lesser extent above the said floor, substantially as and for the purpose specified. 2nd. As a window fitting a table or goods receptacle carried by a vertical standard passing through the floor of the window, in combination, with a base casting resting on the said floor, and in which the said standard is vertically adjustable, substantially as and for the purpose specified. 3rd. As a window fitting a table or goods receptacle carried by two vertical standards passing through the floor of the window, in combination with base castings resting on the said floor and in which the said standards are vertically adjustable, substantially as and for the purpose specified. 4th. As a window fitting a table or goods receptacle carried by a vertical standard passing through the floor of the window, in combination with a goods receptacle hinged at one side to the front of the aforesaid table or goods receptacle and at the other resting on the floor of the window, substantially as and for the purpose specified. 5th. As a window fitting a table or goods receptacle carried by two vertical standards passing through the floor of the window, in combination with base castings resting on the said floor and in which the said standards are vertically adjustable, and a goods receptacle hinged at one side to the front of the aforesaid table or goods receptacle and at the other resting on the floor of the window, substantially as and for the purpose specified. 6th. As a window fitting a table or goods receptacle carried by two vertical standards passing through the floor of the window, in combination with base castings resting on the said floor and in which the said standards are vertically adjustable, a screw secured to the bottom of the table or receptacle and passing through the floor of the window, and a nut upon the said screw adapted to engage the said floor for the purpose of raising the table or receptacle, substantially as and for the purpose specified. 7th. In window fitting a series of tables or goods receptacles each carried by a vertical standard passing through the floor of the window and vertically adjustable so that different tables may be set at different heights, substantially as and for the purpose specified. 8th. A window floor provided with a series of holes, in combination with a series of tables or goods receptacles each connected to a suitable standard of a suitable size to fit the aforesaid holes, and a series of base castings through which the said standards are adjustable, and which are adapted to rest on the aforesaid floor to steady the standards and to hold the standards with the tables at such a height above the floor as has been determined by the adjustment, substantially as and for the purpose specified.

justable, substantially as and for the purpose specified. 4th. As a window fitting a table or goods receptacle carried by a vertical



standard passing through the floor of the window and vertically adjustable to project to a greater or lesser extent above the said floor, in combination with a goods receptacle hinged at one side to the front of the aforesaid table or goods receptacle and at the other resting on the floor of the window, substantially as and for the purpose specified. 5th. As a window fitting a table or goods receptacle carried by two vertical standards passing through the floor of the window, in combination with base castings resting on the said floor and in which the said standards are vertically adjustable, and a goods receptacle hinged at one side to the front of the aforesaid table or goods receptacle and at the other resting on the floor of the window, substantially as and for the purpose specified. 6th. As a window fitting a table or goods receptacle carried by two vertical standards passing through the floor of the window, in combination with base castings resting on the said floor and in which the said standards are vertically adjustable, a screw secured to the bottom of the table or receptacle and passing through the floor of the window, and a nut upon the said screw adapted to engage the said floor for the purpose of raising the table or receptacle, substantially as and for the purpose specified. 7th. In window fitting a series of tables or goods receptacles each carried by a vertical standard passing through the floor of the window and vertically adjustable so that different tables may be set at different heights, substantially as and for the purpose specified. 8th. A window floor provided with a series of holes, in combination with a series of tables or goods receptacles each connected to a suitable standard of a suitable size to fit the aforesaid holes, and a series of base castings through which the said standards are adjustable, and which are adapted to rest on the aforesaid floor to steady the standards and to hold the standards with the tables at such a height above the floor as has been determined by the adjustment, substantially as and for the purpose specified.

No. 64,952. Distributing Gear for Fluid Pressure Engines. (*Engrenage de distribution pour machines à pression de fluides.*)

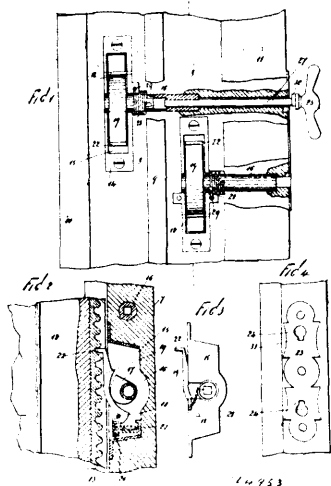


Charles H. Beadle, Cowes, Isle of Wight, England, 16th November, 1899; 6 years. (Filed 27th September, 1898.)

Claim.—1st. Distributing gear for fluid pressure engines, wherein rotary distributing valves are arranged opposite each other and are kept at a predetermined distance apart by distance pieces so that the fluid-pressure cannot increase the friction between the said valves and their seats. 2nd. Rotary distributing valves arranged opposite each other, one at each end of a cylinder and having tubular valve-stems of such length that they bear against each other when the valves are in contact with their seats respectively, for the purpose specified. 3rd. A fluid pressure engine, in which

the axis of the driving shaft is parallel to the axis of the cylinders, and rotary distributing valves are mounted on the said shaft, one at each end of the cylinders, and are kept apart by distance pieces, substantially as and for the purposes described. 4th. The combination, with the driving shaft, of rotary distributing valves mounted on an extension thereof, and kept apart by distance pieces, and means for changing the position of the said valves relatively to the cylinder ports, substantially as and for the purposes described. 5th. The combination of a cylinder having a valve-seat at each end thereof rotary valves working on said seats, a rotary spindle, on which said valves are keyed, and distance pieces between said valves, substantially as and for the purposes described. 6th. The combination of a cylinder having a valve-seat at each end thereof, rotary valves working on said seats, a rotary spindle, on which said valves are keyed, distance pieces between said valves, the main or driving shaft, and a driving connection between said main shaft and valve spindle, substantially as and for the purposes described. 7th. A rotary distributing valve having a receiver on the back thereof, substantially as and for the purposes described. 8th. Rotary distributing valves mounted on a spindle which is connected with the driving shaft, through the medium of adjustable gearing, whereby the position of the valves can be changed to vary the cut-off or reverse the motion of the engine, substantially as described. 9th. The combination of a cylinder having a valve-seat at each end, rotary valves working on said seats, a rotary spindle, on which said valves are keyed, distance pieces between said valves, the main or driving shaft, and adjustable gearing connecting said shaft and spindle, whereby the position of said valves can be changed, substantially as and for the purposes described.

No. 64,953. Sash Fastener. (Arrête croisée.)

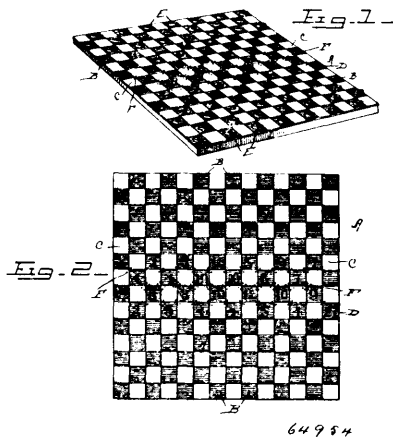


Allen Paul Heidt, Bay Shore, New York, U.S.A., 16th November, 1899; 6 years. (Filed 28th September, 1899.)

Claim.—1st. A window sash provided with a rack bar at one side thereof and a casing countersunk in the frame of the window adjacent to said sash, a spring operated shaft passing through said casing and provided with a cam, a lever mounted in said casing and adapted to be operated by said cam, said lever being adapted at one end to operate in connection with said rack bar, and means for operating said shaft, substantially as shown and described. 2nd. A window sash provided with a rack bar at one side thereof, and a casing countersunk in the frame of the window adjacent to said sash, a spring operated shaft passing through said casing and provided with a cam, a spring operated lever mounted in said casing and provided with two parts in connection with which said cam is adapted to operate, said lever being provided at one end with a lug or projection which is adapted to operate in connection with said rack bar, and means for operating said shaft consisting of a key which is adapted to be passed through the side of the window frame, substantially as shown and described. 3rd. A window frame provided with the usual sashes, a casing mounted in the frame between said sashes, a spring operated shaft passing through said casing and provided with a cam, a spring operated lever mounted in said casing and adapted to be operated by said cam, said lever being provided at one end with a cross head adapted to operate in connection with rack bars and secured to the sashes, and means for operating said shaft, substantially as shown and described. 4th. In a lock, a casing, a spring operated shaft passing therethrough and provided with a cam, means for operating said shaft, and a spring operated lever mounted in said casing and adapted to be

operated by said cam, said levers being curved and provided with two different parts in connection with which said cam is adapted to operate, substantially as shown and described. 5th. The combination with a window frame and sash, the sash being provided with a rack bar, of a lock mounted in said frame and comprising a shaft provided with a cam, a lever adapted at two different points to be operated by said cam and to engage with said rack bar, and means for operating said shaft, substantially as shown and described. 6th. A lock comprising a spring operated shaft provided with a cam, means for operating said shaft, and a spring operated lever provided centrally and adjacent to one end thereof with an inwardly directed projection in connection with both of which said cam is adapted, substantially as shown and described. 7th. The combination with a window frame of a sash lock which is mounted therein between the spaces occupied by the sashes, said lock being provided with a lever having a cross head at one end which is adapted to operate in connection with rack bars secured to the sashes, and means for operating said lever, substantially as shown and described.

No. 64,954. Game Board. (Table de jeu.)

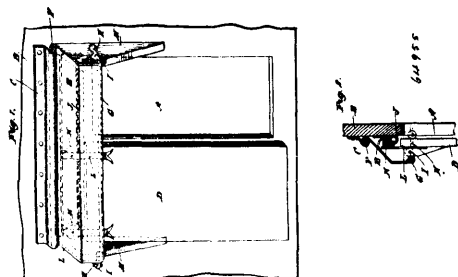


George Newton Ballou, Eugene, North Carolina, U.S.A., 16th November, 1899; 6 years. (Filed 15th March, 1899.)

Claim.—1st. A game apparatus, consisting of a board having checkered spaces on its surface, a series of numbers arranged on the spaces of one color in the central rows of the board, and ratio-symbols arranged on the intervening, differently coloured spaces in said rows, substantially as described. 2nd. A game apparatus, consisting of a board having checkered spaces on its surface, a series of numerals arranged in diagonal rows in the centre of said board having ratio-symbols between them, in combination of the discs or markers adapted to be manipulated, substantially as described. 3rd. A game apparatus, consisting of a board provided on its upper surface with checkered spaces, a series of numerals arranged in the centre of said board so as to form diagonal rows of four figures each, ratio-symbol interposed diagonally between each of said numbers, in combination with the markers adapted to be manipulated by the opposing players, for the purpose set forth.

No. 64,955. Cap for Sliding Doors.

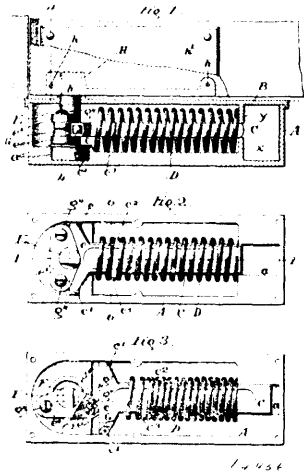
(Capuchon de porte à coulisse.)



Elias Hawes Downe, Tonic, Illinois, U.S.A. 16th November, 1899; 6 years. (Filed 21st March, 1899.)

Claim.—A removable cap for sliding doors, comprising a plate secured to the wall and having its lower edge rolled inward, a cover plate having its upward edge rolled outward and engaging the roll upon the other plate to form a hinge, a rod extending along and secured to the lower edge of the covering plate, and provided with projecting eyes at each end, brackets fixed beneath the ends of the hinged plates and hooks carried by the brackets to engage the projecting eyes and holding the cover down, substantially as described.

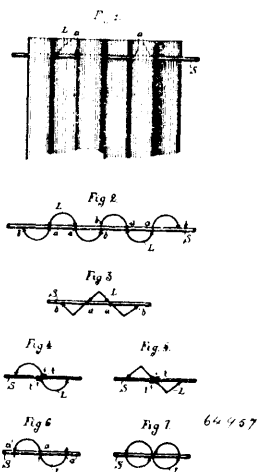
No. 64,956. Floor Hinge. (*Charnière de plancher.*)



George J. Adam, Chicago, Illinois, U.S.A., 16th November, 1899; 6 years. (Filed 6th April, 1899.)

Claim.—1st. The combination with a suitable casing and a longitudinally movable bar therein, of a coiled spring encircling the bar and bearing upon the casing at one end and a bearing for the other end of the spring upon the bar small enough to pass between the coils of the spring, whereby the adjustment of said spring may be effected by turning it upon the bar to bring a greater or less number of coils between the bearing and the case, substantially as described. 2nd. The combination with the case A, of the bar C, guided at one end in said case and provided with a head c, also guided in the case, the spring D, upon the bar and confined between a suitable bearing thereon and the case, the spindle E, journaled in the case and provided with the rocking plates c^1 , c^2 , the pivot pins g^1 , and suitable rollers upon said pins bearing upon the end of the head c, substantially as described. 3rd. The combination with suitable guides, of the longitudinally spring pressed bar C, having the head c, the pivoted spindle E, bearing the rocking plates c^1 , c^2 , the pivot pins g^1 , and the rollers thereon made up of the cups g , g^1 , the interposed washer g^2 , and the antifriction balls g^3 , said rollers bearing upon the head c, substantially as described. 4th. An antifriction roller having a tread composed of two ball bearing cups arranged with their open sides facing each other, a washer within the cups and two series of balls separated by the washer and confined in the cups, substantially as described.

No. 64,957. Fastening Metal Sheets, Laths, Strips or the like, on Bars and the like, for Building, Fencing and other purposes. (*Épave de métal, latte, etc., pour bâtir, clôture, etc.*)

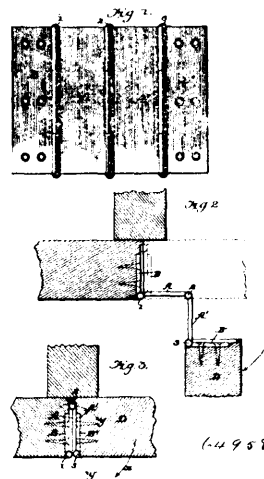


Wilhelm Brandt, Osterode, Prussia, Germany, 16th November, 1899; 6 years. (Filed 2nd May, 1899.)

Claim. The method of fastening sheets, laths, strips, or the like metal bodies on cross bars or rods for the purpose of forming metallic walls, fences, buildings and the like, which consists in forming the laths, or strips L, of a bent, corrugated, zig-zag or angular shape

and providing them with holes not exactly in one plane with their edges to obtain a spring action in a transverse direction that they press on the bars S, which are passed transversely through them, at all or some of the points of contact, thus preventing lateral displacement along the bars, substantially as set forth.

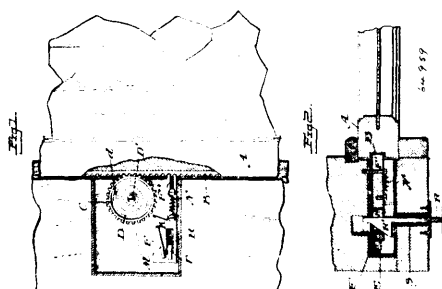
No. 64,958. Hinge. (*Charnière.*)



Hyman Gray Hiltzheim, Jackson, Mississippi, U.S.A., 16th November, 1899; 6 years. (Filed 12th May, 1899.)

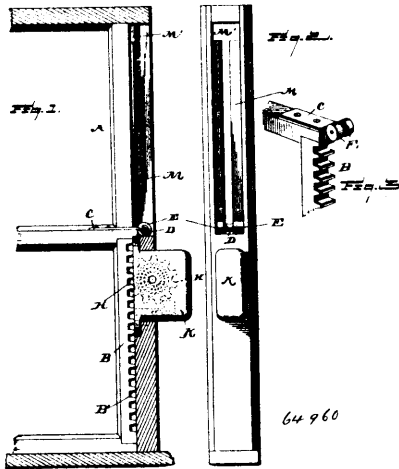
Claim.—1st. A hinge adapted to be embedded entirely within the joint between the door and its jamb composed of four articulated leaves having three centres of motion, the leaves all being of the same length, and the outer ones being of the same dimensions and having terminal edges and screw holes, and being made narrower than the two inner ones, substantially as and for the purpose described. 2nd. The combination with a door and its casing having recessed meeting edges, of a hinge composed of four articulated leaves having three centres of motion, the two outer terminal leaves being of the same dimensions with relation to each other but narrower than the two inner ones, and provided with screw holes and seated in the recesses of the door and jamb entirely within the plane of the door, so as to be concealed, and having two of its centres of articulation on the side of the door toward which it swings in opening, and the other intermediate centre of articulation on the opposite side, substantially as and for the purpose described.

No. 64,959. Window Fastener. (*Arrêtée croisée.*)



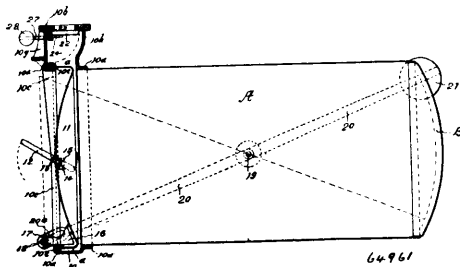
Frank J. Lowery and Frank E. Billings, both of Fort Fairfield, Maine, U.S.A., 16th November, 1899; 6 years. (Filed 27th February, 1899.)

Claim. 1st. In a device for raising and locking a window sash the combination with the sash, the rack bar mounted thereon, the cog wheel having teeth meshing with the teeth of said rack bar, the spring carried by the cog wheel, the spring actuated locking member having a forked end designed to engage with the teeth of the rack bar, and a projection designed to engage with the teeth of the cog wheel, and a push button for drawing the locking member on of engagement with the teeth of the rack bar and cog wheel, as set forth. 2nd. In combination with the sash, the cog wheel, the locking member having a forked end, the forks of which pass through apertures in the window casing, the block secured to the face of the locking member, and the push button, all substantially as shown and described.

No. 64,960. Window Fastener. (Arrête-croisé.)

Frank J. Lowery and Frank E. Billings, both of Forth Fairfield, Maine, U.S.A., 16th November, 1899; 6 years. (Filed 13th May, 1899.)

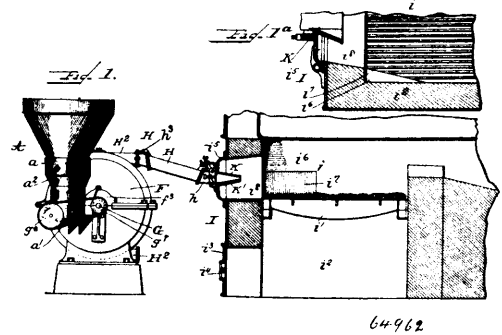
Claim.—1st. A window sash fastener, comprising in combination with the rack and pinion, of rollers designed to hold the rack bar in contact with the pinion, substantially as described. 2nd. In a sash fastener, the combination with the window casing, a sash having a rack bar provided upon one of its vertical outer edges designed to mesh with the teeth of said pinion, and anti-friction rollers carried by the sash and engaging with the inner face of the plate forming the bottom of the recess in which said rack bar slides, substantially as described. 3rd. In a sash fastener, the combination with the window casing having grooves in which the window sash slides, a spring actuated pinion and rack bar formed on the vertical edge of the sash, a plate secured to the upper end of said sash near its end, anti-friction rollers mounted at the contracted end of said plate, the said rollers being adapted to travel on the rear face of the bottom plate in the recess in which the rack bar slides, and the contracted shank portion of said plate carrying the anti-friction rollers being designed to travel in a slot in said plate, substantially as shown and described.

No. 64,961. Means for Closing Retort Doors. (Moyen de fermer les portes de cornues.)

William H. Armstrong and Alexander Morrison, assignees of John Broadfoot Houston, all of Vancouver, British Columbia, Canada, 17th November, 1899; 6 years. (Filed 24th March, 1899.)

Claim.—1st. In a door of the class described, in combination, a frame 10 secured to the mouth of the vessel to be closed, a passage way for the door downward through said frame, and a flexible seat arranged around the opening to be closed and designed to receive the rim of the door, hand levers 12 having devices thereon for drawing the door to its seat, and balance levers for raising said door, a flap door for closing the opening through which the main door slides when being opened, fulcra arranged to support said flap and levers and weights for balancing the same and for bringing it to its seat, substantially as specified. 2nd. In a door and means for closing the same, in combination, a frame 10 secured or integrally fixed to a vessel to be closed, a vertical passage way for a door through the upper part of the said frame, a rim carrying a packing forming a seat around the opening to be closed, a door arranged to be placed over said seat and levers for raising and lowering the same, and means for drawing said door on to its seat when closed, a flap door for closing the passage way hinged or supported on fulcra, said fulcra passing through glands on the opposite sides to the exterior of the frame 10, and levers and balance mechanism fixed on said fulcra, and means for allowing the said door to be pushed tight against its seat by the internal pressure. 3rd. Means for closing a

door of the class described consisting of a frame 10 integral with the vessel to be closed, having a vertical passageway for the door, a closure for said passage way consisting of a flexible seat 23 arranged around the opening therein, a flat door made to lie on said seat and supported by fulcra engaging in brackets 24 near opposite ends thereof, and slots in said brackets, engaging the flattened ends of the fulcra, whereby the door may be opened and closed, and the internal pressure will be allowed to force it upwards and effectively close the aperture, substantially as specified. 4th. A door for closing a retort or steam box of the class described, consisting of a dished circular plate having its seating edge turned at a right angle to the plane of the seat, means for raising and lowering said door, consisting of a horizontal bar rigidly fixed to a projecting bracket near the lower end of the door, rounded ends on said bar and anti-friction rollers on said rounded ends, in combination with levers fulcrumed at a distance from the door and on a horizontal plane with the centre thereof, slotted openings in the forward ends of said levers to receive the anti-friction rollers on the opposite ends of the horizontal bar, and weights on the opposite ends of said levers to counterbalance the door as specified.

No. 64,962. Apparatus for Preparing and Feeding Fuel. (Appareil pour préparer et alimenter le combustible.)

The Ideal Fuel Feeder Company, Hempstead, assignee of Charles Morse Day, New York City, both in the State of New York, U.S.A., 17th November, 1899; 6 years. (Filed 27th March, 1899.)

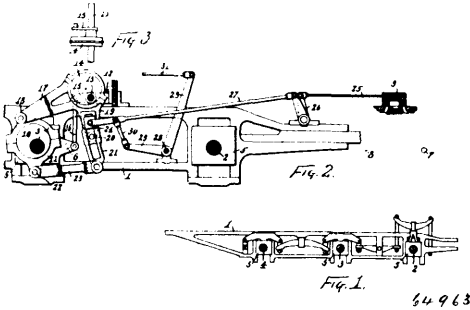
Claim.—1st. In an apparatus for preparing and feeding fuel, the combination with mechanism for reducing the fuel to a finely divided condition, of an ejector comprising a cylindrical casing, having a tangential delivery tube communicating therewith, and a series of revolving blades of substantially the width of said casing, substantially as described. 2nd. In an apparatus for preparing and feeding fuel, the combination with mechanism for reducing the fuel to a finely divided condition, of an ejector comprising a cylindrical casing having a tangential delivery tube communicating therewith, and a series of revolving blades of substantially the width of said casing, said blades having adjustable portions for varying the area of the blades, substantially as described. 3rd. In an apparatus for preparing and feeding fuel, the combination with mechanism for reducing the fuel to a finely divided condition, comprising a pulverizing chamber and a revolvable shaft within said chamber provided with pulverizing blades, of an ejector comprising a cylindrical casing of greater diameter than the pulverizing chamber and communicating therewith, a series of ejector blades mounted upon said shaft and having their outer edges at a greater distance from the same than the outer edges of the pulverizing blades, whereby the ejector blades will travel at a greater speed than the pulverizing blades, substantially as described. 4th. In an apparatus for preparing and feeding fuel, the combination with mechanism for reducing the fuel to a finely divided condition, comprising a pulverizing chamber and a revolvable shaft within said chamber provided with pulverizing blades, of an ejector comprising a cylindrical casing of greater diameter than the pulverizing chamber, communicating therewith and forming an annular groove or recess, a series of ejector blades mounted upon said shaft, adapted to travel in said annular groove or recess and of substantially the width of the same, the outer edges of said blades being at a greater distance from the shaft than the outer edges of the pulverizing blades, whereby said ejector blades will travel at a greater speed than the pulverizing blades, substantially as described. 5th. In an apparatus for preparing and feeding fuel, the combination with mechanism for reducing the fuel to a finely divided condition, including a cylindrical pulverizing chamber provided on its interior with a spiral rib having its working face extending from the delivery end of said chamber toward the end at which the fuel is admitted, a revolvable shaft in said chamber provided with a series of blades extending into close proximity to said rib, of an ejector comprising a cylindrical casing of greater diameter than the pulverizing chamber and communicating with the latter, said casing forming within the same an annular groove or recess, and a series of ejector blades mounted on said shaft adapted to travel in said

annular groove or recess, and of substantially the width of the same, the outer edges of said blades being at a greater distance from the shaft than the outer edge of the pulverizing blades, whereby said ejector blades will travel at greater speed than the pulverizing blades, substantially as described. 6th. In apparatus for preparing and feeding fuel, the combination with mechanism for reducing the fuel to a finely divided condition, of an ejector consisting of a cylindrical casing, and a series of revolving ejector blades in said casing, a discharge nozzle secured to the furnace door, and a delivery tube connecting the ejector casing and the nozzle and provided adjacent to the nozzle with a removable section to permit the furnace door to be opened, substantially as described. 7th. In apparatus for feeding fuel, the discharge nozzle, comprising two horizontally disposed pivoted plates, one of said plates being provided with lateral perpendicular flanges between which the other plate is fitted, and independent adjusting mechanism for each plate, substantially as described. 8th. In apparatus for feeding fuel, the discharge nozzle, comprising two horizontally disposed pivoted plates, one of said plates being provided with lateral perpendicular flanges between which the other plate is fitted, and independent adjusting means for each of said plates, said plates having straight delivery ends, the inner horizontal faces of which are separated a greater distance adjacent to the sides of the nozzle than at the centre, substantially as described. 9th. In apparatus for feeding fuel, the discharge nozzle, consisting of a pair of horizontally disposed pivoted plates, one of said plates having lateral perpendicular flanges within which the other plate is fitted, one of said plates being provided with a longitudinal air passage communicating with the air outside the furnace, substantially as described. 10th. In apparatus for feeding fuel, the discharge nozzle, consisting of two horizontally disposed pivoted plates, one of said plates being provided with lateral perpendicular flanges between which the other plate is fitted, independent adjusting mechanism for each of said plates, one of said plates being provided with longitudinally disposed ribs, and an auxiliary plate secured thereto and engaging said ribs to form a longitudinal air passage, substantially as described. 11th. In apparatus for feeding fuel, the discharge nozzle consisting of two horizontally disposed pivoted plates, one of said plates being provided with lateral perpendicular flanges between which the other plate is fitted, an adjusting arm for each plate, and an adjusting screw operatively connected with each adjusting arm, whereby said plates may be independently adjusted, substantially as described. 12th. In apparatus for preparing and feeding fuel, the combination with a pulverizing chamber, provided with revoluble pulverizing blades, an ejector comprising a cylindrical casing communicating with said pulverizing chamber and provided with revolving ejector blades and a discharge nozzle connected with said ejector, of a breaking and feeding mechanism comprising a cylindrical casing, having a discharge aperture communicating with the pulverizing chamber, revoluble breaking mechanism within said casing, and an adjustable swinging gate adjacent to said discharge aperture for regulating the amount of fuel delivered to the pulverizing chamber, substantially as described. 13th. In apparatus for preparing and feeding fuel, the combination with a furnace provided with a grate, a draft damper below the grate for controlling the air supply beneath the same, a discharge nozzle secured to the furnace door, mechanism for reducing the fuel to a finely divided condition and a delivery tube connected with the nozzle for delivering the finely divided fuel thereto, said delivery tube being provided adjacent to the furnace door with a removable section, whereby said section may be removed, to allow the furnace door to be opened for the purpose of hand firing when desired, substantially as described. 14th. The combination with a furnace having its combustion chamber provided with cheeks extending a distance above the grate, having forwardly converging vertical faces, of a nozzle for introducing finely divided fuel into the combustion chamber, and means for supplying finely divided fuel to said nozzle, substantially as described. 15th. In a breaking and feeding mechanism, the combination with the casing provided with a discharge opening at one side, of the breaking mechanism and a slowly movable bottom below the breaking mechanism adapted to receive the material directly therefrom and carry portions at a distance from the discharge aperture toward said aperture, substantially as described. 16th. In a breaking and feeding mechanism, the combination with the casing provided with a discharge aperture at one side, of breaking mechanism in said casing and a horizontal slowly moving revoluble bottom in said casing below the breaking mechanism and adapted to receive material directly therefrom for conveying the portions of the material at a distance from the delivery aperture toward said aperture, substantially as described. 17th. In a breaking and feeding apparatus, the combination with the casing provided with a discharge aperture, of the breaking mechanism, the horizontal revoluble disc or plate below said breaking mechanism and adjacent to said aperture and an adjusting gate adjacent to said aperture having a portion extending over the said horizontal plate or disc, substantially as described. 18th. In a breaking and feeding apparatus, the combination with the casing provided with a discharge aperture, of the breaking mechanism, the horizontal revoluble plate below said breaking mechanism and adjacent to said aperture and an adjustable gate adjacent to said aperture, extending over said horizontal plate or disc, and having a horizontally disposed portion or guard adjacent to the upper edge of said aperture, substantially as described. 19th. In a breaking and feeding apparatus, the com-

ination with the casing provided with a discharge aperture, of the breaking mechanism and the horizontal revoluble plate below said breaking mechanism and adjacent to said aperture, said plate being provided on its upper face with ribs or webs extending from the periphery inward and with a serrated peripheral edge and a delivery chute engaging the said discharge aperture and extending beneath the serrated edge of said plate, substantially as described. 20th. In a breaking and feeding apparatus, the combination with the casing provided with a discharge aperture, of the breaking mechanism a horizontal revoluble plate below said breaking mechanism, and adjacent to said aperture, said plate being provided with a serrated peripheral edge, a series of ribs or webs on its upper face and a series of cleaning webs on its lower face, and a delivery chute engaging said discharge aperture and extending beneath the serrated edge of said plate, substantially as described. 21st. In a breaking and feeding apparatus, the combination with the casing provided with a discharge aperture, the breaking plates and a revoluble breaking cone provided with downwardly extending agitating fingers, of a horizontal revoluble plate below said cone and fingers, and adjacent to said discharge aperture, substantially as described. 22nd. In a breaking and feeding apparatus, the combination with the casing provided with a discharge aperture, the breaking plates and the revoluble breaking cone provided with downwardly extending agitating fingers, of a horizontal revoluble plate below said cone and fingers and adjacent to said aperture and an adjustable gate adjacent to said aperture and adapted to extend above said horizontal plate, substantially as described. 23rd. In a breaking and feeding apparatus, the combination with the casing, of the breaking plates provided with vertically disposed breaking webs, certain of said webs having inwardly extending projections adjacent to their upper ends, and a revoluble breaking cone provided with vertically disposed breaking webs, certain of said webs being provided with outwardly extending projections substantially in the plane of said inwardly extending projections, substantially as described. 24th. In a breaking and feeding apparatus, the combination with the casing provided with a discharge aperture and breaking plates provided with vertical webs of different lengths and horizontal projections below said webs, of the breaking cone provided with vertical webs of different lengths, and horizontal projections alternating with those of the breaking plates, and a horizontal revoluble plate or disc below said breaking plates and cone, and adjacent to the discharge aperture, substantially as described. 25th. A boiler furnace provided at its rear wall with a vertical transverse partition extending from the boiler downwardly to a point near the bottom of the furnace, a second vertical transverse partition forward of said first named partition, extending from the bottom of the furnace to near the bottom of the boiler, the distance between the said partitions being less than the distance between the rear wall of the furnace and said first named position, whereby the products of combustion will be carried downward through the narrow passage between the said partitions and allowed to expand in the rear of said partitions, to deposit the ash, and means for removing said ash, substantially as described. 26th. A boiler furnace provided adjacent its rear wall with a vertically disposed transverse partition extending to a point near the bottom of the furnace, and a vertical transverse partition forward of said first named partition extending from the bottom of the furnace nearly to the bottom of the boiler, said partitions forming a vertical passage down which the products of combustion are conducted to allow the ash carried thereby to be deposited, a discharge tube for the said ash, and an injector for said discharge tube, substantially as described. 27th. A boiler furnace provided at its front end with a combustion chamber and having adjacent to its rear wall parallel vertical transverse partitions for conducting the products of combustion downwardly between the same and an inclined bottom extending downwardly from the combustion chamber to one of said partitions, substantially as described. 28th. A boiler furnace provided at its front end with a combustion chamber, and adjacent to its rear wall with parallel vertical transverse partitions for causing the products of combustion to travel downwardly to deposit the ash carried thereby, an inclined bottom extending from the combustion chamber downwardly to one of said partitions, a discharge tube adjacent to the lowest portion of said inclined bottom, a discharge tube in rear of said partitions and injectors for said discharge tubes, substantially as described. 29th. A boiler furnace provided with a combustion chamber having the inner portions of its side walls converging toward the front of the chamber, a horizontal grate in said chamber extending from one of said inclined walls to the other, a discharge nozzle located at the narrower end of said chamber for feeding finely divided fuel into said chamber, whereby the formation of eddies at the front of the chamber is avoided and the entire grate is within the range of the said nozzle, substantially as described. 30th. A boiler furnace for consuming finely divided fuel, provided with a discharge tube for ash, and an injector for said discharge tube, substantially as described. 31st. A boiler furnace for consuming finely divided fuel, provided with a combustion chamber at its front end, and adjacent to its rear wall with parallel vertical transverse partitions forming a passage for conducting the products of combustion downwardly to deposit the ash carried thereby, an ash receiving hopper bottom in rear of the said partitions provided with a discharge aperture adjacent to its lowest portion, a discharge tube communicating with said aperture, an inclined ash receiving floor extending from said combustion chamber downwardly to one of the said partitions

and having a discharge aperture adjacent to its lowest portion, a discharge tube communicating with said aperture, and injectors for said discharge tubes, substantially as described. 32nd. In a pulverizing mill, the cylindrical shell, having spiral or helically curved ribs projecting inward therefrom, with their working faces inclined toward the inlet end of the mill, in combination with a rotary shaft, radial arms secured thereto and blades connected to said arms, with their outer edges adjacent to said ribs, and their working faces at an angle toward the working faces of the ribs, which are inclined backward toward the inlet end of the mill, whereby the blades will exert a shearing action, and work against the ribs to convey the heavier and larger particles backward and repeatedly subject them to the pulverizing and shearing action, substantially as described. 33rd. In a nozzle for burning pulverized fuel, the combination with a casing, of an inclined sliding plate extending through the width of the nozzle, and forming a continuous plane surface, and means for adjusting it longitudinally toward or from the delivery end of the nozzle for decreasing or increasing the opening at the said delivery end and thereby regulating the flow of mixed fuel and air to a combustion chamber, substantially as described. 34th. In a nozzle for burning pulverized fuel, the combination with a casing, of a pair of inclined sliding adjustable plates extending through the width of the nozzle and forming continuous plane converging surfaces, substantially as described. 35th. In a nozzle for burning pulverized fuel, the combination with the casing having side walls flaring toward the delivery end, of one or more inclined sliding, adjustable plates extending through the width of the nozzle, and forming one or more continuous plane surfaces, and means for independently moving each plate longitudinally, for varying the opening at the discharge end of the nozzle, substantially as described. 36th. In a nozzle for burning pulverized fuel, the combination with a casing of inclined, sliding, adjustable plates arranged therein to form air spaces or passages between the casing at top and bottom of said plates, substantially as described. 37th. In a nozzle for burning pulverized fuel, the combination with the outer casing as B, having at or near its inlet end a horizontal transverse slot, of an inclined sliding plate in said slot and extending through the width of the nozzle, and a detachable water jacket tip, as *b*⁵, secured to the delivery end of said casing for protecting the outer end of said sliding plate, substantially as described. 38th. In a nozzle for burning pulverized fuel, the combination with an outer casing, of inclined adjustable plates therein, air passages between said casing and plates, and a water jacket exterior to said casing for preventing clogging by coking of fuel thereon, through excessive heat, substantially as described. 39th. In a nozzle for burning pulverized fuel, the combination with the outer casing, of an inclined plate converging from its rear to its front end toward a horizontal median plane, and means for sliding such plate inward or outward for varying the vertical height of the discharge opening and directing the blast either upward or downward as desired, substantially as described.

No. 64,963. Valve Gear. (Appareil de soupapes.)

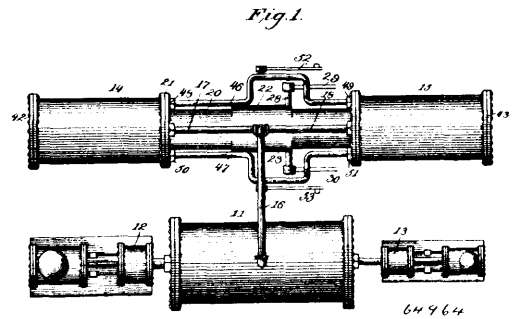


Lincoln Alexander Lang, Yule, North Dakota, and Edward Freeman Walsh, St. Paul, Minnesota, all in the U.S.A., 17th November, 1899; 6 years. (Filed 21st April, 1899.)

Claim.—1st. In a valve gear, the combination, substantially as set forth, of a frame, an axle bearing spring mounted therein, an axle bearing spring mounted therein, an axle journaled in said bearing, an eccentric on said axle, a link, a link block sliding therein, valve operating connections from said block, a supporting pivot for said link, and connections between said spring mounted bearing and said supporting pivot to cause said supporting pivot to be moved relative to the frame as the spring mounted bearing moves in the frame. 2nd. In a valve gear, the combination, substantially as set forth, of a frame, an axle bearing spring mounted therein, an axle journaled in said bearing, an eccentric on said axle, a link, a link block sliding therein, valve operating connections from said block, an eccentric pivot mounted on said frame, an arm mounted on said eccentric pivot and pivotally supporting said link, and connections between said spring mounted bearing and said eccentric pivot to cause the movement of the spring mounted bearing relative to the frame to turn said eccentric pivot. 3rd. In a valve gear, the combination, substantially as set forth, of a frame, an axle bearing mounted therein and capable of motion in the

frame, an axle mounted in the bearing, an eccentric on the axle, an eccentric pivot mounted on the frame, connections between the axle bearing and the eccentric pivot to cause the pivot to be turned by the movement of the axle bearing in the frame, a strap on the eccentric, a bell crank mounted on the eccentric pivot and having one of its arms connected with said strap, a link pivotally mounted on the other arm of the bell crank lever, a connection pivoted to said link and said strap, a block sliding in said link, and valve connections from said block. 4th. In a valve gear, the combination, substantially as set forth, of a frame, an axle bearing mounted adjustable therein, an axle mounted in said bearing, an eccentric on said axle, an oscillating link, a connection from the eccentric to the link to cause the eccentric to oscillate the link, a block adjustable in the link, valve connections from said block, a pivot of oscillation supporting said link, and mechanism for adjusting said pivot of oscillation relative to said frame in correspondence with the adjustment of the axle bearing in the frame. 5th. In link valve gears for locomotive engines, the combination, substantially as set forth, of a link, a sliding block, means for adjusting the sliding block vertically in the link, a pivot of oscillation for the support of the link, and means for adjusting said pivot of oscillation to compensate for the vertical movement of the pedestal boxes of the locomotive relative to the frame thereof.

No. 64,964. Engine. (Machine à vapeur.)



Benjamin Legters, assignee of Edwin A. Golle, both of Three Oaks, Michigan, U.S.A., 17th November, 1899; 6 years. (Filed 16th November, 1899.)

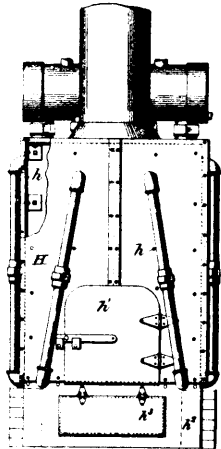
Claim.—1st. In an engine, the combination of two end cylinders in line with each other, an intermediate cylinder also in line with and connecting them, the two ends thereof being open, a central piston rod, piston heads on the ends thereof, outwardly projecting, open ended sleeves or cups secured upon said piston heads within the end cylinders, and stationary discs fitting said cups and pipes projecting inwardly and secured to the outer heads of the end cylinders, substantially as described. 2nd. In an engine, the combination of two end cylinders in line with each other, an intermediate cylinder also in line with and connecting them, the two ends thereof being open, a central piston rod, piston heads on the ends thereof, outwardly projecting, open ended sleeves or cups secured upon said piston heads within the end cylinders, stationary discs fitting said cups, pipes projecting inwardly and secured to the outer heads of the end cylinders, slidable bars entering the end cylinders through stuffing boxes, and cut-off sleeves upon the cups and adapted to slide thereon, substantially as described. 3rd. The combination with the two end cylinders and the intermediate cylinder slotted longitudinally on its sides, of the piston rod provided with end and intermediate pistons, the cross bar secured to the piston rod and projecting through said slots, and pitman for connecting the cross bar with the crank shaft of the engine, substantially as described. 4th. In an engine, the combination of two end cylinders in line with each other, an intermediate cylinder also in line with and connecting them, the two ends thereof being open, a central piston rod, piston heads on the ends thereof, outwardly projecting, open ended sleeves or cups secured upon said piston heads within the end cylinders, stationary discs fitting said cups projecting inwardly and secured to the outer heads of the end cylinders by means of pipes affording free communication, through the cylinder heads, and stationary discs between the outer air and the interior of the cups, substantially as described. 5th. The combination with the two end cylinders of an intermediate cylinder connecting the end cylinders, supply pipes and cut off mechanism for introducing fluid or liquid under pressure into the cylinder, a piston rod carrying four piston heads, and pipes communicating through the ends of the middle cylinders and the heads of the end cylinders between the interior of the middle cylinder, substantially as described.

No. 64,965. Water Tube Boiler. (Chaudière sectionnelle.)

Henry C. Elliott, New York City, New York, U.S.A., assignee of Louis Eldon Miller, Dawson North-west Territory, Canada 17th November, 1899; 6 years. (Filed 19th June, 1899.)

Claim.—1st. In a watertube boiler, the combination with the steam generating section of the same including a series of vertically dis-

posed coils located above the grate, of a steam dome located above the water line of the boiler, connections between said coils and the



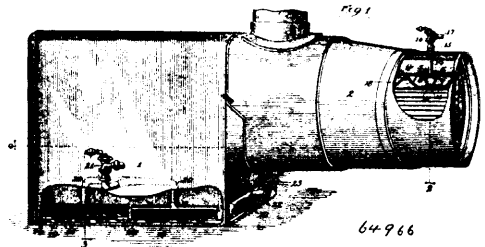
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steam dome and connections extending from the lowest part of the steam dome to points adjacent to the lowest part of the steam generating section for draining the water continually from the steam dome, substantially as described. 2nd. In a water tube boiler, the combination with the steam generating section thereof, including upper and lower horizontal mains and a series of vertically disposed coils each connected at one end to one of the lower mains and at its other end to one of the upper mains, of a steam dome located above the water line of the boiler, connections between the upper mains and said steam dome and connections extending from the lowest point of the steam dome to points adjacent to the lower end of the steam generating section for draining the water continually from the steam dome, substantially as described. 3rd. In a water tube boiler, the combination with the steam generating section including the upper and lower horizontal mains, and a series of vertically disposed coils each connected at one end to one of the lower mains and at its other end to one of the upper mains on the opposite side of the boiler, of a steam dome located above the upper main, connections from said upper mains to the steam dome and connection extending from the lowest point of the steam dome to the lowest point of the steam generating section for draining the water continually from the steam dome, substantially as described. 4th. In a water tube boiler, the combination with the steam generating section comprising the upper and lower horizontal mains and a series of vertically disposed coils each connected to one of the lower mains at one end and to one of the upper mains on the opposite side of the boiler, at its other end, of a steam dome located above the upper mains connections between said upper mains and the steam dome above the lowest point of the dome, a plurality of horizontally disposed tubes above said coils provided at one end with connections extending to the lowest point of the steam dome and at the other end with connections extending to said lower mains, substantially as described. 5th. In a water tube boiler, a steam generating section comprising a pair of lower horizontal mains, a pair of upper horizontal mains and a series of vertically disposed coils, each coil being connected at one end to one of the lower mains and at its upper end to the upper main on the opposite side of the boiler, certain of said coils being connected to one of said lower mains and certain other coils alternating with the first mentioned coils, being connected with the other lower main, whereby the circulation of water in any two adjacent coils will be in opposite directions, and said coils are free to expand and contract without strain, substantially as described. 6th. In a water tube boiler, the combination with a steam generating section comprising a pair of upper horizontal mains, a pair of lower horizontal mains, a horizontally disposed coil connecting said lower mains and forming the grate and a series of vertical coils, each connected at one end to one of the lower mains and at the other end to one of the upper mains on the opposite side of the boiler, of a steam dome located above said upper mains, connections extending from said upper mains to the steam dome, a plurality of horizontally disposed tubes above said vertical coils, connections at one end of said tubes extending to the lowest point of the steam dome, and connections at the other end of said tubes extending to the lower main, substantially as described. 7th. In a water tube boiler, a steam generating section comprising a pair of horizontal upper mains, a pair of horizontal lower mains, vertically disposed tubes at each end of the boiler connecting said lower mains with said upper mains to support the upper mains, a series of vertically disposed coils each connected at one end to one of the lower mains and at its other end to one of the upper mains, of a steam dome located above the upper mains, connections extending from the said upper mains to the steam dome and communicating with said dome at a point above the bottom of the same and supporting said steam dome from said upper mains, and connections

from the bottom of the steam dome to the lower mains, for continually draining the water from said dome, substantially as described. 8th. In a water tube boiler, the combination with a steam generating section comprising the upper and lower horizontal mains and a series vertically arranged coils each connected at one end with one of the lower mains and at the other end with one of the upper mains, of a steam dome located above said upper mains and above the water line of the boiler, connections between the said upper mains and said steam dome above the lowest point thereof, connections between the lowest point of the steam dome and said lower mains for draining the water continually from the steam dome and a sheet metal casing surrounding the steam generating section and provided with a lining of asbestos, substantially as described.

No. 64,966. Mechanical Boiler Cleaner.

(Nettoyeur m canique de chaudi res.)



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Frank William Hornish and Albert Charles Clark, both of Chicago, Illinois, U.S.A., 17th November, 1899; 6 years. (Filed 21st August, 1899.)

Claim.—1st. A mechanical boiler cleaner, comprising a stationary basin arranged within the boiler and having a depression in which the sediment collects, and a draw off device for blowing out the sediment from the basin. 2nd. A mechanical boiler cleaner, comprising a stationary skimmer basin supported within the boiler and having a depression to collect sediment and a draw off head located substantially at the bottom of the basin and a valve governed discharge pipe through which the boiler is blown off and the collected sediment in the basin removed. 3rd. A mechanical boiler cleaner comprising a basin arranged within the boiler and adapted to collect sediment, a draw off head located within the basin and having upon its bottom a series of spaces forming suckers and a valve governed discharge pipe communicating with said spaces. 4th. A mechanical boiler cleaner, comprising a plate extending from side to side of the boiler substantially at the surface of the water therein, and depressed to form a substantially U-shaped basin for the deposit and storage of sediment and a valve governed draw off head located substantially at the bottom of the basin to remove the sediment. 5th. A mechanical boiler cleaner, comprising a stationary basin arranged within the boiler and extending from side to side thereof and having a depression to collect sediment, the back of the basin being above the water line and the front thereof being below the water line and a draw off device for blowing out the sediment from the basin. 6th. A mechanical boiler cleaner, comprising a basin arranged within the boiler and adapted to collect sediment, the back of the basin being above the water line and the front thereof being below the water line, a deflector connected to the said front below the water line and a draw off device or blowing out the sediment from the basin. 7th. A mechanical boiler cleaner, comprising a basin arranged within the boiler and adapted to collect sediment, a draw off head located within the basin and having a horizontal passage, a series of transverse partitions forming sucker spaces communicating with said passage and a valve governed discharge pipe through which the boiler is blown off and the collected sediment in the basin removed. 8th. A mechanical boiler cleaner, comprising a draw off head having a horizontal passage and a series of transverse partitions forming sucker spaces communicating with said passage and a valve governed discharge pipe through which the boiler is blown off and sediment removed from the boiler through the draw head. 9th. A mechanical boiler cleaner, comprising a draw off head having inclined partitions forming open spaces, a discharge pipe and means of communication between said spaces and discharge pipe. 10th. A mechanical boiler cleaner, comprising a draw off head having upon its bottom portion a series of inclined partitions forming inclined passages, and also having a common passage communicating with said inclined passages and a valve governed outlet pipe for said common passage. 11th. A mechanical boiler cleaner, comprising a draw off head having upon its bottom portion a series of inclined partitions forming inclined passages and also having a common passage, communicating through holes with said inclined passages, the holes increasing in size from the centre to the ends, and a valve governed outlet pipe for said common passage. 12th. A mechanical boiler cleaner, comprising a draw off head open at its bottom and having an outlet thereabove, said head having at such bottom reversely inclined partitions forming inclined passageways to said outlet and a valve governed discharge pipe communicating with said outlet. 13th. A mechanical boiler cleaner comprising a draw off head having at its open bottom a series of transverse partitions forming inclined passages, the

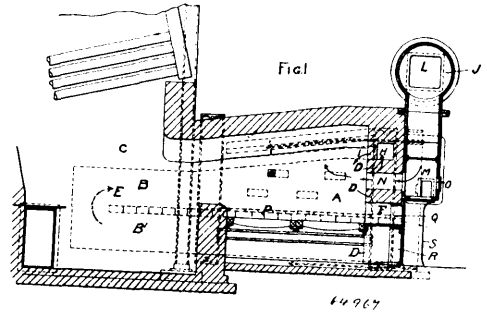
partitions on one side of the center of the head being reversely inclined to those on the other side, said head having an outlet or discharge port and means of communication between said inclined passages and said discharge port. 14th. A mechanical boiler cleaner, comprising a draw off head having an outlet and having at its open bottom a series of transverse partitions forming inclined passages, the partitions on one side of the center of the head being reversely inclined to those on the other side and having holes communicating between the inclined passages and said outlet, said holes increasing in size from the centre outwards to the ends. 15th. A mechanical boiler cleaner, comprising a draw off head having a horizontal passage 8, a series of transverse parallel and inclined partitions 10 forming inclined passages 11 communicating through holes 12 with passage 8, and a valve governed outlet pipe from said passage 8. 16th. A mechanical boiler cleaner comprising a draw off head having a horizontal passage 8, a series of transverse parallel and inclined partitions 10 for ring inclined passages 11 communicating through holes 12 with passage 8, the partitions on either side of the centre of the head being reversely inclined and forming at such centre a space triangular in cross section and having a central passage communicating with said passage 8. 17th. A mechanical boiler cleaner comprising a draw off head open at its sides and ends and having an outlet communicating through its bottom with a boiler or drum, a series of inclined partitions arranged in the head at such bottom and forming inclined passageways from the boiler or drum upwardly to said outlet. 18th. A mechanical boiler cleaner, comprising a draw off head having a horizontal passage and having a horizontal passage and having depending flanges or partitions inclined to form inclined passages, said partitions being substantially triangular in shape, said inclined passages each having a passage located at the apex of such triangular shaped partition and communicating with said horizontal passage. 19th. A mechanical boiler cleaner, comprising a skimmer basin located within the boiler and extending from side to side thereof, such basin having a depression in which the sediment collects, a draw off head located in the bottom of such basin and a valve governed discharge pipe communicating with the head. 20th. A mechanical boiler cleaner comprising a skimmer basin located within the boiler and extending from side to side thereof, an inclined deflector plate extending from one edge of such basin, a draw off head located in such basin and a valve governed discharge pipe communicating with the head. 21st. A mechanical boiler cleaner, comprising a skimmer basin located within the boiler and extending from side to side thereof, a draw off head therein consisting of a casing having a horizontal passage with an outlet, and a series of inclined transverse depending flanges forming inclined passageways communicating with such horizontal passage and a valve governed discharge pipe communicating with said outlet. 22nd. A mechanical boiler cleaner, comprising a curved plate forming a skimmer basin extending from side to side of the interior of the boiler and secured respectively to the front head and sides thereof and a draw off head located in said basin for removing the collected sediment in the basin. 23rd. The combination, with a boiler, of a skimmer basin arranged therein, a pair of draw off heads located in the basin and communicating therewith to remove the collected sediment, two discharge pipes, a common outlet pipe connected with said two pipes and a blow off cock governing said outlet pipe. 24th. The combination, with a boiler, of a skimmer basin arranged therein below its dry pipe and extending transverse with its front end secured to the front head of the boiler, a pair of draw off heads located in the basin and communicating therewith to remove the collected sediment, two discharge pipes extending from said heads on either side of the dry pipe, a common outlet pipe connected to said discharge pipes and a blow off cock governing said outlet pipe. 25th. The combination, with a boiler having a water leg or like place where sediment collects, of a valve governed discharge outlet and a draw off head communicating therewith and located in a water leg or similar place, said head being open at its bottom and having feet to raise it above the bottom of the water leg and to provide for free passage on all sides of the head, such head having a horizontal passage communicating with such outlet and having depending transverse and inclined flanges forming inclined passageways communicating with the horizontal passage. 26th. The combination, with a boiler, of a stationary skimmer basin located substantially at the surface in the path of water circulation, a draw off head located therein, and a draw off head located in a water leg of the boiler. 27th. The combination, with a boiler of the locomotive type, of a skimmer basin located therein in the path of water circulation, a draw off head located therein, a draw off head in the front and back water legs respectively and a pair of draw off heads located in each side water leg, each of said heads comprising a easing having an outlet and having a series of inclined depending flanges forming inclined passageways communicating with said outlet.

No. 64,967. Gas Combustion Chambers for Steam Boilers and other Furnaces. (*Chambre à combustion de gaz pour chaudières à vapeur, etc.*)

Babeec and Wilcox, Limited, London, assignee of Joseph Hutchinson Harrison, Middlesbrough, all of England, 17th November, 1899; 6 years. (Filed 16th September, 1899.)

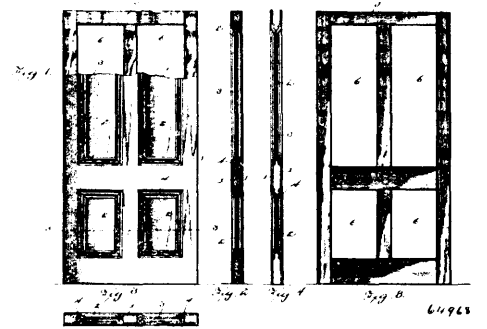
Claim.—1st. A gas combustion chamber for steam boilers and other furnaces constructed and arranged, substantially as described.

2nd. In gas combustion chambers of boiler and other furnaces, the combination of air heating passages formed in the side walls of the



furnace, and having outlets to the interior of the furnace at the front end thereof, with gas outlets situated underneath or in proximity to the air outlet so that thorough admixture of the air and gas is obtained across the entire width of the furnace front, substantially as described.

No. 64,968. Door, Shutter, etc. (*Porte, contrevent, etc.*)



Lewis A. Hall and Robert H. Munson, assignees of James Marshall Leaver, all of Bay Mills, Michigan, U.S.A., 17th November, 1899; 6 years. (Filed 8th March, 1899.)

Claim.—1st. A door or like article of manufacture, consisting of two pieces of sheet material arranged back to back and having certain portions contacting, and the other portions separated laterally, and fastening means for tightly joining together the contacting portions, substantially as set forth. 2nd. A door or like article of manufacture, consisting of two duplicate sheets of paper or pulp material arranged back to back and having panels provided with sunken flat portions closely contacting and with raised ornamental brace portions, and fastening means for tightly joining together the contacting panel portions, substantially as set forth. 3rd. A door or like article of manufacture, consisting of a skeleton frame or core and having panel openings therein, two duplicate sheets of paper or pulp material arranged respectively at opposite sides of said frame or caps and having panels provided with sunken flat portions lying within the panel openings and closely contacting, and fastening means for tightly joining together the contacting panel portions of the separate sheets, substantially as set forth. 4th. A door or like article of manufacture, consisting of a skeleton frame or core having openings therein, two duplicate pieces of sheet material arranged respectively at opposite sides of said frame or core and having certain portions lying within the openings of the frame or core and closely contacting, and other portions separated laterally and closely fitting the sides of the frame or core, and fastening means for joining together the contacting portions of the separate pieces, substantially as set forth.

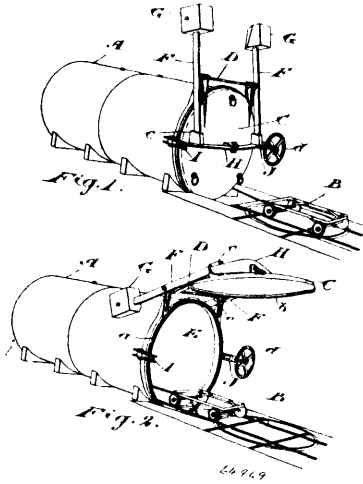
No. 64,969. Door for Steam Boxes or Retorts.

(*Porte pour boîtes à vapeur ou cornues.*)

The Albion Iron Works Company, Limited, assignee of James K. Rebeck, both of Victoria, British Columbia, Canada, 17th November, 1899; 6 years. (Filed 15th July, 1899.)

Claim.—1st. A door hinged at its upper edge above an opening in a steam box or retort, in combination with one or more levers of the first order journalled upon the steam box, connected with the door at their lower ends and provided at their upper ends with counterbalancing weights, substantially as and for the purpose specified. 2nd. A door hinged at its upper edge above an opening in a steam box or retort, in combination with one or more levers of the first order journalled upon the steam box, connected with the door at their lower ends and provided at their upper ends with counterbalancing weights, the centre of gravity being so adjusted that the system balances, when the door is at or slightly above the

horizontal, substantially as and for the purpose specified. 3rd. A door hinged at its upper edge above an opening in a steam box or



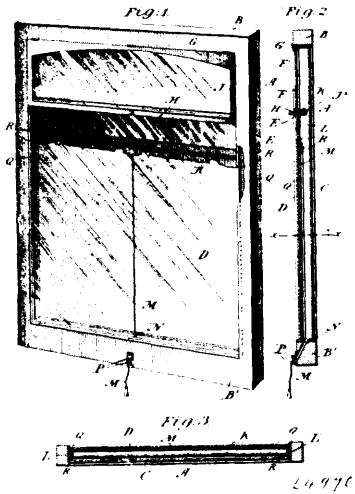
retort, in combination with one or more levers of the first order journaled upon the steam box in line with the hinges of the door, connected with the door at their lower ends and provided at their upper ends with counterbalancing weights, substantially as and for the purpose specified. 4th. A door hinged at its upper edge above an opening in a steam box or retort, in combination with a cross bar loosely secured at its centre to the centre of the door, a pivoted clip shackle adapted to engage one end of the cross bar and a pivoted screw clamp adapted to engage the other, substantially as and for the purpose specified. 5th. A door loosely hinged at its upper edge above an opening in a steam box or retort, in combination with a cross bar loosely secured at its centre to the centre of the door, a pivoted clip shackle adapted to engage one end of the cross bar a pivoted screw clamp adapted to engage the other, substantially as and for the purpose specified. 6th. A door loosely hinged at its upper edge above an opening in a steam box or retort, in combination with a cross bar loosely secured at its centre to the centre of the door, a pivoted clip shackle adapted to engage one end of the cross bar, a pivot screw clamp adapted to engage the other, and a ring of packing about the opening, substantially as and for the purpose specified. 7th. A door hinged at its upper edge above an opening in a steam box or retort, in combination with one or more levers of the first order journaled upon the steam box, connected with the door at their lower ends and provided at their upper ends with counterbalancing weights, a cross bar loosely secured at its centre to the centre of the door, a pivoted clip shackle adapted to engage one end of the cross bar and a pivoted screw clamp adapted to engage the other, substantially as and for the purpose specified. 8th. A door hinged at its upper edge above an opening in a steam box or retort, in combination with one or more levers of the first order journaled upon the steam box, connected with the door at their lower ends and provided at their upper ends with counterbalancing weights, the centre of gravity being so adjusted that the system balances, when the door is at or slightly above the horizontal, and detachable clamping mechanism for securing the door to close the aforesaid opening, substantially as and for the purpose specified. 9th. A door loosely hinged at its upper edge above an opening in a steam box or retort, in combination with a cross bar loosely connected with the centre of the door and having its ends detachably connected with the steam box and mechanism carried by the steam box for applying pressure to the said cross bar, substantially as and for the purpose specified.

No. 64,970. Window Sash. (Clâssis de fenêtr.)

John Cronin Fleming, Philadelphia, Pennsylvania, U.S.A., 17th November, 1899; 6 years. (Filed 11th March, 1899)

Claim.—1st. In a window sash, a plurality of transparent sheets secured therein, one of said sheets being of greater length than the other, and a sheet or frame suitably supported in the upper portion of said sash and forming a continuation of the shorter sheet and adapted to have an advertisement placed thereon. 2nd. In a window sash, the combination of two or more panes or sheets of glass secured therein, one of said panes extending from the upper to the lower portion of said sash, and the other of said sheets being of lesser length, a frame pivotally supported above the sheet of lesser length and adapted to have advertising matter placed thereon, a shade or blind located intermediate said sheets and a connection

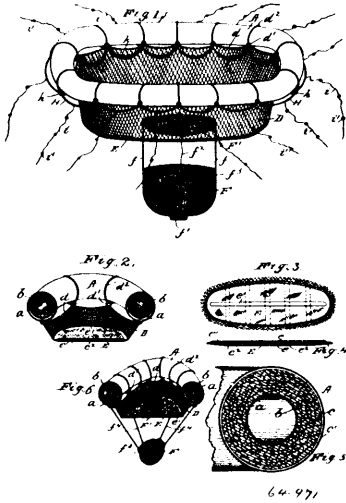
leading from said shade to the exterior of said sash. 3rd. In a window sash, two or more sheets of glass secured therein, one of



said sheets being of less length than the other and a sheet or plane adapted to have advertising matter thereon, and pivotally supported in the upper portion of said sash and in its normal position forming a continuation of the sheet below, a suitable portion of the outer sheet being painted with a suitable varnish, whereby light will be freely admitted to the advertisement and the admission of the sun's rays will be permitted. 4th. In a window sash, a plurality of sheets of glass secured therein, one of said sheets being of less length than the other, a frame or sheet of transparent material hinged or pivotally supported upon said sash and adapted to have an advertisement placed thereon, the upper portion of said outer sheet being painted with a composition adapted to admit light but to exclude the sun's rays, a shade or blind supported in the space between said sheets and adapted to have advertisements placed thereon and means for operating said shade from the exterior. 5th. The combination of a sash having a sheet of glass secured therein and a frame or sheet pivotally mounted or hinged therein and adapted to have advertising matter thereon, said first-mentioned sheet of glass having applied thereto a paint or varnish, whereby light will be freely admitted to the advertisement on said movable sheet or frame, but the admission of the sun's rays will be prevented. 6th. The combination of a window sash, of a plurality of panes of glass or other transparent material secured therein, a shade roller carrying a shade or curtain located between said panes, and means for actuating said roller from the exterior of the sash. 7th. In a window sash, a plurality of panes of glass or other transparent material of different lengths, a movable pane or frame located above the pane of lesser length and adapted to have advertisements placed thereon, and a blind or curtain located between said panes. 8th. A window sash, an outer pane of transparent material secured therein and painted with a composition admitting light freely but excluding the sun's rays, an inner pane of lesser length and a movable pane or frame located above said inner pane and adapted to have advertisements placed thereon. 9th. A window sash, an outer pane of transparent material secured therein and painted with a composition admitting light freely but excluding the sun's rays, an inner pane of lesser length and a movable pane or frame located above said inner pane and adapted to have advertisements placed thereon, in combination with a shade roller and its shade, said roller being located at or near the junction of said inner pane and the adjacent movable pane. 10th. The combination of an upper stationary frame having two or more panes of glass therein, and a lower movable sash having a plurality of panes of glass therein, said lower sash being adapted to be raised into the space between the panes of glass of said upper frame. 11th. In a device of the character named, an upper stationary frame having a plurality of panes of glass located therein, a lower movable sash adapted to be raised into the space between said panes of glass, said lower sash having a plurality of panes of glass therein, a hinged transparent frame or door secured in said upper frame and a shade mounted in the lower movable sash and located between the panes of glass therein. 12th. In a device of the character named, an upper frame having a plurality of transparent panes of glass therein, a movable frame or door hinged to said upper frame, the space between said movable frame and one of said panes of glass being adapted to have advertising matter located therein, a lower movable sash having a plurality of panes of glass therein, the space between said panes having a roller located therein, said roller carrying a shade and a connection leading

from said shade through an opening in the lower portion of the movable sash. 13th. A lower movable sash, a plurality of panes of glass therein, a roller located in the space between said panes of glass, a shade supported on said roller, upright rods at each side of said shade, eyes attached to the latter and movable on said rods, an upper stationary frame having a plurality of panes of glass secured therein, said lower sash being capable of being raised into the space between said panes and a hinged door attached to said upper stationary frame, the space between said door and the adjacent pane of glass being adapted to have advertising material inserted therein. 14th. A lower movable sash, a plurality of panes of glass therein, a roller located in the space between said panes of glass, a shade supported on said roller, upright rods at each side of said shade, eyes attached to the latter and movable on said rods, an upper frame having a plurality of panes of glass secured therein, said lower sash being capable of being raised into the space between said panes and a hinged door attached to said upper frame, the space between said door and the adjacent panes of glass being adapted to have advertising material inserted therein.

No. 64,971. Life-boat. (Bateau de sauvetage.)

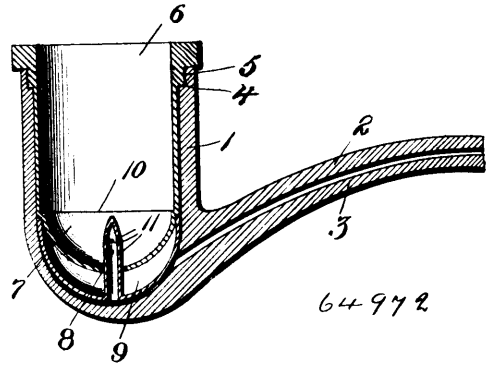


Horace S. Carley, Boston, Massachusetts, U.S.A., 17th November, 1899; 6 years. (Filed 24th June, 1899.)

Claim.—1st. In a collapsible reversible life-boat, the combination with a buoyant body of annular or similar continuous form, of a flat bottom, flexible part secured at one edge around the edge of said bottom, eyelets arranged at suitable intervals along the other edge of the flexible part, and rings in the buoyant body passing through said eyelets and on which they are adapted to freely slide, the space within the buoyant body being entirely free from obstructions, whereby the bottom and flexible part may drop through and depend from either side thereof. 2nd. In a collapsible, reversible life-boat, the combination with a buoyant body of annular or similar continuous form, of a collapsible body, secured to and adapted to depend from either side of said buoyant body, and a bag suspended beneath said parts and adapted when filled with water to constitute a marine drag or ballast. 3rd. In a collapsible, reversible life-boat, the combination with a buoyant body of annular or similar continuous form, of a collapsible body secured to and adapted to depend from either side of said buoyant body, a bag suspended beneath said parts, and adapted when filled with water to constitute a marine drag or ballast, and a line whereby said bag may be emptied and pulled up out of position for use. 4th. In a collapsible, reversible life boat, the combination with a buoyant body of annular or similar continuous form, of a collapsible body secured to and adapted to depend from either side of said buoyant body, and two bags, one connected on each side of the buoyant and collapsible parts, and severally adapted when filled with water to constitute a marine drag or ballast. 5th. In a collapsible, reversible life-boat, the combination with a buoyant body of annular or similar continuous form, of a collapsible body having eyelets disposed at suitable intervals along its edge, rings on the buoyant body passing through said eyelets and on which they freely slide, and two bags, one on each side of the collapsible body connected to a suitable number of said rings by lines, and adapted when filled with water to constitute a marine drag or ballast. 6th. In a life-boat of the kind described, the combination with a buoyant body of annular or similar continuous form, consisting of an inner tube filled with air, layers of cork tightly packed around said air tube, and a covering of canvas or similar material about said cork, of a collapsible body secured within said

buoyant body and adapted to depend from either side thereof. 7th. In a life-boat of the kind described, the combination with a buoyant body of annular or similar continuous form, consisting of an inner tube filled with air, layers of cork tightly packed around said air tube, a covering of canvas and an outer covering of cord or rope wound about the canvas of a collapsible body secured within said buoyant body and adapted to depend from either side thereof. 8th. In a life-boat of the kind described, the combination with a buoyant body of annular or similar continuous form, of a flexible part connected along one edge of the buoyant body, and secured at its other edge to the edge of a flat bottom, said bottom consisting of two layers of canvas of similar material, having interposed therebetween longitudinal and lateral stiffening slats.

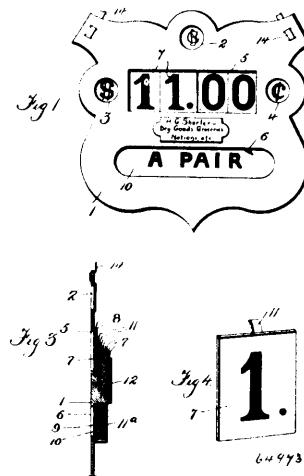
No. 64,972. Pipe. (Pipe.)



Horace Lemieux, Montreal, Quebec, Canada, 17th November, 1899; 6 years. (Filed 4th April, 1899.)

Claim.—1st. The combination with the bowl and stem of a pipe, of a tobacco receiving portion removably mounted within the bowl of said pipe, a nicotine chamber secured below the tobacco receiving portion, said nicotine chamber having an operative connection with said tobacco receiving portion, and means having no connection with said nicotine chamber, for passing the smoke from said tobacco receiving portion into the opening of the stem of the pipe, substantially as described. 2nd. A pipe, comprising a bowl, a stem secured thereto, said stem having an opening communicating with said bowl portion, a removable tobacco receiving portion secured within said bowl, a nicotine chamber secured below said tobacco receiving portion, said nicotine chamber having an operative connection with said tobacco receiving portion, and a cylindrical portion secured to the walls of said nicotine chamber, said cylindrical portion extending upwardly into the tobacco receiving chamber, said portion having peripheral openings adapted to allow of the passage of the smoke from said tobacco receiving portion into said cylindrical portion, from whence it passes into the bowl and through the opening formed in the stem, substantially as described.

No. 64,973. Advertising Sign. (Enseigne.)

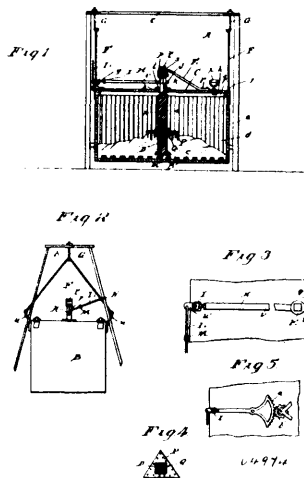


Ag-nir Ferland, St. Marie, Quebec, Canada, 17th November, 1899; 6 years. (Filed 27th March, 1899.)

Claim.—1st. An advertising sign, comprising a base board, openings formed therein, said openings being adapted to expose a series of cards secured in rear thereof, openings formed within said base board, said openings being adapted to expose placards removably

secured in rear thereof, said placards being adapted to indicate the cost price and the quantity, and receptacles located on the rear of said base board, said receptacles being adapted to receive the placards when not in use, substantially as described. 2nd. An advertising sign, comprising a base board, a plurality of openings formed therein, said openings being adapted to expose a series of cards indicating the cost price and the quantity, a receptacle for placards formed upon the rear side of said base board, comprising a frame having its top open, and having its bottom arranged similar to a stair step, and a series of partitions extending across said receptacle, whereby separate compartments will be formed within each of which the placards are adapted to have a portion of their faces exposed, such portion being adapted to expose designating characters formed on said face, substantially as described.

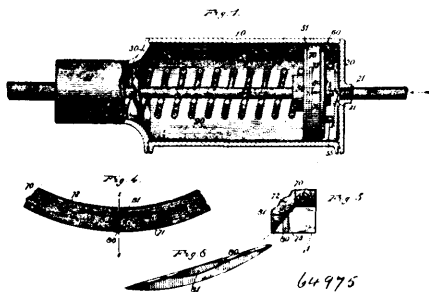
No. 64,974. Washing Machine. (Machine à laver.)



Granville R. Chesnut, Spirit Lake, Iowa, U.S.A., 17th November, 1899; 6 years. (Filed 30th August, 1897.)

Claim.—The washing machine described, comprising essentially the main frame, the swinging body or box hung from the main frame, the cover connected in a hinged manner to one end of the body or box, an oscillating shaft arranged in the body or box and carrying a dasher and having its upper portion journaled in and extending above the cover, the lever connected with the oscillating shaft and comprising loosely connected sections and the rod L disposed at right angles to the lever and arranged above the hinged end of the cover, and having an inner section connected to the outer section of the lever, and an outer section connected to the main frame and the swivel connection M between said inner and outer sections, substantially as and for the purpose set forth.

No. 64,975. Piston Packing. (Garniture de piston.)



Fred Heald Ramsdell, Melrose, Massachusetts, U.S.A., 17th November, 1899; 6 years. (Filed 11th July, 1899.)

Claim.—1st. In a piston packing, the combination of a piston having a spherically convex bevelled resting face for the packing, an expansible packing surrounding said piston and having a spherically concave bevelled face fitting the spherically bevelled face of the piston, and means for pressing said packing against said convex resting face, the convex resting face causing said packing to expand under said pressure. 2nd. In a piston packing, the combination of a piston having a spherically convex bevelled resting face for the packing, an expansible packing surrounding said piston and having

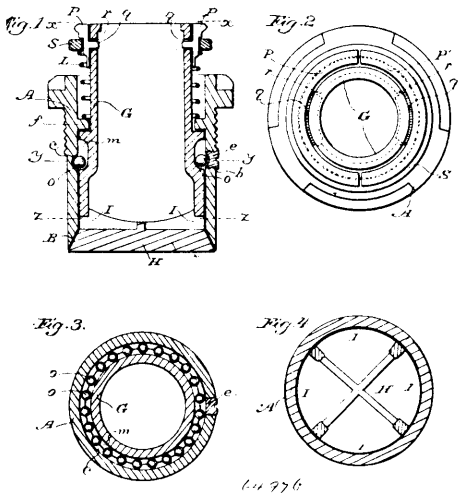
a spherically concave bevelled face fitting the spherically bevelled face of the piston, and a movable follower adapted to be exposed to the fluid pressure on the piston for expanding said packing, and means for holding and guiding said follower. 3rd. In a piston packing, the combination of a piston having a spherically convex bevelled resting face for the packing, an expansible split packing ring surrounding said piston, and having a spherically concave bevelled face fitting the spherically bevelled face of the piston, a coupling link forming a sliding connection between the split ends of said expansible ring, and means for expanding said ring. 4th. In a piston packing, the combination of a piston having a spherically convex bevelled resting face for the packing, an expansible split packing ring surrounding said piston and having a spherically concave bevelled face fitting the spherically bevelled face of the piston, a coupling link forming a sliding connection between the split ends of said expansible ring and having a concave recess fitting said contact face of the piston, and means for expanding said ring. 5th. In a piston packing, the combination of a piston having a spherically convex bevelled resting face for the packing, an expansible split packing ring surrounding said piston and having a spherically concave bevelled face fitting the spherically bevelled face of the piston, a segment shaped link disposed in registering slots in the ends of the split ring and spanning the joint between them, said link being provided with a recess adapted to fit the bevelled face of the piston head. 6th. In a piston packing, the combination of a piston head having a bevelled resting face for the packing, a split expansible packing ring provided with a bevelled face adapted to fit the bevelled face of the piston head, means for applying pressure to said packing ring for expanding it into operative position, said ring contracting automatically when the pressure is released, and a link disposed in registering slots in the ends of the split ring and spanning the joint between them, said link permitting said ends to move towards and from each other in expanding and contracting, and being provided with a recess at its inner edge which fits the bevelled face of the piston head. 7th. In a piston packing, the combination of a piston head provided with guide studs, and a bevelled bearing surface, an expansible packing provided with a bevelled bearing surface adapted to fit the bearing surface of the piston head, and a follower adapted to move on said guide studs for applying pressure to said packing to expand it into operative position. 8th. In a piston packing, the combination of a piston head provided with guide studs, and a bevelled bearing surface, an expansible packing ring provided with a bevelled bearing surface adapted to fit the bearing surface of the piston head, and a follower adapted to move on said guide studs for applying pressure to said packing ring to expand it into operative position said ring contracting automatically into inoperative position when the pressure is released. 9th. In a piston packing, the combination of a piston head provided with guide studs, and a bevelled resting face for the packing, a follower, a split expansible packing ring disposed between said piston head and follower, and provided with a bevelled face adapted to fit the bevelled face of the piston head, and a link disposed in registering slots in the ends of the split ring and spanning the joint between them. 10th. In a piston packing, the combination of a piston head, provided with guide studs, and a spherically convex bevelled resting face for the packing, a follower, a split expansible packing ring disposed between said piston head and follower and provided with a spherically concave bevelled face adapted to fit the bevelled face of the piston head, and a coupling link forming a sliding connection between the split ends of said expansible ring. 11th. In a piston packing, the combination of a piston head provided with guide studs, and a bevelled resting face for the packing, a follower adapted to slide on the guide studs on said head, a split expansible packing ring disposed between said piston head and follower, and provided with a bevelled face adapted to fit the bevelled face of the piston head, and a segment shaped link disposed in registering slots in the ends of the split ring and spanning the joint between them, said link being provided with a recess adapted to fit the bevelled face of the piston head. 12th. In a piston packing, the combination of a piston head having a spherically convex bevelled resting face for the packing, and a shoulder at the inner edge thereof, an expansible split packing ring surrounding said piston and having a spherically concave bevelled face fitting the spherically bevelled face of the piston, a coupling link forming a sliding connection between the split ends of said expansible ring, and means for expanding said ring.

No. 64,976. Suction Valve. (Soupape à suction.)

David Clarence Demarest, Angeles, California, U.S.A., 17th November, 1899; 6 years. (Filed 4th August, 1899.)

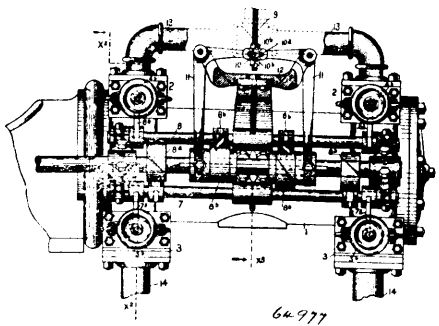
Claim.—1st. A suction valve comprising an outer cylinder casing, a valve seat formed on the lower end of said casing, a circumferential groove formed around the interior of the casing, an inward projecting flange on the interior of said casing outside the groove, a tube adapted to fit inside the outer casing, a valve formed on the inner end of said tube and adapted to fit the valve seat of the outer casing, a circumferential groove on the exterior of the inner tube opposite the groove on the outer casing, and wider than the groove in the casing, and one or more steel balls applied in the semi-circular groove, substantially as described. 2nd. In a suction valve in which air is admitted to the valve opening through a central tube, which is adapted to slide endwise in an outer tube or casing, a device for

limiting the longitudinal movement of the sliding tube, consisting of one or more steel balls contained in a semi-circular groove or



cavity in the inner wall of the casing and projecting into a corresponding groove or cavity in the exterior wall of the inner tube, one of said grooves or cavities being hemispherical in form and adapted to fit one half the circumference of the ball or balls, while the other is elongated equal to the longitudinal movement desired to impart to the inner tube, substantially as described. 3rd. In a suction valve wherein the valve seat is formed on the lower end of a cylindrical valve casing and the valve is formed on the lower end of an inner sliding tube, means for limiting the movement of the inner sliding tube, consisting of one or more steel balls contained in a semi-circular groove formed around the interior circumference of the outer casing and projecting into a circumferential groove of greater width in the exterior of the wall of the inner tube, substantially as described. 4th. In a suction valve, a cylindrical outer casing, a valve seat formed on the lower end of the casing, a tube adapted to slide enwise inside said cylindrical casing, a valve carried at the inner end of said tube, one or more steel balls confined in grooves or cavities between the tube and casing, a flange or ledge on the inner wall of said casing above the groove, and a spiral spring adapted to rest upon said ledge outside the inner tube, while its upper end bears against a cap or flange at the upper end of the inner tube, substantially as described. 5th. In a suction valve comprising an inner tube, adapted to move longitudinally within an outer tube, and means for limiting the movement of the inner tube, a cap piece composed of two semi-circular parts fitted to clasp around the upper end of the inner tube, and provided with lugs, which interlock in slots in the sides of the tube, a ring adapted to slip over and surround the two semi-circular parts of the cap piece, and a spiral spring interposed between the ring, and an inward projecting flange on the outer tube, substantially as described.

No. 64,977. Valve Gear for Engines.
(Appareil de soupapes pour machines à vapeur.)

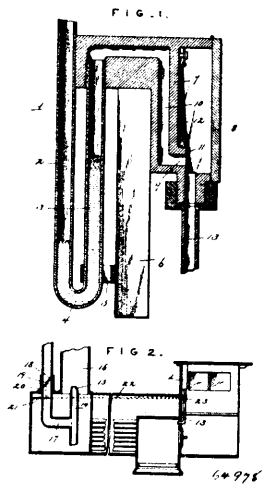


François Xavier Drolet, Quebec City, Quebec, Canada, 17th November, 1899; 6 years. (Filed 3rd August, 1899.)

Claim.—1st. In a steam engine, the combination with the upright governor rod 9, and the bell crank levers 11, at opposite sides of said rod, and having their horizontal arms coupled thereto, of the

cam shaft 8, the cams 8b splined on said shaft and provided each with a circumferential groove engaged by a fork on the pendent arm of one of said bell crank levers, and valve operating mechanism between said cams and the respective valves controlling the induction ports of the engine, whereby should the governor cease to rotate, the said cams will be simultaneously shifted into inoperative positions, as set forth. 2nd. In a valve mechanism for steam engines, the combination with the cylinder, provided with two inductions and two exhaust ports, all provided with grid like valve seats, the four grid like valves controlling the said ports, and their respective stems, of the rotating cam shafts 8, the cam 8b splined on said shaft, the rock shaft 8, the arms 6a, fixed on said rock shaft and engaging the stems of the respective induction valves, the arms 6b, fixed on said rock shaft and bearing on the respective cams 8b, the cams 8a, fixed on the cam shaft, the rock shaft 7, the arms 7a, fixed thereon and engaging the stems of the respective exhaust valves, the arms 7b, fixed on said shaft 7 and bearing on the respective cams 8a, the rod 9 of the governor, and means between said governor and the cams 8b, for displacing them simultaneously in opposite directions, substantially as set forth.

No. 64,978. Exhaust Mechanism. (Mécánisme d'émission.)



James Earle Rankine, Elk Rapids, Michigan, U.S.A., 17th November, 1899; 6 years. (Filed 5th August, 1899.)

Claim.—1st. In draft indicators for locomotive furnaces in which the draft is accelerated by the intermittent action of exhaust steam, the combination of a transparent U gage, a chamber arranged alongside the gage, a tubular connection between one leg of the gage and the chamber, a valve suspended to hand across the passage for checking or preventing pulsations in the gage incident to intermittent exhaust, and a suction pipe leading from chamber to fire box, substantially as described. 2nd. In a locomotive engine having exhaust mechanism adapted to discharge through or at one side of the stack, and means for regulating the discharge from the cab of the engine, the combination with such engine, of a visual indicator consisting of a transparent U gage, a valve chamber communicating with one leg of the gage, a suspended flat valve for preventing pulsations in the gage, and a suction pipe extending from valve chamber to fire box of the engine, substantially as described.

No. 64,979. Lighter for Igniting Fuses.
(Allumeur pour fusés.)

Joseph Pope, Penlee, Tregony, Cornwall, England, 17th November, 1899; 6 years. (Filed 20th December, 1898.)

Claim.—1st. A device suitable for igniting blasting fuses, comprising a tubular casting and a plug of inflammable material fitting in the said casting in a water tight manner, the said casting being adapted to surround one end portion of such a fuse and to keep dry the inner end of the said plug, substantially as set forth. 2nd. A device suitable for igniting blasting fuse, comprising a tubular casing consisting of a substance coated externally with a suitable waterproofing solution, and a plug of inflammable material fitting in the said casing in a water tight manner in said casing being adapted to surround one end portion of such a fuse and to keep dry the inner end of the said plug, substantially as set forth. 3rd. A device suitable for igniting blasting fuses, comprising a tubular casting and an inflammable plug fitting in the said casing in a water tight manner and composed of a mixture of gunpowder and shellac dissolved in methylated spirits, the said casing

being adapted to surround one end portion of such a fuse, and to keep dry the inner end of the said plug, substantially as set forth.

Fig. 1.



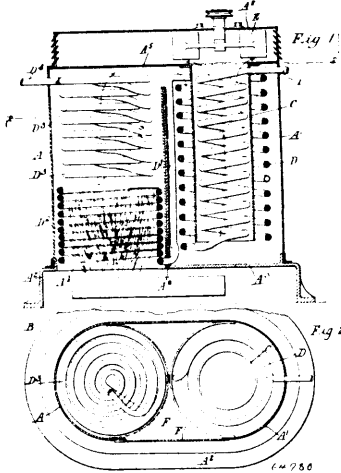
Fig. 2.



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4th. The combination with a fuse of an igniting device comprising a tubular casing and a plug of inflammable material fitting in the said casing in a water tight manner and arranged so as, on burning, to ignite the said fuse, the said casing fitting on one end portion of the said fuse and being adapted to keep dry the inner end of the said plug and the adjacent end of the said fuse, substantially as set forth.

No. 64,980. Steam Generator. (*Générateur à vapeur.*)

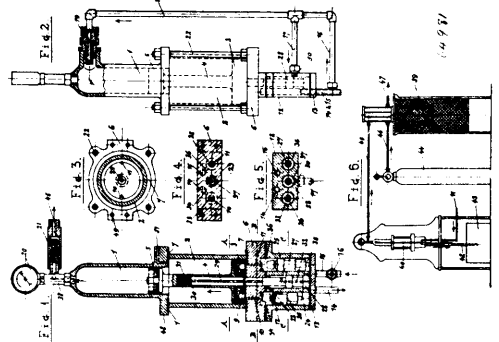


Thomas Clarkson, London, England, 17th November, 1899; 6 years. (Filed 9th August, 1899.)

Claim.—1st. In a steam generator, the combination of a source of heat, a coil of tube constituting a feed water heater heated by the waste products of the source of heat, a coil of tube forming a wall of tube around the source of heat, and a series of involute coils of tube superimposed above the source of heat, all the coils of this combination being connected together to form one continuous conduit, as set forth. 2nd. In a steam generator, the combination of a source of heat, a coil of tube constituting a feed water heater, a coil of tube forming a wall around the source of heat, a series of involute coils of tube superimposed above the source of heat, all the coils of this combination being connected together to form a continuous conduit, a twin casing, one part enclosing the feed heating portion of the coil and the other part enclosing the rest of the coil, and a deflector to direct the products of combustion into the casing of the feed heater from its companion casing, substantially as set forth. 3rd. In a steam generator, the combination of a source of heat, a coil of tube constituting a feed water heater, a coil of tube forming a wall around the source of heat, a series of pairs of involute coils of tube formed by coiling the tube from without inwards, carrying it up and doubling it back on itself, the involute coils thus formed being superimposed above the source of heat, all the coils of this combination being connected together to form one continuous conduit, as set forth. 4th. In a steam generator, the combination of a source of heat, a coil of tube constituting a feed water heater, a coil of tube forming a wall around the source of heat, a series of involute coils of tube superimposed above the source of heat, all the coils of this combination being connected together to form a continuous conduit, a twin casing, one part enclosing the feed heating portion of the coil and the other part

enclosing the rest of the coil, a deflector to direct the products of combustion into the casing of the feed heater from its companion casing, and a fan for sucking the products of combustion out of the feed water heating chamber, substantially as described. 5th. The combination with a steam generator in which no constant water level is maintained, the water being fed into one end of a series of tubes connected together and arranged so that steam in a more or less superheated state issues from the other end, and a source of heat therefor of a regulator comprising metallic members having different coefficients of expansion and means for utilizing the movement of the members of the regulator consequent on their expansion when subjected to the heat of the contents of the generator to control the supply of heat to the generator. 6th. The combination with a steam generator in which no constant water level is maintained, the water being fed into one end of a series of tubes connected together and arranged so that steam in a more or less superheated state issues from the other end, and a source of heat therefor of a regulator comprising metallic members having portions possessed of different coefficients of expansion and constituting a lever which when disposed in the path of the contents of the generator will move owing to the expansion of the members and mechanism for utilizing this movement to control the supply of heat to the generator, as set forth. 7th. The combination with a steam generator in which no constant water level is maintained, the water being fed into one end of a series of tubes connected together and arranged so that steam in a more or less superheated state issues from the other end, and a source of heat therefor of a regulator comprising metallic members having different coefficients of expansion and disposed in the path of the contents of the generator, the members being so arranged as to form a lever and constitute part of an operative connection in which there is a certain amount of slack, and mechanism for utilizing the movement of the lever consequent on the expansion of the members after the slack has been taken up to control the supply of heat to the generator, as set forth. 8th. The combination with a steam generator in which no constant water level is maintained, the water being fed into one end of a series of tubes connected together and arranged so that steam in a more or less superheated state issues from the other end, and a source of heat therefor of a regulator comprising metallic members having different coefficients of expansion and disposed in the path of the contents of the generator, a support for the members, and a lever so arranged that after a certain amount of slack has been taken up it will by the movement of the members consequent on their expansion be operated to control the supply of heat to the generator, as set forth. 9th. The combination with a steam generator of the kind described, of a pump operated by the engine driven by the steam from the generator, having a relief valve so arranged that when the pressure in the generator reaches or exceeds a certain limit, though the pump will continue to operate, the surplus water will pass away through the relief valve to the supply tank, substantially as described. 10th. The combination with a steam generator of the kind described, of a regulator comprising metallic tubular members having different coefficients of expansion through which the contents of the generator can pass, the free ends of the members being connected by a hollow spring connection, and each member being pivotally connected directly to a lever in such a manner that the relative movement of the members consequent on their expansion, when subjected to the heat of the contents of the generator, will bring about a movement of the lever to which they are connected, and through suitable mechanism control the supply of heat to the generator, substantially as describable.

No. 64,981. Fluid Pressure Engine. (*Machine de pression hydraulique.*)

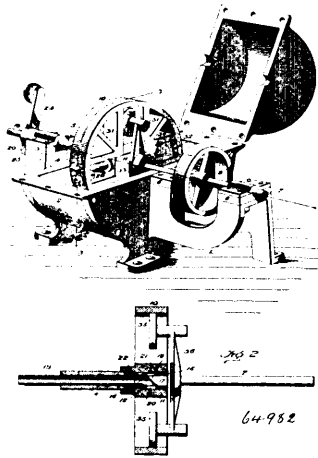


Jan Frederick Bains, Rotterdam, Holland, 17th November, 1899; 6 years. (Filed 21st August, 1899.)

Claim.—1st. In an apparatus of the character described, two cylinders, one larger than the other, pistons connected to each other operating therein, the space between said pistons being in communication with the atmosphere, a conduit for fluid under pressure, communicating with the smaller cylinder and provided with a check valve, a discharge pipe leading from the smaller cylinder and pro-

vided with a check valve, and a conduit for fluid under pressure, leading to the larger cylinder behind the piston therein. 2nd. In an apparatus of the character described, two cylinders, one larger than the other, pistons connected to each other, operating therein, the space between said pistons being in communication with the atmosphere, a conduit for fluid under pressure, one branch of which communicates with the smaller cylinder and is provided with a check valve, a discharge pipe leading from the smaller cylinder and provided with a check valve, valve mechanism for controlling the pressure on the piston in the larger cylinder, and a branch of said conduit leading to said cylinder. 3rd. In an apparatus of the character described, two cylinders, one larger than the other, pistons operating therein, the space between said pistons being in communication with the atmosphere, a nut on the piston of the larger cylinder, a hollow piston rod connecting said pistons having a shoulder therein, a conduit for fluid under pressure, one branch of which communicates with the smaller cylinder and is provided with a check valve, a discharge pipe leading from the smaller cylinder provided with a check valve, a valve chest secured to the larger cylinder having inlet and exhaust orifices therein, and also having inlet valve, outlet valve and piston valve orifices therein, the inlet and inlet valve orifices, and the exhaust and outlet valve orifices being in communication with each other, passages being provided between the piston valve orifice and the inlet valve orifice, and between the piston valve orifice and the outlet valve orifice, the latter passages being located adjacent to the ends of the orifices with which they communicate, and ports being provided between the larger cylinder and the inlet and outlet valve orifices, inlet and outlet valves adapted to close said ports, a piston slide valve having a passage therethrough and provided with a closed annular pocket in its outer surface, a stem on said slide valve extending into said hollow piston rod, a disc thereon adapted to be engaged by said nut and by the shoulder in said piston rod, and branches of said conduit communicating, respectively, with said inlet orifice and with said piston valve orifice, the branch entering the latter at a point opposite the pocket in the piston slide valve.

No. 61,982. Rotary Engine. (Machine rotatoire.)



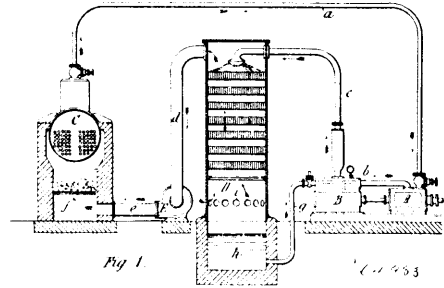
Robert Walter Moore, Fairfax, administrator of the estate of George W. Hunter, Clifton, Virginia, U.S.A., 17th November, 1899; 6 years. (Filed 14th June, 1899.)

Claim.—1st. In a rotary engine, the combination of a revoluble multiple cylinder, an engine shaft in eccentric relation to the axis of rotation of said cylinder, a fly wheel slidably connected to and revoluble with the engine shaft, and pistons connected operatively with the fly wheel, substantially as described. 2nd. In a rotary engine, the combination of a revoluble multiple cylinder, a fly wheel slidably related to said cylinder and revoluble therewith, pistons in said cylinder chambers and connected actively with the fly wheel, and an engine shaft in eccentric relation to the axis of rotation of the cylinder and slidably connected with the fly wheel to be rotated thereby, substantially as described. 3rd. In a rotary engine, the combination of a hollow cylinder shaft carrying a revoluble multiple cylinder, means for supplying motive fluid to and exhausting the same from the piston chambers of said cylinder, an engine shaft in eccentric relation to the axis of rotation of said cylinder, pistons in the chambers of said multiple cylinder, and a shiftable fly wheel operatively connected with the cylinder pistons to be shiftable therewith, substantially as described. 4th. The combination with a rotatable open ended cylinder, and piston therein, of a revoluble member slidably fitted to the cylinder and connected to the pistons, an engine shaft, and slidable connections between the revoluble member and said engine shaft, as and for the purposes described. 5th. In a rotary engine, the combination of a revoluble cylinder provided with a sleeve like valve seat, having ports which communicate with the piston chambers of said cylinder, the non-revoluble hollow valve fitted accurately to the valve seat and having the

live and exhaust passages which terminate in ports isolated one from the other by an intermediate abutment, pistons in the chambers of said cylinder, an engine shaft, and operative connections between the pistons and said engine shaft to rotate the latter, substantially as described. 6th. In a rotary engine, the combination of a hollow cylinder shaft, a multiple cylinder fast with said shaft and having a sleeve like valve seat, an axially adjustable non-revoluble valve housed within said hollow shaft and the valve seat and provided with separate live and exhaust passages, means connected with said valve to reverse the relation of its ports to the piston chambers of the cylinder, an engine shaft, pistons in the chambers of said cylinders, and means actuated by the pistons and connected with the engine shaft to rotate the latter, substantially as described. 7th. In a rotary engine, the combination of a revoluble multiple chamber cylinder, an engine shaft in eccentric relation to the axis of rotation of the cylinder, a shiftable fly wheel revoluble with the cylinder and connected operatively with the cylinder pistons to be shiftable therewith, and a cross head carried by the engine shaft and slidably connected with the fly wheel to be rotated thereby, substantially as described. 8th. In an engine, the double cylinder having open ends and a central partition, said partition forming a valve and provided with ports for the admission and exhaust of steam or air, as and for the purposes described. 9th. The combination of a suitable boxing or housing, with an engine situated therein and having its working parts exposed to the action of steam which may be confined in said housing, as and for the purposes described. 10th. In a rotary engine, a multiple chambered cylinder having the tapered sleeve like valve seat and with the dished inner heads of the piston chambers provided with the shallow ports, combined with a tapered valve fitted in said seat of the revoluble cylinder, pistons in the cylinder chambers, an engine shaft, and means connecting the pistons with said shafts, substantially as described. 11th. In a rotary engine, the combination of an inclosing casing, a hollow shaft supported in casing, a multiple chambered cylinder fast with said shaft and having a valve seat, a valve contained in said hollow shaft and having independent live and exhaust channels, the exhaust channel of the valve discharging into the casing, means for supplying live motive fluid to the valve, an engine shaft, pistons in the chambers of the cylinder and a fly wheel slidably related to and connected with the cylinder and the engine shaft to rotate therewith, the working elements of the engine being contained in said casing and having the surfaces thereof exposed to the exhausted fluid discharged by the valve to said casing, substantially as described.

No. 61,983. Steam Boiler Furnace.

(Fournaise de chaudière à vapeur.)



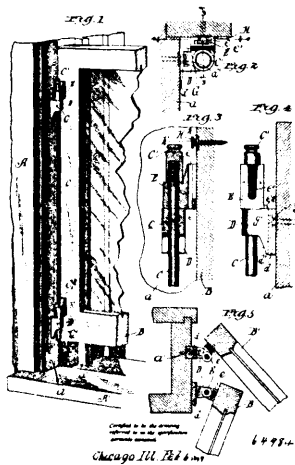
Louis Garnegy Auldjo, Sydney, New South Wales Australia, 17th November, 1899; 6 years. (Filed 24th August, 1899.)

Claim.—1st. Air charged with aqueous vapour as a medium for again returning to the steam boiler furnace the heat not utilized by the steam engine. 2nd. A heat exchanger, placed between and connected with the steam engine condenser and the steam boiler, so arranged that the resulting mixture of aqueous vapour and air produced in said heat exchanger is transmitted to the steam boiler furnace, as and for the purpose herein set forth. 3rd. An evaporative condenser, placed between and connected with the steam engine and steam boiler, so arranged that the resulting mixture of aqueous vapour and air formed in said evaporative condenser is transmitted to the steam boiler furnace, as and for the purpose herein set forth. 4th. The combination of a vapour condenser for producing fresh water, with a heat exchanger, placed between and connected with the steam engine condenser and steam boiler, so arranged that the resulting mixture of aqueous vapour and air formed in said heat exchanger is transmitted to the steam boiler furnace, substantially as herein set forth. 5th. The combination of a vapour condenser for producing fresh water, with an evaporative condenser, placed between and connected with the steam engine condenser and steam boiler, so arranged that the resulting mixture of aqueous vapour and air formed in said evaporative condenser is transmitted to the steam boiler furnace, substantially as herein set forth. 6th. The combination of a vapour condenser and heat exchanger, with an evaporative condenser placed between and connected with the steam engine and boiler, so arranged that the resulting mixture of aqueous vapour and air formed in said evaporative condenser is transmitted to the boiler furnace, as and for the purpose herein set forth. 7th.

The combination of a steam engine and boiler, with a heat exchanger for producing air charged with aqueous vapour, and a heat exchanger placed to intercept waste gases from the boiler furnace, whereby the mixture of air and aqueous vapour is further heated before entering the boiler furnace, substantially as herein set forth. 8th. The combination of a steam engine and boiler, with an evaporative condenser for producing air charged with aqueous vapour, and a heat exchanger placed to intercept waste gases from the boiler furnace, whereby the mixture of air and aqueous vapour is further heated before entering the boiler furnace, substantially as set forth.

No. 64,984. Pivotal Supporting Device.

(Appareil de support à pivot.)

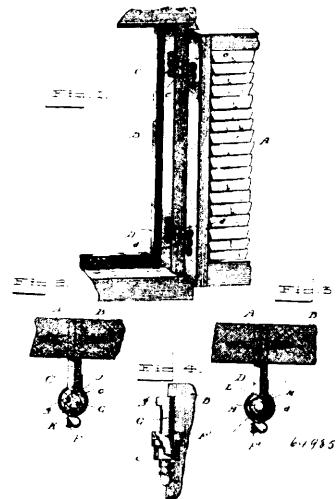


Joseph C. Winship, assignee of George Henry Parker, Chicago, Illinois, U.S.A., 18th November, 1899; 6 years. (Filed 27th February, 1899.)

Claim.—1st. A device for the purpose set forth, comprising two brackets having permanent pivotal connections with each other and provided with means affording interlocking engagement with complementary holding devices on a jamb and sash or the like by vertical movement of the bracket with respect to said holding devices. 2nd. A device for the purpose set forth, comprising two brackets having permanent pivotal connection with each other and provided with flat faces for contact with a jamb and sash or the like, and provided also with means affording interlocking engagement with complementary holding devices on such jamb and sash, by vertical movement of said brackets with respect to said holding devices. 3rd. A device for the purpose set forth, comprising two brackets having permanent pivotal connection with each other and provided with flat faces for contact with a jamb and sash, or the like, and provided also with means affording interlocking engagement with complementary holding devices on said jamb and sash by vertical movement of the brackets with respect to said holding devices, the said interlocking means in the case of the bracket which is adapted for engagement with the sash or part to be pivotally supported being within the flat contact face of said bracket. 4th. A device for the purpose set forth, comprising two pivotally connected brackets, provided with base plates having flat faces for contact with a jamb and sash, or the like, and having also vertical open ended slots for engagement with headed studs on said jamb and sash, the open ends of the said slots being oppositely directed in the two brackets. 5th. A device for the purpose set forth, comprising two pivotally connected brackets and means for detachably securing said brackets to a jamb and sash or the like, embracing headed studs and slotted plates adapted for interlocking engagement. 6th. A device for the purpose set forth, comprising two pivotally connected brackets provided with base plates having vertical, open ended slots, which on one bracket opens upwardly and on the other opens downwardly, and headed studs constructed for engagement with said slots, and adapted for attachment to a jamb and sash or the like. 7th. A pivotal supporting device, comprising a plurality of pairs of pivotally connected brackets and a rod connecting the pairs of brackets with each other, said brackets being provided with means affording interlocking connection thereof with complementary holding devices on a jamb and sash, or the like, by relative vertical movement of the interlocking parts. 8th. A pivotal supporting device, comprising a plurality of pairs of pivotally connected brackets and connecting rod rigidly secured to one bracket of each pair, said brackets being provided with means affording interlocking connection thereof with complementary holding devices on a jamb and sash or the like. 9th. A pivotal support-

ing device, comprising a plurality of pairs of brackets and a connection thereof on which said brackets are mounted and which affords pivotal connection between the brackets of each pair, said brackets being provided with means affording interlocking engagement thereof with complementary holding devices on a jamb and sash, or the like. 10th. A pivotal supporting device, comprising a plurality of pairs of brackets and a connecting rod which affords pivotal connection between the brackets of each pair, said brackets being provided with base plates having flat faces for contact with jamb and sash, or the like, and having also, vertical open ended, oppositely directed slots adapted for engagement with headed studs on such jamb and sash. 11th. A pivotal supporting device, comprising two pivotally connected brackets one of which is movable vertically with respect to the other and means for giving vertical movement to the movable bracket, said brackets being provided with means affording interlocking connection thereof with complementary holding devices on a jamb and sash, or the like, by vertical movement of the said brackets with respect to the said holding devices. 12th. A pivotal supporting device, comprising two pivotally connected brackets, one of which is movable vertically with respect to the other, and means for giving vertical movement to the movable bracket, said brackets being provided with flat faced base plates having vertical, open ended slots, which open upwardly in one bracket and downwardly in the other bracket, and are adapted to receive headed studs on a jamb and sash or the like. 13th. A pivotal supporting device, comprising two pivotally connected brackets, a pivot connecting the same, on which pivot one of the brackets has vertical sliding movement and a sleeve having screw threaded engagement with said pivot and acting on the movable bracket. 14th. A device for the purpose set forth, comprising a plurality of sets of bracket, connecting rod pivotally connecting the brackets and means affording endwise movement of one of the brackets of each pair upon the rod toward and from its co-acting bracket. 15th. A device for the purpose set forth, comprising two brackets, a pivot connecting the same, one of said brackets being movable endwise on said pivot toward and from the other bracket and a sleeve having screw threaded engagement with the pivot and swivelled connection with the movable bracket. 16th. A device for the purpose set forth, comprising two brackets and a pivot uniting the same, one of said brackets being movable vertically on the pivot, a sleeve having screw threaded connection with the pivot, and swivelled connection between said sleeve and the bracket which is movable vertically on the pivot, embracing an annular groove in the sleeve and a stud secured in the last mentioned bracket and engaging said groove. 17th. The combination with a bracket having a flat base plate provided with open ended slot, of a stud for engaging the said base plate, consisting of a headed screw and a washer provided with an integral sleeve fitting over the screw in contact with the head thereof.

No. 64,985. Hinge. (Penture.)

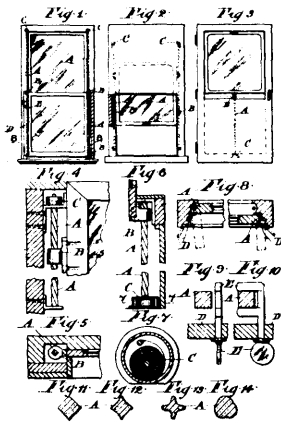


Austin R. Neal and Elisa S. Gale, assignee of James W. Neal, all of Roanoke, Virginia, U.S.A., 18th November, 1899; 6 years. (Filed 15th April 1899.)

Claim.—1st. The combination with a shutter, or door, and frame, of the upper hinge, comprising a fixed pintle, a groove in its upper hub and a locking stud on said pintle, and the lower hinge having grooves in the upper and lower hubs, a removable pintle having a locking stud and spline formed thereon, the grooves of the upper and lower hinges being arranged out of alignment, one with the other, whereby the upper and lower hinges cannot be assembled or

disconnected at the same time, as and for the purposes described. 2nd. The combination with a shutter or door and frame, of the upper hinge comprising a fixed pintle, a locking stud on said pintle adapted to pass through a groove in the hub and ride on the upper surface of said hub, the lower hinge comprising a removable pintle, the hubs of said hinge having grooves formed in the eyes thereof, locking means on said pintle, the locking means and grooves of the lower hinge being out of alignment with those of the upper hinge, whereby the hinges are adapted to be separately assembled in hanging the shutter, the upper hinge serving as a support for the shutter while the lower hinge is adjusted, substantially as and for the purpose described. 3rd. In a hinge the combination, with the leaves and hubs thereof, of a removable pintle having a spline or stud on the upper portion thereof engaging with a groove in the upper hub, thereby causing said pintle to turn with said upper hub, a stud near the lower end of said pintle adapted to pass through a groove in the lower hub and interlock therewith by turning the shutter, and a collar or stop on said pintle, substantially as described. 4th. The combination with a shutter or door and frame, of the upper hinge having a fixed pintle, and the lower hinge having a removable pintle, means for separately locking or unlocking the upper and lower hinges when the shutter or door is swung to different angles from the face of the supporting frame, substantially as and for the purposes described.

No. 61,986. Contrivances for Counter-balancing Window Sashes, Shutters, etc. (*Appareil pour contre balancer les chaines de fenetre, etc.*)



61986

Arthur Stoughton Bloomfield, Melbourne, assignee of George Barnes, Albert Park, both of colony of Victoria, Australia, 18th November, 1899; 6 years. (Filed 19th July, 1899.)

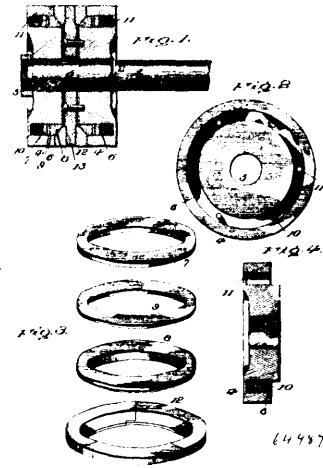
Claim.—1st. In contrivances for counter balancing window sashes, shutters and the like, a screw threaded or twisted rod in combination with a spring or springs attached to said rod in such a way as that said spring or springs always tend to rotate said rod in the direction required to raise the window, substantially as and for the purposes herein described and explained. 2nd. In contrivances for counterbalancing window sashes, shutters and the like, a twisted or special rod mounted in suitable bearings in combination with spiral spring attached to said rod so as to rotate same in the direction required to raise the sash together with a nut or traveller on the sash frame engaging said twisted rod substantially as and for the purpose herein described and explained. 3rd. In contrivances for counterbalancing window sashes, shutters and the like, the combination with a twisted rod of a key (as E) adapted to be placed in engagement with said rod so as to prevent its rotation substantially as and for the purposes herein described and explained.

No. 61,987. Packing for Pistons. (*Garniture de pistons.*)

William Roadman of Kregar and Lémon Byers, Ligonier, both of Pennsylvania, U.S.A., 18th November, 1899; 6 years. (Filed 30th August, 1899.)

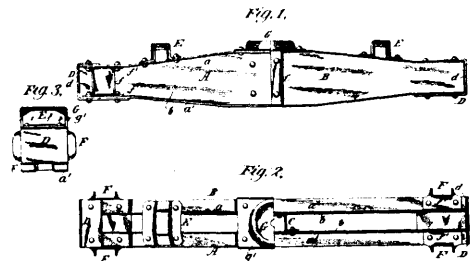
Claim.—1st. In a device of the character set forth, a head having an annular chamber in one face near its outer edge, springs located in said chamber, a follower arranged within said chamber and seated against the springs, an expander placed against the follower and having its outer side made conical, an expandible packing ring composed of sections having their meeting or matching ends halved, and having the sides adjacent to the expander formed with a conical depression to receive the conical end of said expander, and means for holding the parts in fixed relation when assembled, substantially as

set forth. 2nd. In a device of the character specified, a head formed in one face with an annular chamber having ports leading therefrom, springs located in said chamber, a follower seated upon said springs, an expander placed upon the follower and having its outer end made conical, an expandible packing ring composed of sections having their meeting ends halved and the side adjacent to the expander formed with a conical depression to receive the conical end of the expander and co-operate therewith, and a cap plate, as and for the purpose described. 3rd. In a device of the character specified, a head formed in one face with annular chamber having ports leading therefrom and having the middle portions raised or projecting beyond the plane of the edge portion exterior to the annular chamber, springs located in said chamber, a follower, an expander, a sectional packing ring, and a cap plate seated against said central portion of the head and maintaining the parts in proper relation, substantially as set forth. 4th. In combination, a rod having a threaded extremity and an outer shoulder a distance from the threaded end, two heads placed upon the rod and having their inner faces formed with corresponding annular chambers near their outer edges and having their middle portions raised or projected, and having ports extending through the outer faces and communicating with the annular chambers, corresponding followers and expanders for the heads, gaskets or packing rings interposed between the followers and expanders, springs located in the annular chambers and exerting an outward pressure against the followers, and expandible packing rings composed of sections having conical depressions in the sides adjacent to the expanders to receive the conical ends thereof, a cap plate common to both heads and interposed between them and secured directly to one of said heads, and a clamp nut applied to the threaded extremity of the rod to hold the heads and adjunctive parts in assembled relation, substantially as set forth.



61987

No. 61,988. Truck Bolster. (*Traversin de camion.*)



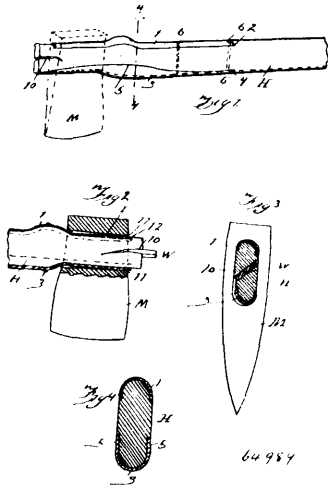
61988

The Pressed Steel Car Company, New York City, New York, assignee of Frederick Harvey, Rapely, Pennsylvania, U.S.A., 18th November, 1899; 18 years. (Filed 5th September, 1899.)

Claim.—1st. On a pressed steel truck bolster comprising side members which are deeper at their middle portion than at their ends, means for spacing and attaching said side members together at their middle, and channel plates, the webs of which abut against the ends of the side members for spacing and attaching together said side members at their ends, substantially as described. 2nd. A pressed steel truck bolster comprising flanged side members, the webs of which are adjacent, means for spacing and attaching them together at their middle, and channel plates for securing them at their ends, said plates being secured to the upper and lower flange of each side member and having their web portions abutting the ends of the side members, substantially as described. 3rd. A pressed

steel truck bolster comprising flanged side members, the webs of which are adjacent, means for spacing and attaching together said side members, and guides having vertical flanges and horizontal flanges by which they are secured to the ends of the side members and between the top and bottom flanges thereof, substantially as described. 4th. A pressed steel truck bolster comprising flanged side members having their webs adjacent, a trough-shaped piece for spacing and attaching them together at their middle, guides having horizontal flanges located between the flanges at the ends of the side members and channel plates for attaching together and spacing said side members at their ends, said channel plates and guides being secured to the flanges of the side members, substantially as described.

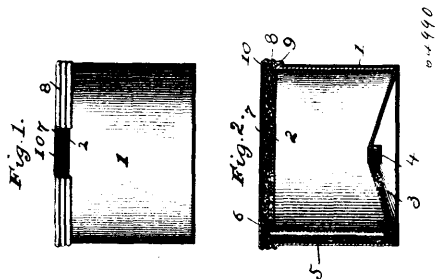
No. 64,989. Axe Handles. (Manche de hache.)



William T. Marsh, Intervale, Maine, U.S.A., 18th November, 1899; 6 years. (Filed 11th October, 1899.)

Claim.—1st. The combination with a tool head having an eye parallel with its operative face and vertically elongated, of a wooden handle fitting said eye and whose outer end has therein a kerf extending completely across it and oblique to its longest axis, and a wedge inserted in said kerf, as and for the purpose set forth. 2nd. The combination with a tool head having a transverse eye which is vertically elongated, of a wooden handle whose outer end conforms substantially in shape with said eye and has therein a kerf extending completely across them oblique to its longest axis, metallic guards on the upper and lower edges of said handle and adapted to extend through and project beyond the outer end of the eye when the handle is in place in the head, and a wedge inserted in said kerf, as and for the purpose set forth.

No. 64,990. Stamp Moistener. (Appareil pour humecter les timbres.)

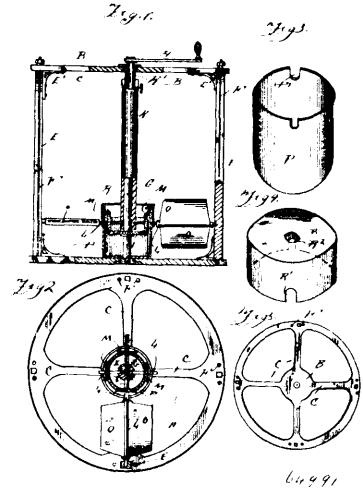


Albert Riederer, Carlstadt, New Jersey, U.S.A., 18th November, 1899; 6 years. (Filed 2nd October, 1899.)

Claim.—In a stamp moistener, a liquid receptacle consisting of a hollow cylindrical body portion having a bead formed integral with its upper end and a cone shaped bottom suitably secured to its lower end provided with an opening at the apex thereof, of means for closing said opening, in combination with a metallic diaphragm mounted upon the said receptacle, a feed pipe suitably secured in said diaphragm and having its lower end extending to near the bottom of said receptacle and its upper end bent at right angles forming a spout resting upon the upper face of the diaphragm, a pad mounted on

the said diaphragm and spout, a removable band secured to the upper end of said receptacle by means of the said bead, and an inwardly extending flange formed integral with the said band for securing the said pad and diaphragm in position, substantially as herein set forth.

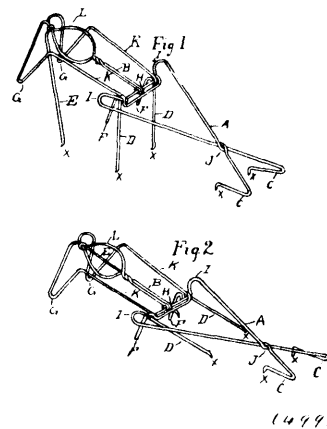
No. 64,991. Dough Mixing Machine. (Machine à pétrir la pâte.)



Charles Adson Conner, Warsaw, New York, U.S.A., 18th November, 1899; 6 years. (Filed 11th October, 1899.)

Claim.—1st. In a dough mixer, the combination of an open framework, a central driving shaft and radial shafts arranged in the framework and having beaters thereon, and driving gears connected to the driving shaft and radial shafts, said gears inclosed in a removable box which in its operating position closes around the shafts, substantially as described. 2nd. In a dough mixer, the top and bottom spiders, posts or standards, and binding rods by which the frame is rigidly held, the central shaft having a bevel gear thereon, a sleeve surrounding said shaft, the radial shafts having bearings in said sleeve and in the standards, and bevel gear on the central and radial shafts as described, and means for excluding the dough from such gearing, all combined substantially as described. 3rd. In a dough mixer, the combination with the open frame central driving shaft and radial shafts extending from near the centre of the frame and carrying beaters, of the gearing by which said shafts are connected, and an inclosing vessel for said gears consisting of two cups having bottom openings and notched sides, and arranged with relation to the gears, substantially as described.

No. 64,992. Head Rests for Casket. (Appui-tête pour cercueils.)

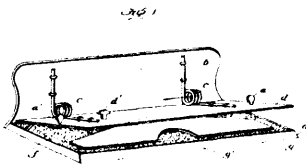


Thomas W. Coughlin, Binghamtown, New York, U.S.A., 18th November, 1899; 6 years. (Filed 10th October, 1899.)

Claim.—1st. In a head rest for caskets, the frame A provided with the logs C, the ears I, and the rod H in combination with the extension

frame K provided with the auxiliary legs F and G, and the ring L, and the legs D and E; as described and specified. 2nd. In a head rest for caskets a wire frame made to support the body at a desired angle by means of movable vertical legs at different lengths located at different parts of the frame and provided with sharpened points to prevent their slipping on the bottom of the casket, in combination with a rigid wire frame having sharpened points at the lower extremities to engage the bottom of the casket and relatively short auxiliary rigid legs at its upper end to support it when let down, at a slight angle above the casket bottom, said frame at its upper end being shaped to receive and hold the head, the lower part spreading out laterally to support the shoulders, the lower end narrowing, the head frame and the body frame being rigidly connected as described and specified.

No. 64,993. Envelope Moistener and Sealer.
(Appareil pour humecter et coller les timbres.)



Benjamin Franklin Pletcher, Lock Haven, Pennsylvania, U.S.A., 15th November, 1899; 6 years. (Filed 4th October, 1899.)

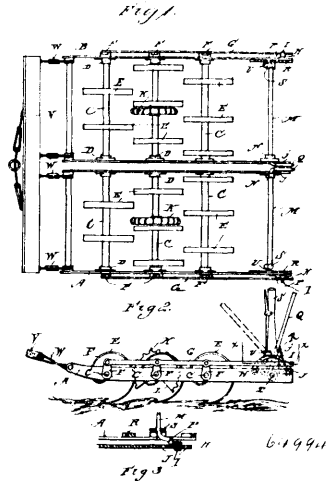
Claim.—1st. As a new article of manufacture, the envelope and stamp moistener, consisting of the receptacle containing the moistening device and having an upright handled portion, and the spring hinged or spring pivoted platen or plate normally held at an angle to the moistening device, substantially as set forth. 2nd. As a new article of manufacture, the envelope and stamp moistener, consisting of the receptacle containing the moistening device and having an upright fixed handled portion, and the spring hinged or spring pivoted platen or plate normally held at an angle to said moistening device, and means adapted to retain said platen out of operative position, as when it is to moisten stamps, substantially as set forth. 3rd. As a new article of manufacture, the envelope and stamp moistener consisting of the receptacle containing the moistening device and having an upright fixed handled portion, the spring pivoted or spring hinged platen or plate normally held angularly to said moistening device, said receptacle having inward and upward inclined sides, substantially as set forth.

No. 64,994. Harrow. (Hers.)

Josiah Knoop, Casstown, Ohio, U.S.A., 18th November, 1899; 6 years. (Filed 11th October, 1899.)

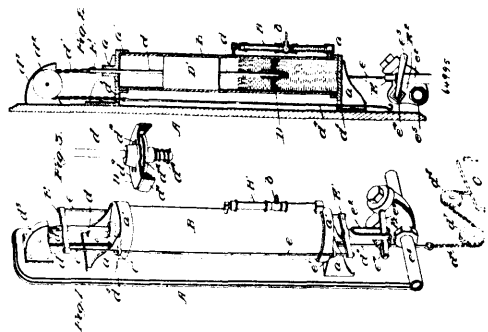
Claim.—1st. In a harrow the combination with a suitable frame having one or more rotatable tooth carrying shafts mounted therein, of a toothed wheel, having a section removed, rigidly mounted on one of said shafts, and normally out of engagement with the ground, and means to rotate said wheel whereby the teeth are brought into engagement with the ground. 2nd. In a harrow, the combination with a suitable frame structure having one or more rotatable tooth carrying shafts mounted therein, said shafts extending beyond said frame to one end, of a pitman and crank mechanism to connect with each of said rotatable shafts, and mechanism to engage with and disengage from said pitman, and means to rotate said shafts when the pitman holding mechanism is disengaged. 3rd. In a harrow, the combination with a frame structure having one or more rotatable tooth carrying shafts mounted therein, a pitman connected with each of said shafts, and other means to rotate said shafts or shaft when said pitman is disengaged. 4th. In a harrow, the combination with a frame having one or more tooth carrying shafts mounted therein, a pitman connected with each of said shafts, a movable block connected with said pitman and an operating rock shaft adapted to engage said block to hold the pitman in its normal position and to disengage from said block to free the pitman and permit the tooth carrying shafts to rotate. 4a. In a harrow, the combination with a frame having one or more rotatable tooth bars mounted therein,

of a toothed segment rigidly mounted on one of said tooth bars, a wheel segment loosely mounted on said bar adjacent to said fixed



toothed segment, and a hook carried by said wheel segment and adapted to engage with said toothed segment to cause said segment to rotate together. 5th. In a harrow, the combination with a suitable frame having one or more tooth carrying shafts mounted therein and adapted to be rotated, a pitman connected with each of said shafts, an operating rock shaft to engage with and disengage therefrom, and means to rotate said tooth carrying shafts when the operating rock shaft is out of engagement with said pitman. 6th. In a harrow, the combination with a frame structure having one or more tooth carrying rotatable shafts mounted therein, and means to rotate said shafts, a pitman connected with each of said shafts, an operating rock shaft engaging with said pitman, mechanism including a lever, also carried by said frame, said mechanism adapted to set the teeth to run shallower or deeper in the ground, and the operating rock shaft passing through said lever and adapted to move therewith. 7th. In a harrow, the combination with a suitable frame having tooth carrying shafts mounted therein, a sprocket wheel connected with one of said shafts, a sprocket wheel mounted on an auxiliary shaft, a chain connecting said sprocket wheels, a ground wheel adapted to drive said last named shaft, and means secured to such shaft and adapted to engage with and disengage from the sprocket wheel thereon whereby the sprocket chain is operated, and means for connecting the other tooth carrying shafts with said chain operated shaft. 8th. In a harrow, the combination with a frame having toothed shafts mounted therein, means for connecting said shafts together, a sprocket wheel on one of said shafts, an auxiliary shaft carrying a driving sprocket having clutch teeth thereon and adapted to be rotated by a ground wheel, a slidable clutch keyed to said shaft, mechanism for moving said clutch into engagement with and disengagement from the teeth of said driving sprocket, of a sprocket chain for connecting said sprocket wheels together whereby the tooth carrying shafts are rotated.

No. 64,995. Automatic Valve Regulating Devices for Smoke Consumer. (Régulateur automatique de soupape pour appareils à consommer la fumée.)

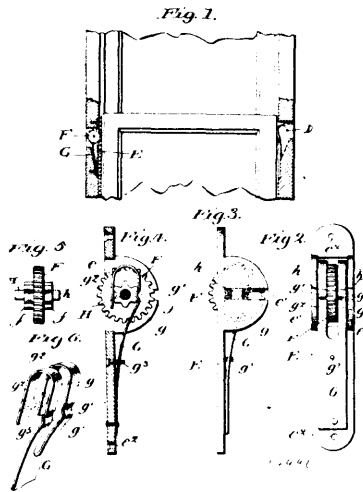


Alfred Pageau, Montreal, Quebec, Canada, 18th November, 1899; 6 years. (Filed 21st September, 1899.)

Claim.—1st. An automatic valve governor, comprising a cylinder containing fluid, a weighted piston operating therein, a valved by-pass for the passage of the said fluid around said piston, a chain connected to the piston rod for raising said piston in its cylinder, a steam valve operatively connected with said piston rod, whereby the steam may be shut off at a predetermined time, substantially as

described. 2nd. An automatic valve governor, comprising a cylinder containing fluid, a weighted piston operating therein, and having perforations for the passage of the fluid in one direction, a spring pressed plate for closing said perforations against the passage of the fluid in the other direction, a valved by-pass communicating with the interior of the cylinder on each side of said piston, a chain connected to the piston rod for raising said piston in its cylinder, a steam valve operatively connected with said piston rod, whereby the steam may be shut off at a predetermined time, substantially as described. 3rd. An automatic governor, comprising a cylinder containing fluid, a weighted piston operating therein, a valved by-pass for the passage of the fluid around the said piston, a chain connected to the piston rod for raising said piston in its cylinder, a rod connected with said piston rod, and a steam valve operatively connected with said rod, whereby the steam may be shut off at a predetermined time, substantially as described.

No. 64,996. Window Sash Holder. (Arrêt-croisic.)



Daniel Gardner, Newburg, New York, U.S.A., 18th November, 1899; 6 years. (Filed 4th October, 1899.)

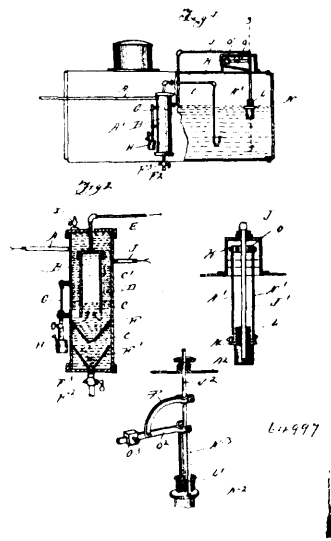
Claim.— 1st. The combination with the rack adapted to be secured to a sliding sash, of a pinion for engaging said rack and provided with a ratchet hub, and a spring having a portion intermediate its ends engaging said hub on one side, and having one of its ends bent around and engaging said hub on the other side, one of said hub engaging portions of the spring being provided with a projection, substantially as described. 2nd. The combination with a sliding sash provided with a rack, of a frame adapted to be secured to the window casing provided with slotted arms, a pinion mounted in said slotted arms and provided on each side with a ratchet hub, a spring secured to said plate and having its free end bifurcated to form two arms, each of said arms having a projection engaging one of the ratchet hubs on one side, and having its end bent over and engaging said hub on the opposite side, and an adjusting screw engaging said spring between the bifurcated portions and the point of attachment, whereby said screw will adjust the pressure of both of said arms upon said ratchet hub simultaneously, substantially as described.

No. 64,997. Feed Water Purifier and Boiler Skimmer. (Epurateur d'eau d'alimentation.)

Herman M. Nye, Elmwood, Nebraska, U.S.A., 18th November, 1899; 6 years. (Filed 20th September, 1899.)

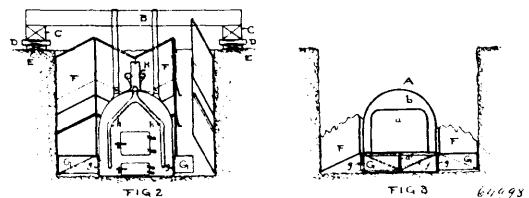
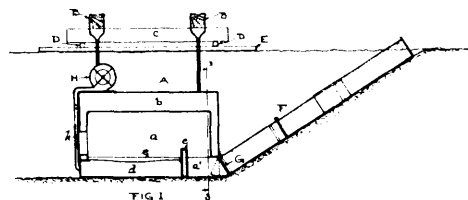
Claim.— 1st. A device of the class described, provided with a vessel adapted to contain water and oil, and connected with the feed water supply, and a tube extending with its lower open end into the water, the tube having connection with the boiler, so that the feed water passes through the oil in order to pass into the said tube and finally to the boiler, substantially as shown and described. 2nd. A device of the class described, provided with a vessel adapted to contain water and oil, and having connection with the feed water supply, a tube in said vessel and extending with its lower open end into the water, so that the feed water in order to reach the tube has to pass downward through the oil, a pipe leading from the tube to the water compartment of the boiler, and funnels in the lower end of said vessel and extending one above another within the water, substantially as shown and described. 3rd. A device of the class described, provided with a vessel adapted to contain water and oil and having connection with the feed water

supply, a tube in the said vessel and extending with its lower open end into the water, so that the feed water in order to reach the tube



has to pass downward through the oil, a pipe leading from the tube to the water compartment of the boiler, and funnels in the lower end of said vessel and extending one above the other within the water, one of the funnels having a valved outlet pipe, substantially as shown and described. 4th. A device of the class described, provided with a vessel adapted to contain water and oil, and having connection with the feed water supply, a tube in the said vessel and extending with its lower open end into the water, so that the feed water in order to reach the tube has to pass downward through the oil, a pipe leading from the tube to the water compartment of the boiler, funnels in the lower end of said vessel and extending one above the other within the water, a skimmer comprising a perforated tube, and a pipe leading from the inside of said tube to the said vessel, substantially as shown and described. 5th. A device of the class described, provided with a vessel adapted to contain water and oil, and having connection with the feed water supply, a tube in the said vessel and extending with its lower open end into the water, so that the feed water in order to reach the tube has to pass downward through the oil, a pipe leading from the tube to the water compartment of the boiler, funnels in the lower end of said vessel and extending one above the other within the water, a skimmer comprising a perforated tube, and a pipe leading from the inside of said tube to the said vessel, said skimmer tube being counterbalanced to rise and fall with the water in the boiler, substantially as shown and described.

No. 64,998. Apparatus for Thawing Frozen Earth or Ground. (Appareil à degeler la terre.)

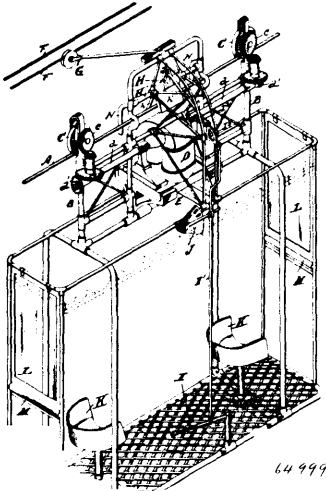


Edwin D. Coddington, Milwaukee, Wisconsin, U.S.A., 18th November, 1899; 6 years. (Filed 28th October, 1897.)

Claim.— 1st. The combination with a furnace, of an extensible flue leading out of the fire box of the furnace and open next to the surface of the ground or earth to be thawed and removed, so as to direct the heat issuing from the furnace against such surface as the work progresses, substantially as and for the purposes set forth.

2nd. The combination with a furnace, of a plurality of adjustable flues each constructed and arranged to direct the heat from the fire box of the furnace against the surface of the ground or earth to be thawed and having a movable section for exposing such surface for excavation or removal of the earth, and means for shutting off the heat from one flue and directing it into another, substantially as and for the purposes set forth. 3rd. The combination with a furnace, of an adjustable flue constructed and arranged to direct the heated products of combustion from the fire box of the furnace against the surface of the earth or ground to be thawed and removed, and means for forcing such heated products of combustion through said furnace and flue, substantially as and for the purposes set forth. 4th. The combination with a furnace, of an extensible flue pivotally connected therewith and constructed and arranged to conduct the heat therefrom to the surface of the ground or earth to be thawed and removed, substantially as and for the purposes set forth. 5th. The combination with a furnace, of an extensible flue pivotally connected therewith and constructed and arranged to conduct heat therefrom to the surface of the ground or earth to be thawed and removed, substantially as and for the purposes set forth. 6th. The combination with a furnace, of a plurality of extensible flues pivotally connected therewith and having a movable section for exposing the thawed ground or earth, and means for shutting off the heat from one flue and directing it into another, substantially as and for the purposes set forth. 7th. The combination with a furnace, of a flue constructed and arranged to conduct heat from the furnace and direct it over or against the surface of the earth or ground to be thawed and having a movable section for exposing the thawed earth or ground and permitting its removal, substantially as and for the purposes set forth.

No. 64,999. Electric Trolley Car. (Char électrique.)

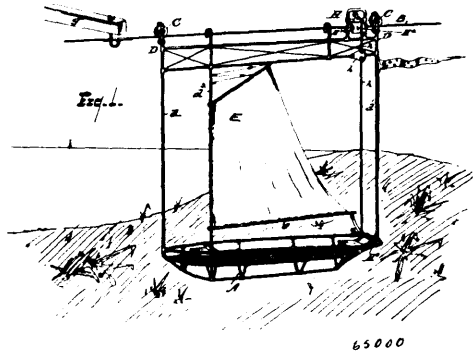


James H. Talbot, Detroit, Michigan, U.S.A., 18th November, 1899; 6 years. (Filed 23rd September, 1899.)

Claim.—1st. In an elevated trolley car, the combination of the frame, the trolley wheels, an electric motor supported in said frame, means for connecting the driving shaft of the motor with the trolley wheels whereby the same may be rotated, substantially as described. 2nd. In an elevated trolley car, the combination of the frame, the trolley wheels, the prime motor for driving said wheels, and a brake mechanism consisting of arms pivoted in the frame above the track wire and means whereby one or more of said arms may be operated to grip the wire track, substantially as described. 3rd. In an elevated trolley car, the combination of the frame, trolley wheels, an electric motor secured in the frame and provided with means for driving said trolley wheels, and a brake mechanism consisting of two or more arms secured in the frame above the track wire and arranged so as to straddle said track, one or more of said arms being fixed, the others arranged to swing, means connecting the latter with suitable lever mechanism under the control of the car occupants, whereby the brake mechanism may be applied when desired, substantially as described. 4th. In an elevated trolley car, the combination of the frame, trolley wheels, an electric motor mounted in the frame and arranged to drive the trolley wheels, a rheostat for controlling the current and a brake mechanism provided with means whereby said current may be cut off before the brake is applied and the brake thrown off before the current is applied, substantially as described. 5th. In an elevated trolley car, the combination of the frame, trolley wheels, an electric motor for driving the car, a brake adapted to straddle the track wire and grip the same when power is applied, suitable lever mechanism connecting said brake with a lever for controlling the same mounted in the car, a rheostat suitably mounted, the lever for controlling same suitably engaged with the lever mechanism controlling the brake, whereby, in applying the brake, the current will be first thrown off,

and before turning on the current the brake will be released, substantially as described. 6th. In an elevated trolley car, a U-shaped frame arranged to support a suitable platform, uprights rising from the centre of the U-shaped frame, said uprights braced by suitable cross bracing and trolley wheels mounted in said uprights, substantially as described. 7th. In an elevated trolley car, a U-shaped frame adapted to support a suitable platform, upright members secured to the top of the U-frame, trolley wheels mounted therein, suitable cross members and bracing between said uprights, adapted to receive an electric motor, secure said cross members to receive and secure said motor, and an electric motor, substantially as described. 8th. In an elevated trolley car, a U-shaped frame adapted to support a suitable platform, windows hinged at the top to the frame, and suitable curtains arranged so as to inclose said frame, when desired, upright members secured to the top of said frame, and trolley wheels mounted in said uprights, substantially as described. 9th. In an elevated trolley car system, a suspended track, a motor car, a series of cars connected with said motor car but separated from each other a sufficient distance whereby the weight of the several cars may be distributed between several loops of the track, substantially as described.

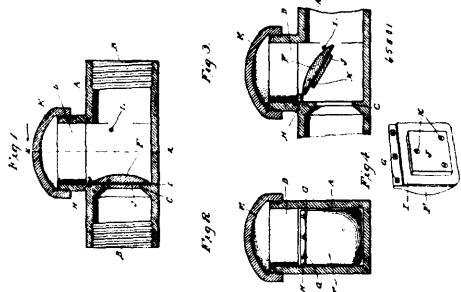
No. 65,000. Trolley Conveyances. (Transport a trollee.)



James H. Talbot, Detroit, Michigan, U.S.A., 18th November, 1899; 6 years. (Filed 30th September, 1899.)

Claim.—1st. In a trolley conveyance, the combination of the trolley wheels, a suitable frame work forming the carriage suspended from said wheels, a sail and a suitable brake mechanism, substantially as described. 2nd. In a trolley conveyance, the combination of the trolley wheels, a suitable frame work forming the carriage suspended from said wheels, and a swinging seat mounted in said frame work, substantially as described. 3rd. In a trolley conveyance, the combination of the trolley wheels, a frame work for supporting said wheels, a boat like frame work provided with stanchions whereby the same is engaged to the upper frame work, and a sail suitably supported, substantially as described. 4th. In a swinging chair, the combination of the seat pivoted in a supporting frame, the frame, and a counterpoised weight secured to the underside of the seat adapted to maintain the seat level regardless of the angle the supporting frame may assume, substantially as described. 5th. A track wire support for trolley railways, consisting of a pole formed in two sections and sleeved together, the lower section suitably anchored, the upper section provided with a cross arm, hooks engaging the track wire secured to said cross-arm, and a suitable yielding support located between the upper and lower sections of the pole, substantially as described.

No. 65,001. Check Valves. (Soupape d'arrêt.)



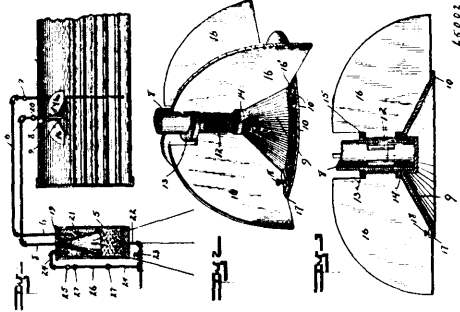
James John Locke, Checkalah, Arkansas, U.S.A., 18th November, 1899; 6 years. (Filed 1st September, 1899.)

Claim.—1st. In a check valve, the combination with the case or body having a cubical chamber and valve seat in one side thereof, of hooks arranged above the valve seat, the valve proper provided with slots to pass over said hooks, whereby the valve is suspended thereon, and a stop pin to prevent the valve from rising too high

when open, substantially as described. 2nd. The valve plate herein described, rectangular in outline, having a flat rear face, a convex front face, and a series of suspending slots near its upper edge, a sheet of asbestos packing on the rear face, and a clamp plate of less area than the orifice of the valve seat secured by screws to the plate and holding the packing in place, in combination with the valve case, the valve seat therein, the suspending hooks over the valve seat, the stop pin, the upward extension chamber, and the cap therefor, substantially as described.

No. 65,002. Automatic Boiler Cleaner.

(*Nettoyeur automatique de chaudière.*)



Charles F. Noftezger, Denver, Colorado, U.S.A., 18th November, 1899; 6 years. (Filed 15th September, 1899.)

Claim.—1st. In a boiler cleaner, a skimmer therefor consisting of a cone-shaped deflector, and a pipe leading therefrom, and as for the purpose set forth. 2nd. In a boiler cleaner, a skimmer therefor consisting of a cone-shaped deflector, a pipe leading therefrom, and a series of wings carried by said deflector. 3rd. In a boiler cleaner, a skimmer therefor having a series of adjustable wings. 4th. In a boiler cleaner, a skimmer therefor consisting of a pipe provided at its lower end with a series of openings, a cone secured at its smaller end to the lower end of said pipe, and a series of radial wings pivotally mounted thereon. 5th. In a boiler cleaner, a settling chamber, a pipe leading from said settling chamber to a boiler, a pipe leading to said settling chamber from the boiler, and a skimmer mounted upon the boiler end of the second pipe. 6th. In a boiler cleaner, a settling chamber, a pipe leading from said settling chamber to a boiler, a pipe leading to said settling chamber from the boiler, a cone mounted within the settling chamber and communicating with said pipe, and a skimmer mounted upon said boiler end of the second pipe. 7th. In a boiler cleaner, a settling chamber, a pipe leading from said settling chamber to a boiler, a pipe leading to said settling chamber from the boiler, a cone mounted within the settling chamber and communicating with said pipe, a skimmer mounted upon the boiler end of the second pipe, and a series of adjustable wings carried by the skimmer. 8th. In a boiler cleaner, a settling chamber, a pipe leading from said settling chamber to a boiler, a pipe leading to said settling chamber from the boiler, a cone mounted within the settling chamber and communicating with said pipe, a skimmer mounted upon the boiler end of the second pipe, a discharge pipe leading from near the bottom of the settling chamber, a second discharge pipe leading from the said chamber near its top, and a sight-glass mounted in said pipe.

No. 65,003. Method of and Machinery for Renewing Old Steel Rails. (*Méthode et machine pour renouveler les vieilles rails d'acier.*)

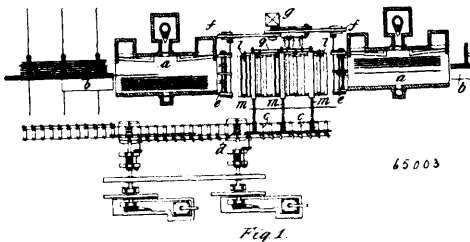


Fig 1.

Edward William McKenna, Milwaukee, Wisconsin, U.S.A., 18th November, 1899; 6 years. (Filed 27th February, 1899.)

Claim.—1st. The herein described process of renewing steel rails for their original purpose, which consists in heating the rail, reducing it to a uniform height by pressure upon the top and bottom thereof, bringing the head and flange nearer together and thereafter spreading the head and flange apart again, at the same shaping the rail to the desired section, whereby uniform fishing angles may be secured, substantially as described. 2nd. The herein described process of renewing steel rails for their original purpose, which consists in heating the rail applying pressure to the top and bottom thereof to crush the head buckle or upset the web, thereby to bring the head

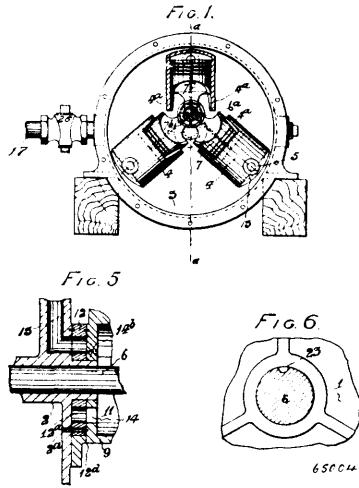
and flange nearer together, and thereafter rolling the rail to the desired section by spreading the head and flange apart again and forming the required fishing angles, substantially as described. 3rd. In a rolling mill for renewing old steel rails, the combination with a furnace for heating the rails, of a breaking down roll train through which the rail may be passed upon leaving the furnace, said roll train having opposing surfaces adapted to engage the top and bottom of the rail and exert pressure thereon, whereby the head and flange are brought nearer together, and main rolls for operating upon the rail after it leaves said breaking down rolls, said main rolls having passes shaped to spread the head and flange apart again and impart the desired cross section to the rail, substantially as described. 4th. In a rolling mill plant, the combination with a furnace adapted to heat old steel rails, of a pair of breaking down rolls located in front of said furnace and adapted to receive a rail therefrom, said rolls having smooth cylindrical surfaces between which the rail is passed and which are adapted to exert a pressure upon the top and bottom thereof, whereby the head and flange are brought nearer together, a guide for directing a rail between said rolls, and main rolls for operating upon the rail after it leaves said breaking down rolls, said main rolls having passes shaped to the desired cross section of the rail, whereby the head and flange are spread apart again, and uniform fishing angles secured, substantially as described. 5th. In a rail rolling machine, the combination with a pair of rolls *a, a'*, between which the rail may be passed, journals *b, c*, at the ends of said rolls, supplemental journals *d*, approximately in the middle of said rolls, means for adjusting the distance between said rolls to accommodate rails of different height, a way *e*, guide carriers *f, f'*, adapted to travel along said way, guides carried by said guide carriers, and means for causing movement of said guide carriers along said way, substantially as described. 6th. The combination with a furnace for heating rails, of a breaking down roll train placed before an opening therein, a guide for receiving a rail from said furnace and directing the same between said rolls, said guide having opposing vertical faces adapted to engage the sides of the head of the rail to sustain the latter against lateral displacement and in an upright position while being rolled, and means for moving said guide opposite different parts of the furnace opening, substantially as described. 7th. The combination with a furnace of a rail rolling machine placed in front of an opening therein, said machines having rolls of an operative length substantially equal to the width of the opening in the furnace, a guide adapted to receive a rail from any part of the opening in the furnace, and direct the same between said rolls, and means for moving said guide opposite any point in said furnace, substantially as described. 8th. In a rolling mill plant for renewing old steel rails, the combination with a furnace for heating the rails of a breaking down roll train located in front of an opening in said furnace, said roll train having a pair of cylindrical rolls with smooth surfaces whose operative length is substantially equal to the width of said opening, a guide for receiving a heated rail from the furnace and directing the same between said rolls, a way along which said guide may travel, motor mechanism adapted to cause said guide to travel to and fro along said way, whereby a rail may be received from any part of said furnace opening, means for controlling said motor mechanism, and main rolls for operating upon the rail after it leaves said breaking down rolls, said main rolls having passes shaped to the desired cross section of the rail, substantially as described. 9th. The combination with a furnace for heating rails, of a breaking down roll train placed before an opening therein, said roll train having cylindrical rolls forming opposing smooth surfaces, a guide having opposing vertical faces adapted to engage either side of the head of the rail to direct the same between the rolls and sustain it against lateral displacement and in an upright position while being rolled, whereby the head and flange of the rail are brought nearer together, means for moving said guide opposite different parts of the furnace opening and main rolls for operating upon the rail after it leaves said breaking down roll train, said main rolls having passes for shaping the rail to the desired cross section, substantially as described. 10th. A machine for preparing rails for reshaping which consists of a pair of rolls placed opposite an opening in the rail heating furnace of a rolling mill plant, said rolls having smooth surfaces adapted to engage the top and bottom of the rail, whereby the head and flange thereof are forced nearer together, a guide adapted to receive a rail from the furnace, said guide having opposing surfaces adapted to engage either side of the head of the rail, whereby the latter is maintained in an upright position and sustained in lateral displacement while being rolled, and means for moving said guide to and from in the direction of the length of the rolls in front of the furnace, to receive rails which may be lying at different parts of the furnace, substantially as set forth.

No. 65,004. Engine. (*Machine.*)

George Henry Hardie and Nicholas Thompson, Vancouver, British Columbia, Canada, 18th November, 1899; 6 years. (Filed 5th September, 1899.)

Claim.—1st. In a three cylinder engine having the cylinders pivotally arranged trihedrally around a crank shaft within a casing formed by the sections 1 and 2, in combination with ports leading off from said cylinders to a common supply chamber, a disc valve 12 having elongated ports therein interposed between the supply chamber and the cylinders, off sets in the ports at the point of con-

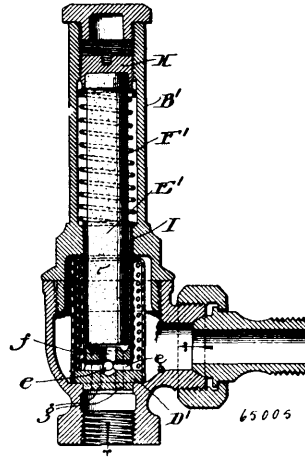
tact with the disc valve, such off sets corresponding with the length of the elongated ports in the said disc valve, and a rotating valve 16,



loosely fixed on the end of the crank shaft within the common supply chamber, as specified. 2nd. In an engine of the class described having a closed chamber 3, with a crank shaft passing there-through and cylinders pivotted by trunnions on opposite sides near the periphery of the chamber, and pistons working in said cylinders, in combination with a ring 8, embracing the converged ends of the pistons and the crank of the shaft, as specified. 3rd. In an engine having a closed chamber 3, for receiving the waste and exhaust, in combination with a crank shaft arranged to turn in said chamber, and pistons arranged trihedrally around the crank of the shaft working in cylinders pivotted on oppositely disposed trunnions journalled in bosses in opposite sides of the chamber 3, pressure communications through the trunnions on one side of the cylinder, and apertures through the oppositely disposed trunnions to chambers 20, as and for the purpose specified. 4th. In combination with cylinders trihedrally placed and pivotted on trunnions with pistons working therein and engaging a crank shaft with their converging ends, ports communicating with the cylinders through the trunnions and with a common supply chamber 11, off sets in said ports at a point near the chamber 11, a disc valve 12, interposed in the posts at the point where the off sets occur, elongated ports 12a in the disc valve whereby the communication may be changed from one port to another, and a rotating valve 16, loosely fixed to the end of the crank shaft. 5th. In combination with cylinders trihedrally arranged from each other and pivoted on trunnions with pistons working therein, and a crank shaft arranged to turn between said pistons, a common supply chamber, 11, ports communicating between the pistons, trough the trunnions, and the supply chamber 11, off seats or jogs in the ports near the supply chamber, of a disc valve 12, having annular tongue shaped grooves therearound, in the path of the ports at the point where the off sets take place, elongated ports 12a, in said disc valve, of a valve loosely fixed to the end of the crank shaft within the closed chamber, said valve consisting of a disc 16, with a segment 16a, removed from one side to expose one port at once as the same is rotated by the said shaft. 6th. In an engine of the class described, a disc valve 12, having the elongated ports therein for reversing the machine, and being provided with a groove 12d, on its opposite sides, and an orifice 12c, communicating between the grooves, for the purposes specified. 7th. In a multiple single acting engine having the cylinders arranged within an exhaust chamber 3, formed by castings 1 and 2, and pivotally mounted on trunnions 5, through which the pressure is introduced to the pistons and a crank shaft passing through the centre of said chamber, in combination with a chamber or chest 11, consisting of an annular casting 9, with a cover 10, said casting 9 being securely fixed to the casting 2 and embracing the hub thereof and the end of the crank shaft, an annular chamber between the sections 2 and 9 and a disc valve arranged to fit therein and susceptible of being turned one sixth of a revolution, elongated ports 12a, in the disc valve, ports 12, communicating with one end of the elongated ports 12a and ports 14, 14a and 14b communicating between the opposite ends of the said elongated ports and chamber 11, and a valve 16, loosely fixed on the enclosed end of the shaft, such valve having a recess therein so that as it rotates with the shaft but one port in the section 9 will be exposed at once.

No. 65,005. Thermostatic Valves.

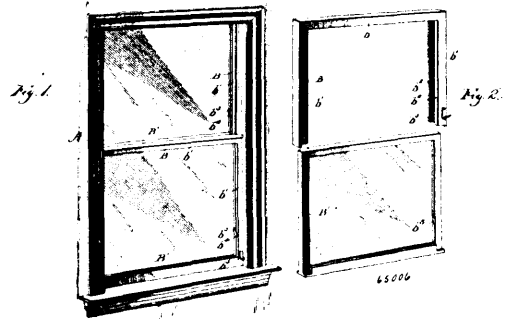
(Soupape thermostatique.)



Warren Webster and Company, Camden, assignees of John A. Serrell, Bayonne, New Jersey, and Meredith Letch, Boston, Massachusetts, all in the U.S.A., 20th November, 1899; 6 years. (Filed 13th June, 1899.)

Claim.—1st. In a thermostatic valve device, the combination with the valve body of an expanding piece for controlling the valve passage, a seat of support for holding one end of said expanding piece in a fixed position, and a spring acting on said expanding piece to maintain it in close contact with the support and take up lost motion. 2nd. The combination with the shoulder expanding piece E¹ of the spring F¹ acting on said shoulder to maintain the expanding piece in close contact with the support. 3rd. The combination with the shoulder expanding piece E¹ of the washer M bearing upon said shoulder and the spring F¹ acting upon said washer to maintain the expanding piece in close contact with its support and take up lost motion.

No. 65,006. Window Sash. (Châssis de fenêtre.)



James Wellesley Murray and John O'Brien, St. George, New Brunswick, Canada, 20th November, 1899; 6 years. (Filed 24th October, 1899.)

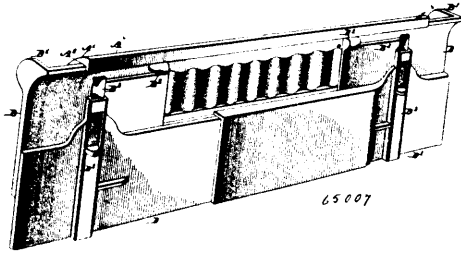
Claim.—1st. The combination with a sash frame of a sash removably mounted therein, substantially as described. 2nd. The combination with a sash frame of a sheath slidably mounted therein, and a sash removably mounted in said sheath, substantially as described. 3rd. A window sash, comprising a sheath adapted to fit in a window frame and having an open side, a sash slidably connected with said sheath and adapted to be removed from and inserted in said open side, and a latch for securing the sash in said sheath, substantially as described. 4th. A window sash, comprising a sheath adapted to fit in a window frame and having an open side, grooves formed in said sheath adjacent to said open side, a sash mounted to slide in said grooves and adapted to be removed from and inserted in said open side, and a latch pivoted to said sash and adapted to engage said sheath whereby the sash may be locked to said sheath, substantially as described.

No. 65,007. Fire Back. (Dos de foyer.)

James Watson Conchar, Dubuque, Iowa, U.S.A., 20th November, 1899; 6 years. (Filed 24th October, 1899.)

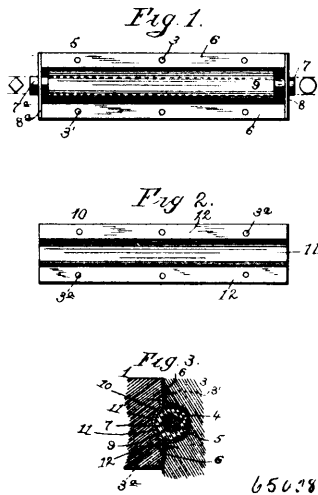
Claim.—1st. In a fire back, the combination of the main plate having a backwardly curved flange terminating in a downwardly extending lip or flange at the upper side, a dove tail bottom flange and a suitable key set at each end, end plates corresponding in cross section to the shape of the main plate but without the terminal

flanges, and adapted to slide freely between said terminal flanges of the main plate, and keys or wedges fitted in said key seats and



adapted to hold the parts in engagement, as described. 2nd. In a fire back, the combination of a main plate having suitable longitudinal, marginal flanges adapted to retain one or more end plates, a key seat at each end and flanges adjacent thereto adapted to retain a winged key or wedge, end plates corresponding in cross section to the main plate, and adapted slide between its marginal flanges, and retaining keys or wedges provided with forwardly projecting gibs at the outer ends and lateral wings adapted to retain them in connection with the other parts when said parts are placed in engagement, substantially as described.

No. 65,008. Door Check. (Arrête-porte.)



Harris H. Fassett, San Francisco, California, U.S.A., 20th November, 1899; 6 years. (Filed 23rd October, 1899.)

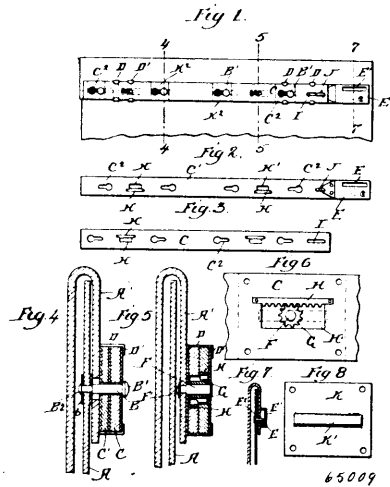
Claim. 1st. The combination with a door and its jamb which latter is formed with a recess, of a shaft mounted in end bearings in said recess and held from lateral movement, an elastic tabular roll loosely mounted on said shaft, so as to rotate thereon and project beyond the face of the jamb, and a concave face on the door into which said elastic roll seats when the door is closed. 2nd. In a door check, the combination of a casing comprising a semi-cylindrical body portion closed at both ends and open at the front and provided with oppositely projecting side flanges having screw openings, a cylindrical shaft projecting through an opening in one end of the case and provided with a square boss to enter a square socket or opening in the other end of said case, an elastic roll mounted on said shaft and of greater diameter than the shaft and having its outer surface adapted to project beyond the line of the case, and a contact plate provided with a central cavity or indented portion and side flanges provided with openings for the insertion of fastening screws, all combined, arranged and operating, substantially as herein shown and described.

No. 65,009. Mail Bag Fastener. (Attache de sac de maille.)

John A. Schreiner, Johnsberg, Pennsylvania, U.S.A., 20th November, 1899; 6 years. (Filed 20th October, 1899.)

Claim.—1st. The combination with a closure provided with a fastening stud, of oppositely movable superposed slides each extending substantially the width of the closure, and means whereby the movement of one slide will actuate the other slide in the opposite direction, substantially as specified. 2nd. The combination with a closure provided with a fastening stud, of oppositely movable super-

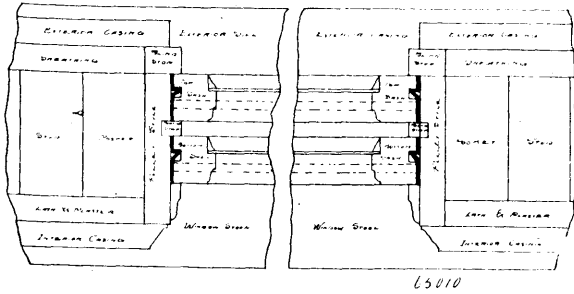
posed slides each extending substantially the width of the closure, means whereby the movement of one slide will actuate the other



slide in the opposite direction, and locking means to secure said slides in their adjusted position, substantially as specified. 3rd. The combination with a closure provided with a fastening stud, of oppositely movable superposed slides each extending substantially the width of the closure, means whereby the movement of one slide will actuate the other slide in the opposite direction, and locking means adapted to engage a locking stud carried by the closure, substantially as described. 4th. The combination with a closure provided with a fastening stud, of oppositely movable superposed slides each extending substantially the width of the closure, and means located within an aperture formed in said slides whereby the movement of one slide will actuate the other slide, substantially as specified. 5th. The combination with a closure provided with a fastening stud, of oppositely movable superposed slides each extending substantially the width of the closure and provided with rack bars, and a cog adapted to engage said rack bars, substantially as specified. 6th. The combination with a closure provided with a fastening stud, of oppositely movable superposed slides each extending substantially the width of the closure and provided with apertures therein, rack bars located upon opposite sides of said apertures, and a cog lying within the apertures and in engagement with said rack bars, substantially as specified. 7th. The combination with a closure provided with a fastening stud, of oppositely movable superposed slides each extending substantially the width of the closure and provided with apertures therein, rack bars located upon opposite sides of said apertures, a cog within the apertures and in engagement with said rack bars, and a cover plate located on the outer face of one of said slides to protect said rack and cog, substantially as specified. 8th. In combination with a closure provided with a headed fastening stud, of oppositely movable superposed slides extending substantially the width of a flexible flap and provided with keyhole slots, the enlarged ends of which are oppositely arranged, and means for moving one of said slides by the movement of the other slide, substantially as specified. 9th. The combination with a closure provided with a headed fastening stud, of oppositely movable superposed slides extending substantially the width of a flexible flap and provided with keyhole slots the enlarged ends of which are oppositely arranged, means for moving one of said slides by the movement of the other slide, and clips secured to said flap and embracing said slides, substantially as specified. 10th. The combination with a closure provided with a fastening stud, of oppositely movable superposed slides, each extending substantially the width of the closure, means whereby the movement of one slide will actuate the other slide in the opposite direction, and a lock casing provided with an aperture to permit inspection of a label, substantially as specified. 11th. The combination with a closure provided with a fastening stud, of oppositely movable superposed slides each extending substantially the width of the closure and provided with apertures, rack bars located upon the opposite edges of said apertures, a stud extending from the said closure, and a cog-wheel journaled upon said stud, substantially as specified. 12th. The combination with a closure provided with oppositely movable superposed slides each extending substantially the width of the closure and having therein keyhole slots and apertures, rack bars upon the opposite sides of said apertures, a cog located within said apertures and in engagement with said rack, retaining clips secured to the flap and embracing said slides, a lock carried by one of said slides and adapted to engage a locking stud secured upon the bag

and extending through the flap thereof, and a projection from the lower slide adapted to lie within an elongated aperture upon the upper slide, substantially as specified.

No. 65,010. Weather Strip. (*Garniture de porte.*)

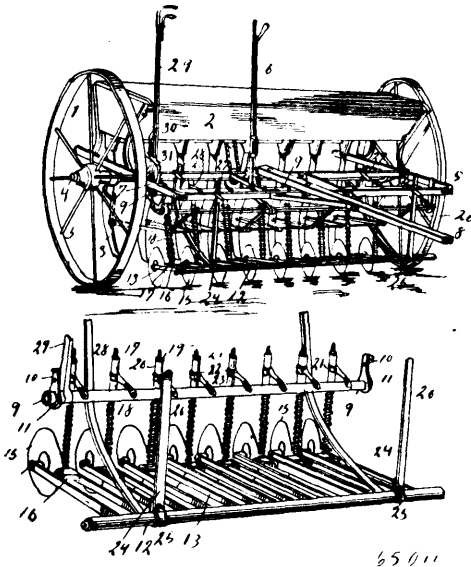


65010

John M. Byrens, Vancouver, British Columbia, Canada, 20th November, 1899; 6 years. (Filed 20th October, 1899.)

Claim.—1st. The use of a triangular shaped piece of metal of any kind or quality attached by nails or screws to the top, bottom and both sides of a window frame and placed in such a position as to fit into a groove cut in the shape of a square on each side of the window sash which comes in contact with each side of the window frame, thus forming a tight fitting joint and an air chamber triangular in shape, which will prevent friction, and any cold, wind or damp from entering the house by either the top, bottom or sides of the window, substantially as above set forth. 2nd. The square rabbit or groove cut in the top, bottom and both sides of the sash of a window into which the above described triangular shaped piece of metal fits all, substantially as described, for the purposes specified.

No. 65,011. Grain Drill. (*Semoir en ligne.*)



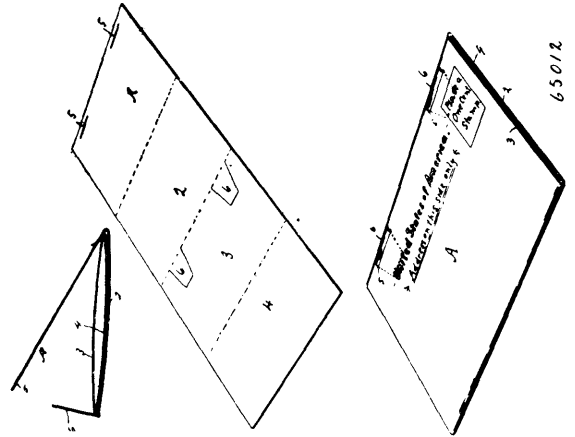
65011

Benjamin F. Hafer, Oklahoma City, Territory of Oklahoma, U.S.A., 20th November, 1899; 6 years. (Filed 18th October, 1899.)

Claim.—1st. In combination with a drill having a front overhanging frame and a series of boots, of an upper operating bar located under the rear part of said frame, bearing clamps depending from said frame in which the bar is rotatably mounted, a supporting bar normally adjacent the ground surface in advance of the said operating bar and in a plane parallel with that of the latter, a series of separate pairs of straight horizontally disposed arms extending rearwardly from the said supporting bar, each pair having a removable spindle connecting their rear ends, discs rotatably mounted on said spindles, yokes connecting each pair of arms and located near the rear ends of the latter, vertical rods attached to said yokes, sleeves removably mounted on said rods, springs surrounding the rods between the yokes and lower ends of the sleeves, bracket fingers movably attached to said sleeves at their rear ends and rigidly secured to the operating bar at their front ends, a lever attached to said operating bar for rotating the same, and a lever for elevating and lowering the entire attachment. 2nd. In combination with a drill having a frame and a series of boots, of an upper operat-

ing bar, a supporting bar in advance and below said supporting bar, a series of horizontal arms extending rearwardly from the said supporting bar and below and under the operating bar and carrying independent rotatably mounted discs between their rear ends, yielding connection between the arms and the operating bar, and a pair of angle braces having curved seats in which said supporting bar has loose bearing, the front arms of said braces extending upwardly and having their ends attached to the drill frame, and the rear arms extended along between adjacent pairs of said arms and then upward at an incline to the rear of said drill frame where they are secured.

No. 65,012. Postal Card. (*Carte postale.*)



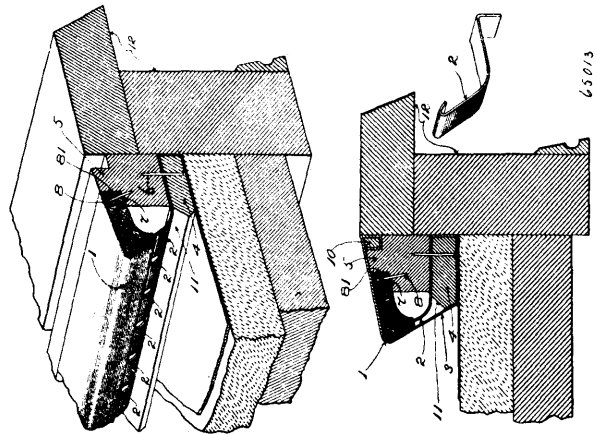
65012

Dwight W. Custer, Proctorville, Ohio, U.S.A., 20th November, 1899; 6 years. (Filed 18th October, 1899.)

Claim.—1st. A postal device consisting of a strip comprising several sections adapted to be folded one upon another, said strip having a slit at one end and a tongue cut from an intermediate section of the strip at a point between the sides of the strip and normally constituting a part of the writing or printing surface before the device is folded, said tongue being adapted to enter said slit when the sections of the device are folded, one upon another, substantially as set forth. 2nd. A foldable postal device having a slit at one end and a tongue cut from the body of the strip, said tongue being integral with the strip at the point of folding between two sections thereof, whereby when the strip is folded, the tongue will be automatically projected outwardly and adapted to enter said slit. 3rd. A postal device consisting of a strip comprising a series of sections adapted to be folded one upon another, said strip having slits at one end in proximity to its longitudinal edges, and tongues located intermediate of the ends of the strip and constituting part of the writing or printing surface, said tongues being located near the longitudinal edge of the strip and adapted to project from the strip at the point of folding between two sections and to enter said slits, substantially as set forth.

No. 65,013. Cushions for Billiard Tables.

(*Bande pour tables de billiard.*)



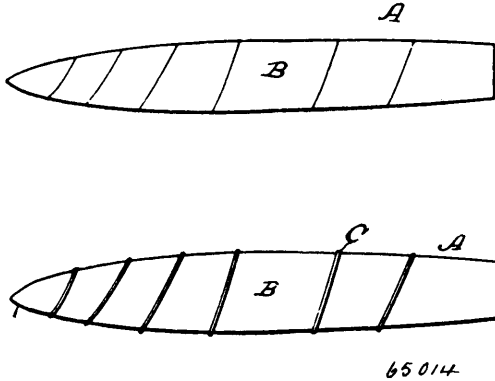
65013

Thomas R. S. Bullock, Providence, Rhode Island, U.S.A., 20th November, 1899; 6 years. (Filed 27th October, 1899.)

Claim.—1st. The improved billiard cushion comprising the impact receiving portion or nose of elastic material, such as, and a series of independently movable springs mounted therein close together side by side and extending into proximity to the apex or edge of the

cushion, substantially as described. 2nd. The combination with the impact receiving portion or nose 1 of a billiard cushion, the same being composed of yielding material, of a series of bent springs as 2, 2, having hooked or recurved upper ends which are embedded in said impact receiving portion or nose, and a support to which the said impact receiving portion or nose and the springs are applied, substantially as described. 3rd. The combination with the impact receiving portion or nose 1 of a billiard cushion, the same being composed of yielding material, of a series of bent springs, as 2, 2, to the ends of which the said impact receiving portion or nose and the springs are applied, the said springs being confined from movement above the line or lines of force intermediate the edge of said yielding portion 1 and the backing or abutment for the said portion, substantially as described.

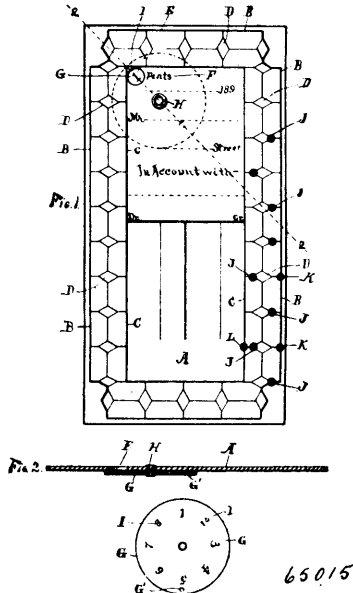
No. 65,014. Cigar. (Cigare.)



Bernard Fanta, Los Angeles, California, U.S.A., 20th November, 1899; 6 years. (Filed 23rd October, 1899.)

Claim.—1st. As a new article or manufacture, a cigar having a protecting roll formed by rolling the overlapping edge of the wrapper back upon the wrapper, substantially as described. 2nd. A cigar A having wrapper B, the wrapper B having the overlapping edge and the portion of the wrapper lying adjacent thereto rolled back upon the wrapper forming the protecting roll C, substantially as described. 3rd. As a new article of manufacture, a cigar composed of a filler and a wrapper, the exposed edge of the wrapper being rolled backward upon the wrapper forming a protecting roll.

No. 65,015. Vending Ticket. (Billet de vente.)

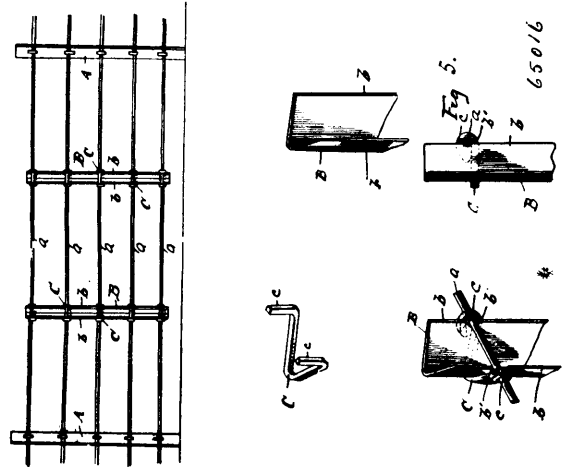


Clare Cahoon, Grand Rapids, Michigan, U.S.A., 20th November, 1899; 6 years. (Filed 22nd November, 1898.)

Claim.—1st. A ticket having marginal lines or figures which are adapted to indicate by their relation to punch marks, the delivery of goods and return of bottles or packages, an opening in said ticket, and a shifting index having a series of numerals adapted to display one of said numerals at a time through the opening in the ticket, substantially as described. 2nd. A ticket having outer lines near the margins and inner lines parallel thereto and at a distance therefrom, geometrical figures between said lines and at regular intervals,

an opening in the card within the inner lines, a rotative disc attached to the ticket, and a series of numbers on said disc adapted to show through said opening in succession as the disc is turned on its axis, substantially as described. 3rd. A ticket consisting of a rectangular card having outer lines near its margins, inner lines parallel thereto and at a distance therefrom, diamond shaped figures at intervals between the lines and having their greater diameters transverse to said lines, an opening within the inner lines, a disc attached to the card by a central pivot and rotative thereon, a series of numerals at intervals on said disc and successively opposite the opening in the card as the disc is turned, and ruling for date, purchaser's name and location, and an account on the inner portion of said card, substantially as described.

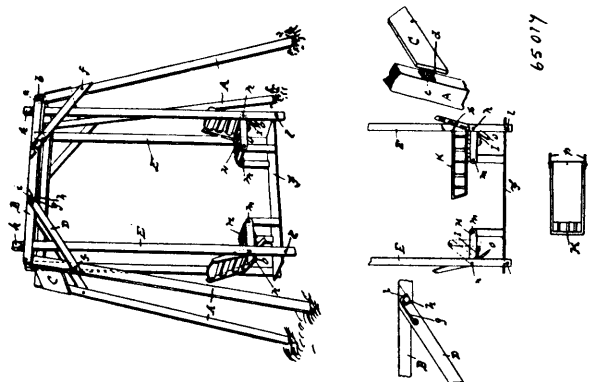
No. 65,016. Wire Fence. (Clôture de fil de fer.)



Richard B. Bobbins, Adrian, Michigan, U.S.A., 20th November, 1899; 6 years. (Filed 25th October, 1899.)

Claim.—1st. A metal tie comprising among its members, a bar formed of sheet metal bent into V-shape in cross section and provided with straight, plain, longitudinal edges, a wire engaging the parallel edges of said bar perpendicularly thereto and a V-shaped clamping staple engaging the angular portion of the bar and having its ends bent around the wire to draw the same into firm contact with the plain straight edges of the bar, and causing said wire to seat itself slightly in said edges, whereby the wire and bar will be locked firmly together, without previously notching or recessing the edges of the bar, substantially as described. 2nd. A wire fence including among its members a series of horizontal line wires, vertical stay bars composed of thin sheet metal bent into V-shape in cross section, and having straight, plain, longitudinal edges, engaging the line wires, the stay bars and line wires being secured together at each intersection thereof, by a V-shaped staple engaging the angular portion of the stay and having its end bent around the line wire, to draw the wires into firm contact with the said straight, plain edges of the stay bar, and cause it to seat itself slightly in said edges, whereby the wires and stay bars will be locked rigidly together at each intersection without previously notching or recessing the stays, substantially as described.

No. 65,017 Swing. (Balanoire.)

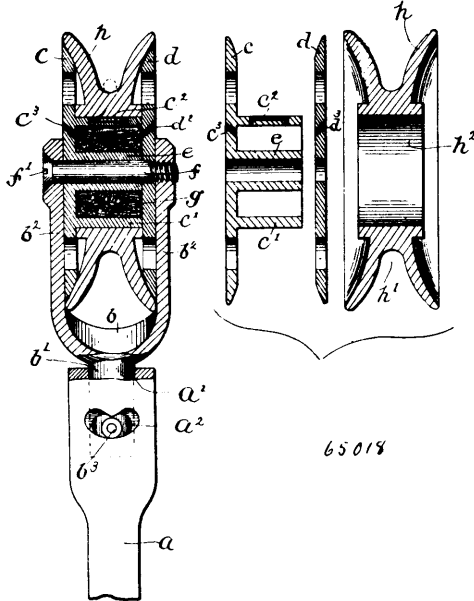


Elihu D. McGlamery, Waynesborough, Tennessee, U.S.A., 20th November, 1899; 6 years. (Filed 2nd November, 1899.)

Claim.—1st. The combination with the hangers and a support for the front chair legs, of chairs extending mainly in front of the former, the hangers and the chair back and seat being directly jointed

together at one point, as set forth. 2nd. The combination with the hangers forming an equivalent of rear chair legs, of the chair back and seat jointed together, the jointing rod passing through the hangers, the front legs jointed to the seat, and a suitable support for the front legs, as set forth. 3rd. The combination with the hangers, of the chairs, the intermediate section, and side sections resting on the intermediate section and the chair seats and having central and end fastenings, as set forth. 4th. The combination with the uprights, of side braces D pivoted at one end thereto and having at the other end a hook *g* and recess *h*, and the top rails provided with bolts entering said recess and engaging said hook, as set forth.

No. 65,018. Trolley. (Trolley.)



Francis A. Le Court, Rockport, Massachusetts, U.S.A., 20th November, 1899; 6 years. (Filed 23rd October, 1899.)

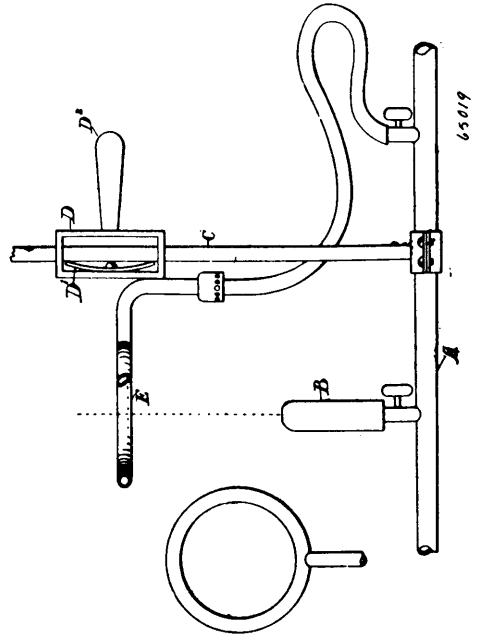
Claim.—1st. In a device of the character described, the combination of a trolley wheel, a bracket supporting the same, a trolley pole, a socket in one of the two last said members and a stem on the other member occupying said socket, a cam slot in the wall of the socket, and a stud on the stem, occupying said slot, whereby the bracket and pole are held in connection, the shade of the slot being such as to normally maintain the bracket in a central position and to allow the same to turn when torsional force is applied. 2nd. In a device of the character specified, the combination of a trolley bracket, a hollow cylindrical bush held therein, a trolley wheel mounted to revolve on said bush, side flanges forming an end bearing for said wheel and constituting the end walls of a chamber of which the bush forms the outer wall, a sleeve constituting the inner wall of said chamber, absorbent materials occupying the chamber, the bush being formed with an outlet for lubricant contained in the chamber, and a bolt engaged with the sides of the bracket and extending through the sleeve, said bolt holding the flanges, bush, and sleeve in place in the bracket. 3rd. In a device of the character described, the combination of a trolley wheel concaved at its ends, a trolley pole, a trolley pole, a bracket mounted on said pole and having provisions for journaling said wheel, said bracket being provided with side flanges fitting within the concaved ends of the wheel, and engaging the rims thereof inside of the outer edges of the latter, substantially as described.

No. 65,019. Preparing Incandescent Mantles. (Préparation des manteaux incandescents.)

The Auer Incandescent Light Manufacturing Company, Limited, assignee of William Rownan Granger, all of Montreal, Quebec, Canada, 20th November, 1899; 6 years. (Filed 22nd February, 1899.)

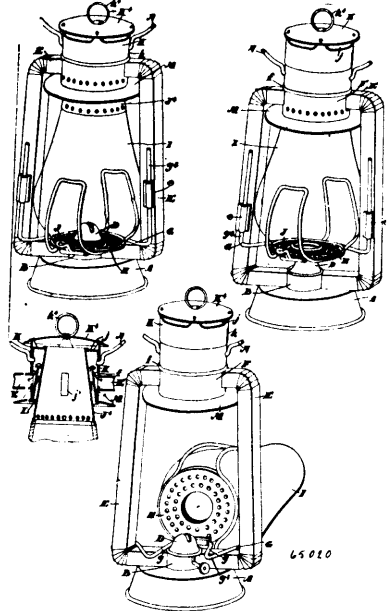
Claim.—1st. The process of treating incandescent mantles consisting of heating the inside of the oxidized mantle over an ordinary Bunsen and the outside by means of a ring Bunsen burner as described. 2nd. In a mantle annealing apparatus, the combination of a Bunsen burner and a ring Bunsen burner adapted to move vertically on the axis of the Bunsen. 3rd. In a mantle annealing apparatus, the combination of a Bunsen, a ring Bunsen with apertures pointing below the horizontal inwards and a sliding device

adapted to allow the ring Bunsen to move vertically in the axis of the Bunsen. 4th. In a mantle annealing apparatus, the combina-



tion of a Bunsen burner of ordinary form and a ring shaped Bunsen as described.

No. 65,020. Lantern. (Lanterne.)

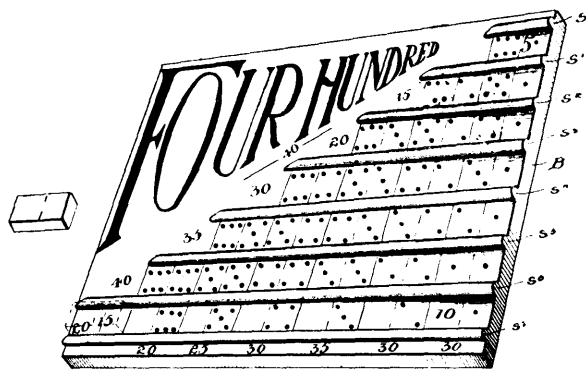


John Henry Stone, Toronto, Ontario, Canada, 20th November, 1899; 6 years. (Filed 9th January, 1899.)

Claim.—1st. In a lantern, the combination with the bowl, tubes and upper globe holder, of the lower globe holder, the wire support or lift connected thereto and having lateral extensions provided with upwardly projecting spring wire ends and guides therefor secured to the side tubes, as and for the purpose specified. 2nd. In a lantern, the combination with the bowl, tubes and upper globe holder, of the lower globe holder, the support therefor connected to the side tubes and a hinge attached to the bottom and one edge of the lower globe holder connecting it to the wire support or lift, as and for the purpose specified. 3rd. In a lantern, the combination with the bowl tubes and upper globe holder, of the lower globe holder, the wire support or lift connected thereto, means for connecting it to the side tubes provided with guides whereby the globe and holder may be vertically adjusted and a thumb piece connected to the outer edge of the globe holder, as and for the purpose specified. 4th. The combination with the globe suitably held at the bottom and the side tubes, of the upper truncated cone-shaped

holder, the jacket secured to the upper end of the tubes, the cap, the downwardly extending flange and the flange connecting such flange to the top of the truncated cone-shaped holder and the truncated cone-shaped casing located outside the holder and connected to the bottom of the jacket, as and for the purpose specified. 5th. The combination with the globe suitably held at the bottom and the side tubes, of the upper truncated cone-shaped holder, the jacket secured to the upper end of the tubes, the cap, the downwardly extending flange provided with notches, the bail extending into the jacket through such notches, the flange connecting the downwardly extending flange to the top of the holder and the truncated cone-shaped casing located outside of the holder and connected to the bottom of the jacket, as and for the purpose specified. 6th. The combination with the globe suitably held at the bottom and the side tubes, of the upper truncated cone-shaped holder, the jacket secured to the outer end of the tubes, the cap, the downwardly extending flange and the flange connecting such flange to the top of the truncated cone-shaped holder, the truncated cone-shaped casing located outside the holder and connected to the bottom of the jacket and the row of perforations in the jacket located beneath the top ends of the tubes, as and for the purpose specified.

No. 65,021. Game. (Jeu.)



65021

Allsey Oscar Browne, Glasgow, Kentucky, U.S.A., 20th November, 1899; 6 years. (Filed 14th October, 1899.)

Claim.—1st. A game consisting of a board provided with rows or parts having each a definite numerical value or indication and permanently arranged in a predetermined sequence, in combination with movable parts having like individual valuations or characters and adapted to be placed upon said fixed rows of parts in a prearranged order, substantially as described. 2nd. A game consisting of a board or base having rows of parts of definite valuation or indication permanently affixed thereto and arranged in a predetermined sequence, in combination with movable parts of like valuation or character adapted to be arranged over said fixed parts in a definite or prearranged order, said fixed rows or parts having summation values which count for the player when the movable parts are placed upon the fixed parts in the definite or prearranged order, substantially as described. 3rd. A game consisting of a board or base B, having painted or otherwise affixed to the surface thereof a set of dominos in a definite order, in combination with a movable set of dominos adapted to be placed over the fixed dominos in the same order, substantially as described. 4th. A game consisting of a board or base B, having strips or grooves which divide it into rows, in combination with dominos painted or otherwise affixed thereto in definite sequence between said strips or grooves, and movable dominos adapted to be placed over the fixed dominos in a definite or prearranged order, substantially as described.

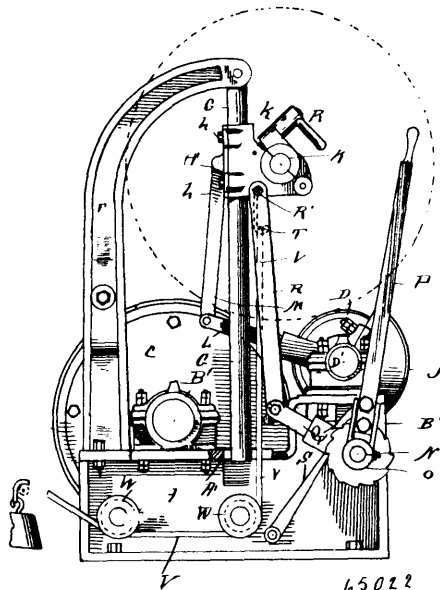
No. 65,022. Machine for Winding Paper.

(Machine à enrouler le papier.)

John James Warren, Grand Mere, Quebec, Canada, 20th November, 1899; 6 years. (Filed 18th October, 1899.)

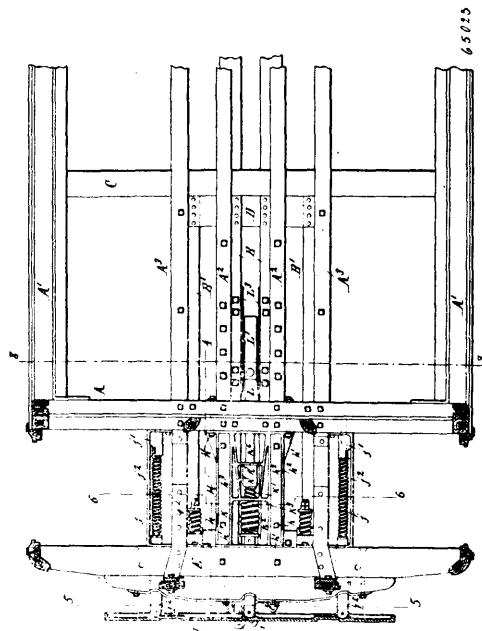
Claim.—1st. A double drum winder for paper machines, comprising in combination with the drum suitably mounted in a frame bracket arms at the ends of the drum, guide bars pivoted to the upper curved ends of said bracket arms, their lower free ends having a limited movement in elongated slots in the frame, combined with the journal boxes sliding on said bars, the winding roll mounted in said boxes, and means for raising the journal boxes so that the roll will not contact with the winding drums, as set forth. 2nd. A paper winder, consisting of the drums mounted in a suitable frame, bracket arms at the ends of the drums, swinging bars pivoted to the upper ends of the arms, and their lower ends guided in slots and allowed a limited play, the journal boxes sliding on said bars, combined with the shaft carried by said journal boxes, a shaft and ratchet wheel keyed thereto, a handle secured to said ratchet wheel, a pawl for engaging the teeth of the wheel, and a pawl pivoted to

the frame, and a link connection between the journal box and the shaft carrying the ratchet wheel, whereby the shaft on which the



paper is wound, may be raised and held suspended, as set forth. 3rd. In a double drum winding machine, the combination with the frame, the drum mounted therein, the bracket arms the guide rods pivoted thereto, the journal boxes sliding thereon, the rocking guard for the outer of the said drum, and link connection between said guard and the journal box, whereby as the size of the roll of paper being wound, increases, the guard is lowered, as shown and described. 4th. In a device for winding paper, the combination of the drums mounted in a suitable frame, the bracket arms, the guide bars pivoted to said bracket arms, the journal boxes sliding on said bars, the semi-cylindrical shaped guard, mounted to rock on one of the drum carrying shafts and a link connection between the journal box and a bar or extension of said guard, whereby as the roll of paper increases in diameter, the upper free edge of said guard is kept at a given distance from the circumference of the roll of paper being wound, as set forth.

No. 65,023. Car. (Char.)



The Gould Coupler Company, New York City, assignee of Wellard Richards, Buffalo, all of the State of New York, U.S.A., 21st November, 1899; 6 years. (Filed 2nd September, 1899.)

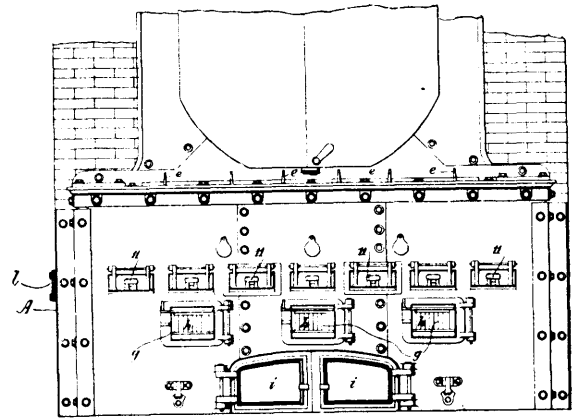
Claim.—1st. The combination with the sills or base frame of the car body, of longitudinal Z-beams secured to the underside of said

sills and extending beyond the end sill of the car body, and a buffer beam secured to the projecting portions of said Z-beams, substantially as set forth. 2nd. The combination with the sills or base frame of the car body, of longitudinal Z-beams secured to the underside of said sills and extending beyond the end sill of the car to form platform supports, a buffer beam secured to the upper flanges of said Z-beams, and a tie plate or plates secured to the lower flanges of said beams, substantially as set forth. 3rd. The combination with the sills or base frame of the car body, of longitudinal centre and side beams of Z-shaped cross-section secured to the underside of said sills and extending beyond the end sill of the car body to form platform supports, said side beams being of a greater depth than said centre beams, and a tie plate or plates connecting said Z-beams and secured to the underside of the bottom flanges of said centre beams and to the upper side of the bottom flanges of said side beams, substantially as set forth. 4th. The combination with the sills or base frame of the car body, of longitudinal side and centre beams of Z-shaped cross section secured to the underside of said sills and projecting beyond the end sill of the car body, the Z-beams on opposite sides of the centre line of the car facing in opposite directions, a buffer beam secured to the upper flanges of said beams, and a tie plate or plates secured to the lower flanges thereof, substantially as set forth. 5th. The combination with the sills or base frame of the car body, of longitudinal beams secured to the underside of said sills and extending beyond the end sill of the car to form platform supports, a buffer beam secured to the upper side of said longitudinal beams, and an integral cast metal filling frame secured to the upper side of said longitudinal beams and extending from the end sill of the car body to the buffer beam, substantially as set forth. 6th. The combination with the sills or base frame of the car body, of longitudinal beams secured to the underside of said sills and extending beyond the end sill of the car to form platform supports, a buffer beam secured to the upper side of said beams, a metallic filling frame or block arranged above said beams and extending from said buffer beam to the end sill of the car body, and longitudinal fastening bolts connecting the ends of said metallic frame to the buffer beam and the end sill, substantially as set forth. 7th. The combination with the sills or base frame of the car body, and longitudinal Z-beams secured to the underside of said sills, a draw bar arranged between said Z-beams, and provided at its rear end with a yoke containing a pair of followers and an interposed spring or springs, brackets of Z-shaped cross section secured to said Z-beams, and side lugs or guides for said followers secured to said brackets, substantially as set forth. 8th. The combination with the sills or base frame of the car body, and longitudinal Z-beams secured to the underside of said sills, of a draw bar arranged between said beams and provided at its rear end with a yoke containing a pair of followers and an interposed spring or springs, brackets of Z-shaped cross section secured to said Z-beams, and having their lower flanges provided with depending lips or stops, and side lugs or guides for said followers secured to the lower flanges of said brackets and confined between the lips of the brackets, substantially as set forth. 9th. The combination with the sills and base frame of the car body, and longitudinal Z-beams secured to the under side of said sills, of a draw bar arranged between said beams and provided at its rear end with a yoke containing a pair of followers and an interposed spring or springs, brackets of Z-shaped cross section secured to said Z-beams, and having their lower flanges arranged on the under side of the bottom flanges of said Z-beams, and side lugs or guides for said followers secured to the under side of said Z-brackets, the lower flanges of said Z-brackets forming chafing plates which protect the Z-beams from the wear of the followers, substantially as set forth. 10th. The combination with the sills or base frame of the car body, and longitudinal Z-beams secured to the under side of said sills, of a draw bar arranged between said beams and provided at its rear end with a yoke containing a pair of followers and an interposed spring or springs, brackets of Z-shaped cross section secured to said Z-beams, and having their lower flanges arranged on the under side of the bottom flanges of said Z-beams, and extended inwardly beyond the inner edges of said bottom flanges, and side lugs or guides for said followers secured to said Z-brackets, substantially as set forth. 11th. The combination with the sills or base frame of the car body, of a pair of Z-beams secured to the under side of said sills and forming platform supports, a tie plate connecting the lower flanges of said beams, and a draw bar carry in secured to the underside of said tie plate and abutting at the ends against the lower ends of said Z-beams, substantially as set forth. 12th. The combination with the sills or base frame of the car body, of side and centre Z-beams secured to the under side of said sills and forming platform supports, said side beams being of greater depth than said centre beams, and a tie plate secured to the under side of the bottom flanges of said centre beams, and to the upper side of the bottom flanges of the side beams, whereby the latter flanges form stops on the under side of said tie plate, and a draw bar carry in secured to said tie plate and abutting at its ends against said stop flanges, substantially as set forth. 13th. The combination with the sills or base frame of the car body, and metallic longitudinal beams secured to the under side thereof and forming platform supports, of brackets or bearings secured to the side of said metallic beams, and a longitudinal eye bolt carrying a safety chain and guided in said brackets, substantially as set forth. 14th. The combination with the sills or base frame of the car body, and metallic longitudinal

beams secured to the under side thereof and forming platform supports, of a tie plate connecting the lower portions of said beams, a bracket secured to the side of one of said beams, and having a lip which overlaps the rear edge of said tie plate, and an eye bolt carrying a safety chain and guided in said bracket, and having a spring which bears against the rear side of said bracket, substantially as set forth.

No. 65,024. Down Draft Boiler Furnace.

(*Tirage pour fournaies de chaudières.*)

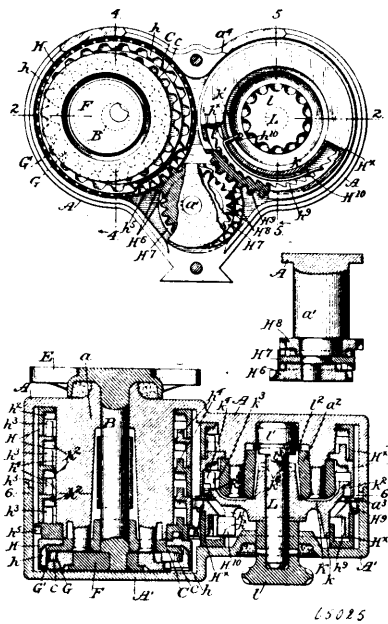


William De Lancey Wallridge, assignee of Frederick Gittanner, both of New York City, New York, U.S.A., 21st November, 1899; 6 years. (Filed 16th September, 1899.)

Claim.—1st. In a down draft boiler furnace, the combination of a support for fuel, a series of air supply tubes arranged at the top of the furnace and contiguous with the front and side walls of the same to direct jets of air downwardly through the fuel, and a series of air tubes arranged intermediate of the tubes at the side walls for the same purpose, substantially as described. 2nd. In a down draft boiler furnace, the combination of a support for fuel, a series of charging openings for the furnace, a series of air tubes arranged adjacent to the front and side walls of the furnace to direct jets of air downwardly through the fuel, and a series of air tubes arranged intermediate of the charging openings for the same purpose, substantially as described. 3rd. In a down draft boiler furnace, the combination of a support for fuel, a series of charging openings located at the top of the furnace, a series of air tubes arranged at the top of the furnace adjacent to the front and side walls of the same to direct jets of air downwardly through the fuel, and a series of air tubes arranged adjacent to the charging openings for the same purpose, substantially as described. 4th. In a down draft boiler furnace, the combination of a support for fuel, a series of charging openings located at the top of the furnace, a series of air tubes arranged adjacent to the front and side walls of the furnace to direct jets of air downwardly through the fuel, a series of air tubes arranged intermediate of the charging openings for the same purpose, air flues and chambers arranged adjacent to the walls and top of the furnace, and means for regulating the supply of air to said flues and chambers, substantially as described. 5th. In a down draft boiler furnace, the combination of a support for fuel, a series of air supply tubes arranged at the top of the furnace adjacent to the front and side walls of the same, and said tubes being adapted to direct jets of air downwardly through the fuel, a series of air tubes arranged intermediate of the air tubes at the side walls for the same purpose, an air chamber or chambers above the lines of tubes with which chambers said tubes communicate, and removable plates forming part of the enclosure of said air chamber or chambers, substantially as described. 6th. In a down draft boiler furnace, the combination of a support for fuel, a series of charging openings located at the top of the furnace, a series of air tubes arranged adjacent to the front and side walls of the furnace to direct jets of air downwardly through the fuel, a series of air tubes arranged intermediate of the charging openings for the same purpose, an air chamber or chambers with which said tubes communicate, and removable plates forming part of the enclosure of said chamber or chambers and provided with upwardly extending flanges adjacent to the charging openings, substantially as described. 7th. In a down draft boiler furnace, the combination of a support for fuel, a series of charging openings for the furnace, a series of air tubes arranged adjacent to the front and side walls of the furnace to direct jets of air downwardly through the fuel, a series of air tubes arranged intermediate of the charging openings for the same purpose, an opening or openings provided with doors and regulators, and a passage or passages leading through the rear wall of the furnace to the combustion chamber and located at or near the bottom of the furnace, substantially as described. 8th. In a down draft boiler furnace, the combination of a support for fuel, a series

of air supply tubes arranged at the top of the furnace and contiguous with the front and side walls of the same to direct jets of air downwardly through the fuel, a series of air tubes arranged intermediate of the tubes at the side walls for the same purpose, a passage or passages through the rear wall of the furnace communicating with the combustion chamber and located near the bottom of the furnace, and an air distributor located back of the furnace wall, substantially as described. 9th. In a down draft boiler furnace, the combination of a support for fuel, a series of air supply tubes arranged at the top of the furnace and contiguous with the front and side walls of the same to direct jets of air downwardly through the fuel, a series of air tubes arranged intermediate of the tubes at the side walls for the same purpose, and a plurality of contracted passages, located near the bottom of the furnace, and passing through the rear wall of the same to communicate with the combustion chamber, substantially as described. 10th. In a down draft boiler furnace, the combination of a support for fuel, a series of air tubes arranged at the top of the furnace contiguous with the front and side walls of the same to direct jets of air downwardly through the fuel, a series of air tubes arranged intermediate of the tubes at the side walls for the same purpose, a rear wall for the furnace having a downwardly and outwardly inclined inner wall, and a passage or passages through the rear wall of the furnace communicating with the combustion chamber and located near the bottom of the furnace, substantially as described. 11th. In a down draft boiler furnace, the combination of a hearth closing off the ingress of air to the furnace from below, a series of air supply tubes arranged at the top of the furnace and contiguous with the front and side walls of the same to direct jets of air downwardly through the fuel, and a series of air tubes arranged intermediate of the tubes at the side walls for the same purpose, substantially as described.

No. 65,025. Register. (Révisé.)



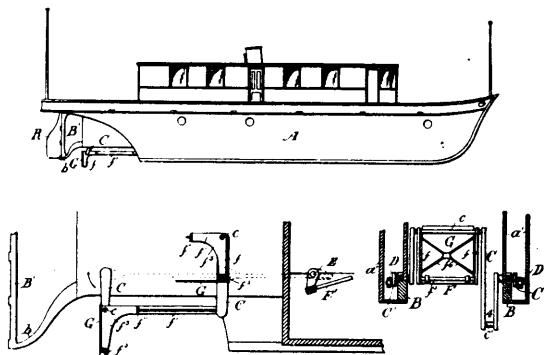
The Veeder Manufacturing Company, assignee of Curtis Hussey Veeder, both of Hartford, Connecticut, U.S.A., 21st November, 1899; 6 years. (Filed 25th November, 1898.)

Claim.—1st. A cyclometer comprising a totalizing register and a trip register, positive driving connection between said registers, positive transmitting and locking devices between successive index wheels or rings of the trip register, and means to release the locking devices, substantially as shown and described. 2nd. A register comprising a totalizing register and a trip register, a gear mounted concentrically with one of said registers, a driving connection between said gear and the first index wheel or ring of said register to drive the latter positively and permit independent movement thereof, and positive connections between said gear and the first index wheel or ring of the other register, substantially as shown and described. 3rd. A register comprising a totalizing register and a trip register, a gear mounted concentrically with one of said registers, positive connections between said gear and the first index wheel or ring of the other of said registers, and a ratchet connection between said gear and the first index wheel or ring of the first-named register, substantially as shown and described. 4th. A register comprising a totalizing register and a trip register, a gear mounted concentrically with said trip register, said gear carrying a series of ratchet teeth, positive connections between said gear and the first index wheel or ring of the totalizing register, and a ratchet engaging said

ratchet teeth and connected with the first index wheel or ring of the trip register, substantially as shown and described. 5th. A cyclometer comprising a totalizing register and a trip register, a gear connected with the first index wheel or ring of one of said registers, a gear connected with the first index wheel or ring of the other of said registers, and transmitting gearing between said gears, substantially as shown and described. 6th. A register comprising a totalizing register and a trip register, a gear connected with the first index wheel or ring of one of said registers, a gear connected with the first index wheel or ring of the other of said registers, and transmitting gearing between said gears, said gearing comprising a double outer gear, a double internal intermediate gear, and a double inner gear, the outer and the intermediate gear being mounted eccentrically with respect to the inner gear, the outer gear meshing with the gear of one of said registers and with one side of the double intermediate gear, and the inner gear meshing with the gear of the other of said registers and with the other side of said intermediate gear, substantially as shown and described. 7th. The combination with a driving gear and a driven gear, of transmitting gearing between said gears, said transmitting gearing comprising a double outer gear, a double internal intermediate gear, and a double inner gear, the outer and the intermediate gear being mounted eccentrically with respect to the inner gear, the outer gear meshing with one of said first-named gears and with one side of the double intermediate gear, and the inner gear meshing with the other of said first-named gears and with the other side of said intermediate gear, substantially as shown and described. 8th. A cyclometer comprising a series of index wheels or rings, transmitting devices between successive index wheels or rings of the series, a driven part mounted concentrically with the first index wheel or ring, and a driving connection between said driven part and the first index wheel or ring to drive the latter positively and permit independent forward movement thereof, substantially as shown and described. 9th. A cyclometer comprising a series of index wheels or rings, transmitting devices between successive index wheels or rings of the series, a driven part mounted concentrically with the first index wheel or ring, and a ratchet connection between said driven part and the first index wheel or ring, substantially as shown and described. 10th. A register comprising a series of index wheels or rings of the series, an external gear having a sleeve extended and having a bearing within the first wheel or ring, internal ratchet teeth formed in said sleeve, and a ratchet engaging said ratchet teeth and connected with said first index wheel or ring, substantially as shown and described. 11th. A cyclometer comprising a series of index wheels or rings, means to drive the first index wheel or ring, positive transmitting and locking devices between successive index wheels or rings of the series, and means to release the positive locking devices, substantially as shown and described. 12th. A cyclometer comprising a series of index wheels or rings, a transmitting gear between each index wheel or ring and the next, said gear comprising a locking pinion engaged by an internal locking ring and actuator carried with the preceding index wheel or ring and a transmitting pinion engaging an internal gear carried with the index wheel or ring, and means to disengage said locking ring and said locking pinion, substantially as shown and described. 13th. A register comprising a series of index wheels or rings, a transmitting gear between each index wheel or ring and the next, said gear comprising a locking pinion engaged by a locking ring and actuator carried with the preceding index wheel or ring and a transmitting pinion engaging a gear carried with the next index wheel or ring, and means to move said locking ring longitudinally upon its axis to release said locking pinion, substantially as shown and described. 14th. A register comprising a series of index wheels or rings, positive transmitting and locking devices between successive index wheels or rings of the series, means to release the positive locking devices and means to connect the successive index wheels or rings for rotation together, substantially as shown and described. 15th. A register comprising a series of index wheels or rings, a transmitting gear between each index wheel or ring and the next, said gear comprising a locking pinion and a transmitting pinion engaging the gear carried with the successive index wheel or ring, a locking ring connected with the preceding index wheel or ring and movable longitudinally with respect thereto, said locking ring normally engaging said locking pinion and adapted to actuate the same, and adapted also to engage said successive index wheel or ring when moved longitudinally from its normal position, substantially as shown and described. 16th. A register comprising a series of index wheels or rings, a longitudinally movable shaft supported concentrically therewith, a clutch disc mounted loosely upon said shaft and adapted to be engaged thereby when the latter is moved longitudinally, said clutch disc being connected with the first of the index wheels or rings and having a locking ring and actuator and adapted to engage the next wheel or ring, and a transmitting gear having a locking pinion to engage said locking ring and actuator and a transmitting pinion to engage the next index wheel or ring, substantially as shown and described. 17th. A register comprising a series of index wheels or rings, a longitudinally movable shaft supported concentrically therewith, a clutch disc mounted loosely upon said shaft and adapted to be engaged thereby and having a locking ring and actuator adapted to engage the next wheel or ring, a locking and transmitting gear between said locking ring and the next index wheel or ring, a driver having ratchet teeth and a ratchet engaging said teeth and the first index wheel or ring

said first index wheel or ring and said clutch disc being connected positively for rotation with freedom for independent longitudinal movement, substantially as shown and described.

No. 65,026. Marine Propeller. (*Propulseur de marine.*)

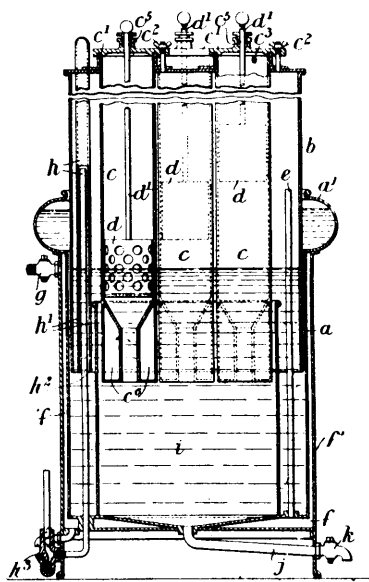


65026

John Anderson Hopewell and William Barclay Craig, both of Annprior, Ontario, Canada, 21st November, 1899; 6 years. (Filed 24th June, 1899.)

Claim. 1st. In a marine propeller, the combination with the hull of a vessel of a pair of beams having one end secured in the stem of the vessel a distance apart and extending rearwardly and united at their rear ends, a stern post secured to the rear end of said beams, a water-tight casing at the outer side of each beam open to the hold of the vessel, a pair of two-throw crank axles journaled upon said beams, and having their ends extending into said casings, crank arms upon the overhanging ends of said crank axles set at an angle to the two-throw cranks, coupling rods connecting said outside cranks, means for actuating said crank axles, each of the latter having a wide crank and a narrow one set at an angle of 180° apart and the two axles mounted in reverse order to each other so that a narrow crank is opposite a wide crank adapting a narrow crank and a wide crank to rotate in unison, two frames each consisting of an arm journaled at one end upon a narrow crank and at the other branched out laterally near the wide crank and the branch arm continued parallel with the main arm and both journaled upon the long crank pin and then turned downwards and connected by cross braces and at the lower end of a cross bar to form a vertical frame, and a float consisting of a plate hung pivotally upon the lower cross bar of said vertical frame to swing clear up and down in any direction to a vertical position or nearly so, substantially as set forth. 2nd. In a marine propeller, the combination of a pair of beams having one end secured in the stem of the vessel and extending parallel rearwards and having their ends united and secured to the stern post, a pair of two-throw crank axles journaled transversely upon said beams, each of said axles having a wide and a narrow crank at an angle of 180° apart and mounted in reverse order to each other so that the narrow crank of one moves in unison with the wide crank of the other, an arm connecting each narrow crank with the opposite wide crank said arm being branched out laterally near the wide crank to form a frame journaled upon the long crank pin then continued vertically downwards and connected at the lower end, and a float consisting of a plate hung pivotally upon the lower cross bar of said transverse frame and adapted to swing up and down in any direction and abut in its vertical position against its supporting frame, substantially as set forth. 3rd. A marine propeller, consisting of a pair of two-throw crank axles journaled at the stern of the vessel upon suitable supports transversely to the centre of the line of the vessel, each axle having a wide crank and a narrow crank adjacent to each other and at an angle of 180° apart and said cranks mounted in reverse order to each other, a vertical frame journaled at its upper end upon each long crank pin, said frame having its sides turned at a right angle and extended in the direction of the other crank to form arms, one of said arms extended to the narrow crank pin and the other arm turned and joined to the long crank pin, a float consisting of a plate hung pivotally to the lower cross bar of the vertical frame capable of swinging freely up and down and abutting against the vertical frame when raised, and means of giving a rotary motion to the two crank axles, substantially as set forth. 4th. In a marine propeller, the combination with a pair of parallel supports placed a distance apart, of a pair of two-throw crank axles journaled upon said supports, said crank axles having each a wide crank and a narrow crank set at an angle of 180° apart and mounted in reverse order so that a narrow crank is opposite a wide crank and may rotate in unison, two frames each consisting of an arm having one end journaled upon one of the other narrow cranks and having near its other end a branch or cross arm turned and extended parallel to the main arm and both branches journaled upon the crank pin of a wide crank and then turned downwards to form a vertical frame connected by cross braces and by a cross pin at the lower end and a plate acting as a float hung pivotally to said cross pin adapting it to swing freely and when raised abut against the vertical supporting frame, substantially as set forth.

No. 65,027. Acetylene Gas Generator. (*Générateur de gaz acétylène.*)



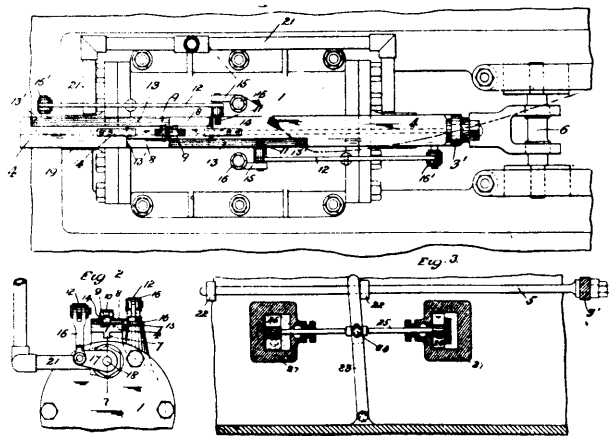
65027

The Economic Acetylene Gas Generator Syndicate, Limited, assignees of Henry Ralph Bean and Henry Ringwood, all of London, England, 21st November, 1899; 6 years. (Filed 4th February, 1899.)

Claim.—1st. Apparatus for the production of acetylene or other gas comprising a gas container or gasometer, to the sliding holder of which is suspended one or more gas generating chambers open at the lower end and communicating at the upper end with the interior of the gas holder, the said chamber or chambers being arranged to receive baskets for containing the material from which the gas is to be generated by the action of water, substantially as hereinbefore described. 2nd. In apparatus for the generation of acetylene or other gas, the combination of a gas container, a sliding holder, one or more generating chambers suspended in the said sliding holder, the said chamber being open at the lower end and communicating at the upper end with the interior of the gas holder, baskets adjustably fitted in the said chambers and adapted to receive the material from which the gas is to be generated by the action of water, and means for counterbalancing the weight of the gas holder, such means consisting of one or more air spaces formed around the gas generating chamber or chambers or weights, substantially as hereinbefore described. 3rd. In apparatus for the production of acetylene or other gas, the combination of a gas container, a sliding holder having one or more gas generating chambers suspended therein, said chambers being open at the lower end and in communication at the upper end with the gas container, baskets in the said chambers containing material from which the gas is generated, and a telescopic safety or relief valve consisting of a fixed pipe passing up through the bottom of the gas container and into a pipe suspended in the sliding holder, the said suspended pipe being provided with holes for the outlet of the gas when the said holes rise above the level of the water in the gasometer and of a trap provided at the lower part of the apparatus, substantially as shown and described. 4th. In apparatus for the production of acetylene or other gas, the combination of a gas container or gasometer, a sliding holder having one or more generating chambers suspended therein, the said chambers being open at their lower ends and in communication at their upper ends with the gas container, baskets containing carbide or other material for the generation of gas arranged in the said chambers and an annular space formed at the upper end of the water container to receive the water displaced by the pressure of the gas generated, substantially as hereinbefore described. 5th. In apparatus for the production of acetylene or other gas, the combination of a gas container, a sliding holder within which are suspended one or more gas generating chambers having baskets containing carbide or other gas forming materials, said chambers being open at their lower ends and in communication at their upper ends with the gas container, and a water jacket surrounding the gas container so as to form a condensing and cooling chamber for the gas generated, substantially as described and illustrated. 6th. In apparatus for the production of acetylene or other gas, the combination of a gas container, a sliding holder having depending chambers with baskets for containing the carbide or other gas yielding material, said chambers being open at their lower ends and in communication at their upper ends with the gas container and a charging cock connecting each generating chamber with the gas holder, substantially as shown and described. 7th. In apparatus for generating and

storing acetylene and other gases, the combination of an outer or water vessel made with a top annular space or receptacle for the water displaced by the pressure of gas generated and surrounded by a jacket forming a condenser with an inner vessel having one or more generating chambers the lower ends of which are reduced and surrounded by air spaces with a charging cock connecting each generating chamber with the gas holder proper, and with a telescopic safety or relief valve having a trap, all substantially as hereinbefore described and illustrated. 8th. In apparatus for generating acetylene or other gas the combination with a water container and sliding gas holder, of two or more gas generating chambers suspended in the sliding holder and having baskets arranged at different heights in their respective chambers for containing the material from which the gas is to be generated by the water in the container and of means for controlling the communication between the interior of each generating chamber and the interior of the gas container so that the generating chambers can be separately and successively isolated from the gas container, whilst the apparatus is in use, whereby a continuous generation of gas is obtained, substantially as described.

No. 65,028. Steam Engine. (Machine à vapeur.)



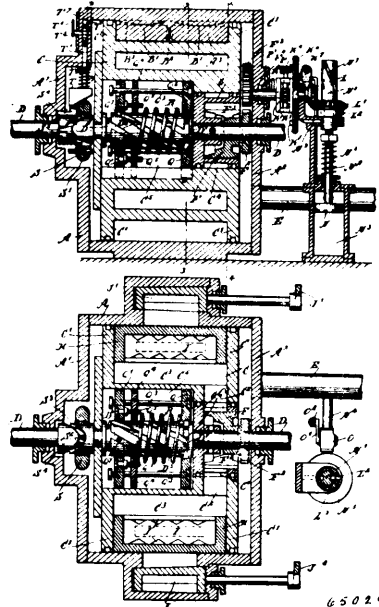
65028

Henry Wood Niver, St. Louis, Missouri, U.S.A., 21st November, 1899; 6 years. (Filed 16th October, 1899.)

Claim.—1st. In an engine, a suitable cylinder, a piston and piston rod therefor, means for reciprocating the latter, a pipe for supplying the steam or motor fluid to the cylinder, valves mounted on the cylinder wall and adapted to establish communication between the steam pipe and interior of the cylinder, and suitable connections between the piston rod and valves for actuating the latter with each reciprocation of the piston, substantially as set forth. 2nd. In an engine, a cylinder, a piston and piston rod therefor, a race bar and thrust rod connected to said piston rod, valves for admitting steam to the cylinder, exhaust valves, the motor fluid or steam valves being adapted to be actuated by the race bar, and the exhaust valves by the thrust rod, with each reciprocation of the piston, substantially as set forth. 3rd. In an engine, a cylinder, a piston and piston rod therefor, a race bar carried by the piston rod and guided along the peripheral walls of the cylinder, a lever adapted to be tripped by the race bar during the reciprocations of the latter, a steam valve and intermediate connections between said steam valve and lever for actuating the former upon the successive oscillations of the lever, substantially as set forth. 4th. In an engine, a stationary cylinder, a piston and piston rod therefor, steam and exhaust valves for said cylinder, a race bar and thrust rod secured to the piston rod, tripping dogs pivotally secured to the race bar, valve actuating levers pivoted to the cylinder and adapted to be tripped by the dogs during the reciprocations of the race bar, intermediate connections between the thrust rod and exhaust valves for actuating the latter, and suitable connections between the valve actuating levers and steam valves, the parts operating substantially as and for the purpose set forth. 5th. In an engine, a tripping dog comprising a substantially wedge shaped block having an inclined back, and upper face perpendicularly to the altitude of the triangular end of the wedge, and means for pivoting the dog at a point adjacent to the edge of the wedge or the meeting line of its faces, substantially as set forth. 6th. In an engine, a stationary cylinder, a piston and piston rod therefor, a race bar connected to said piston rod, marginal depressions formed along the opposite longitudinal edges of the race bar, the bases of said depressions rising at their ends to meet the outer surface of the race bar, valve actuating levers adapted to have one end travel along said depressions, valves connected to said levers, the latter retaining the valves in a closed position while traversing the bases of the depressions, but admitting lead steam to the cylinder while traversing the

raised ends of the said depressions, substantially as set forth. 7th. An engine comprising a cylinder, a piston, a piston rod therefor, a yoke carried by the piston rod, a race bar secured to one end of the yoke and adapted to traverse the periphery of the cylinder, a thrust rod secured to the opposite end of the yoke and disposed parallel to the race bar, wedge shaped tripping dogs pivoted with their edges adjacent to one another on top of the race bar, a marginal depression having inclined terminals formed on the race bars, springs for holding down the free ends of the dogs or the backs of the wedges at a point adjacent to or directly above the depressions, valve actuating levers pivoted in proximity to the cylinder, rollers at the inner ends of the lever, springs for holding the rollers in contact with the depressions on the race bar, oscillating steam valves, link connections between the valve and the outer or adjacent ends of the levers, exhaust valves, a valve rod connecting the same, a lever pivoted to the bed plate and operatively connected to the valve rod, and tappets on the thrust rod adapted to strike the said lever, the parts operating substantially as and for the purpose set forth. 8th. In an engine, a tripping dog comprising a wedge shaped block, and means carried thereby for pivoting the same at a point adjacent to the edge of the wedge, substantially as set forth.

No. 65,029. Rotary Engines. (Machine rotatoire.)



65029

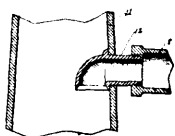
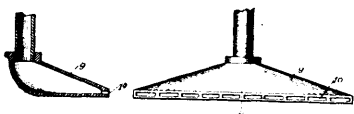
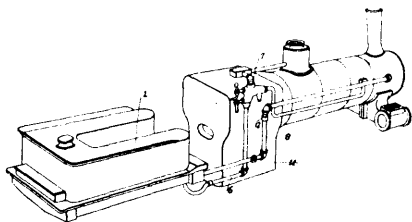
Thomas Craton, Hoquiam, Washington, U.S.A., 21st November, 1899; 6 years. (Filed 29th September, 1899.)

Claim.—1st. A rotary engine, provided with a main shaft, a cylinder, a piston mounted therein loosely on the main shaft, a disc connected with the piston to rotate therewith, a guide secured to the shaft and extending obliquely in relation to its axis, another disc mounted to rotate with the piston and having a projection engaging the said oblique guide, said second named disc being movable longitudinally of the shaft, toward and from the other disc, and a spring located between the two discs. 2nd. A rotary engine, provided with a main shaft, a cylinder, a piston mounted therein loosely on the main shaft, a disc connected with the piston to rotate therewith, a guide secured to the shaft and extending obliquely in relation to its axis, another disc mounted to rotate with the piston and having a projection engaging the said oblique guide, said second named disc being movable longitudinally of the shaft, toward and from the other disc, a cut off valve positively connected with the shaft and co-operating with ports in the piston, and a spring located between the two discs. 3rd. A rotary engine, provided with a reversing device consisting of a valve chamber with ports at opposite sides and a valve in said chamber for closing one port and opening the other, the valve being controlled by the pressure of live steam over the port exposed to atmosphere. 4th. A rotary engine, provided with a cylinder, a piston mounted therein, an admission valve for the steam to said cylinder and piston, a main driving shaft controlling said valve, a yielding connection between said shaft and piston, and a cut off valve operating in conjunction with the admission valve and under the control of the engineer, substantially as shown and described. 5th. A rotary engine, provided with a cylinder, a piston mounted therein, an admission valve for the steam to said cylinder and piston, a main driving shaft controlling said valve, a yielding connection between said shaft and piston, said yielding connection comprising discs engaged by and carried around by said piston, one of the discs being fitted to slide in spiral groove on said shaft, and a spring pressing the discs apart, substantially as shown and described. 6th. A rotary engine, pro-

vided with a cylinder, a piston mounted therein, an admission valve for the steam to said cylinder and piston, a main driving shaft controlling said valve, a yielding connection between said shaft and piston, said yielding connection comprising discs engaged by and carried around by said piston, one of the discs being fitted to slide in spiral grooves on said shaft, a spring pressing the discs apart, and means for regulating the tension of said spring, substantially as shown and described. 7th. A rotary engine, provided with a cylinder, a piston mounted therein, an admission valve for the steam to said cylinder and piston, a main driving shaft controlling said valve, a yielding connection between said shaft and piston, said yielding connection comprising discs engaged by and carried around by said piston, one of the discs being fitted to slide in spiral grooves on said shaft, a spring pressing the discs apart, and a loose connection between said discs, for shifting the same simultaneously and automatically on reversing the engine, substantially as shown and described. 8th. A rotary engine, provided with a piston having a piston head with ports on opposite sides, and a valve in said piston head, for closing one port and opening the other, the valve being controlled by the pressure of the steam, substantially as shown and described. 9th. A rotary engine, provided with a piston having a piston head with ports on opposite sides, and a valve in said piston head, for closing one port and opening the other, the valve being controlled by the pressure of the steam passing from the interior of the piston through a port into the valve chamber in the piston head, substantially as shown and described. 10th. A rotary engine, provided with a cylinder, a piston mounted to turn therein, a main driving shaft on which the piston rotates loosely, a yielding connection between the said shaft and the said piston, and an indicator connected with the said shaft and piston, to indicate the differential position of the two, substantially as shown and described. 11th. An engine, comprising a main shaft, a rotary piston loose on said shaft, a valve rigidly secured to the shaft and controlling ports of the piston, and a yielding connection between the shaft and piston. 12th. An engine, provided with a cut-off valve revolving on a revoluble valve nest, and a regulator controlled by the boiler pressure and connected with the valve seat to turn the latter according to the increase or decrease of the boiler pressure, substantially as shown and described. 13th. An engine, provided with a cut-off valve revolving on a revoluble valve seat, a regulator controlled by the boiler pressure and connected with the valve seat to turn the latter according to the increase or decrease of boiler pressure, said regulator comprising a cylinder containing a piston and connected with the boiler pressure, a gearing connected with said valve seat, and means for turning said gearing from the piston rod of said piston on the movement of the latter in the cylinder, substantially as shown and described. 14th. An engine, provided with a cut-off valve revolving on a revoluble valve seat, a regulator controlled by the boiler pressure and connected with the valve seat to turn the latter according to the increase or decrease of the boiler pressure, a valve in the supply pipe for said regulator, and an exhaust reversing device connected with said valve for controlling the valve and the regulator on reversing the engine, substantially as shown and described.

No. 65,030. Feed Water Heater for Locomotives.

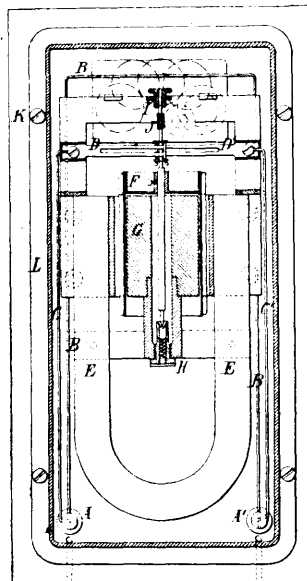
(*Chauffeur d'eau d'alimentation pour locomotives.*)



Samuel Prescott Bush, Columbus, Ohio, U.S.A., 21st November, 1899; 6 years. (Filed 1st February, 1899.)

Claim. 1st. In a feed water heater for locomotives, the combination with the water tank, a supplemental water compartment communicating with the main compartment and a water outlet communicating with said supplemental compartment, of a steam carrying pipe leading from a supply of exhaust steam and discharging into said supplemental compartment, substantially as specified. 2nd. In a feed water heater for locomotives, the combination with the water tank, a supplemental water compartment communicating with the main compartment, a water outlet communicating with said supplemental compartment, and a deflector plate located in front of the opening between the supplemental and main compartments, of a steam carrying pipe leading from a supply of exhaust steam and having one end discharging into said supplemental compartment and against said deflector plate, substantially as specified. 3rd. In a feed water heater for locomotives, the combination with the water tank, a supplemental water compartment communicating with the main compartment, and a water outlet communicating with said supplemental compartment, of a steam carrying pipe leading from a supply of exhaust steam into the main compartment and terminating at the connecting passage between said compartments in a discharging nozzle provided with one or more steam outlet openings, substantially as specified.

No. 64,031. Electric Meter. (Electromètre.)



Charles Edouard O'Keenan, Paris, France, 21st November, 1899; 6 years. (Filed 27th May, 1898.)

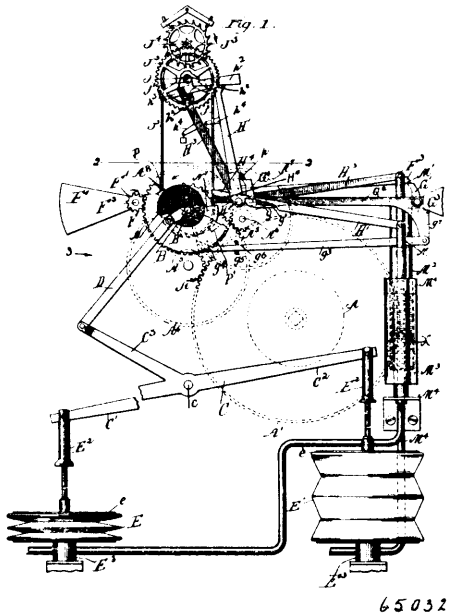
Claim. In an electricity meter, the combination of a permanent horse shoe magnet, a coiled armature in the form of a cylindrical shell mounted on a vertical axis between the limbs of the magnet and surrounding a stationary iron core, a commutator on the vertical axis having its segments connected to the coils of the armature, and having its two brushes electrically connected to the extremities of a resistance wire through which the current to be measured passes, and a counter geared to a worm on the vertical axis, substantially as described.

No. 65,032. Pneumatic Clock. (Horloge pneumatique.)

August Louis Hahl, Chicago, Illinois, U.S.A., 21st November, 1899; 6 years. (Filed 21st January, 1899.)

Claim.—1st. In a pneumatic clock system, the combination with the air impulsing mechanism and mechanism for operating same, of mechanism for governing the admission of air to and from the system, independent of the air impulsing mechanism, substantially as described. 2nd. In a pneumatic clock system, the combination of an impulsing mechanism and mechanism for operating same, a service pipe, and means independent of the impulsing mechanism for governing the admission of air to and from the service pipe, substantially as described. 3rd. In a pneumatic clock system, the combination of an impulsing mechanism and mechanism for operating same, a service pipe, and means independent of the impulsing mechanism for opening the service pipe to the external air, substantially as described. 4th. In a pneumatic clock system, the combination of an impulsing mechanism and mechanism for operating same, a service pipe, and a valve independent of the impulsing mechanism for governing the admission of the air to and from the service pipe, substantially as described. 5th. In a pneumatic clock system, the combination of an impulsing mechanism and mechanism for operating same, a service pipe, and a valve

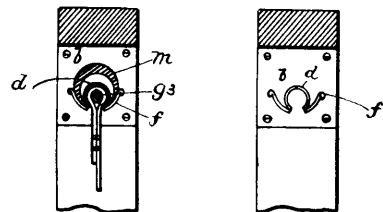
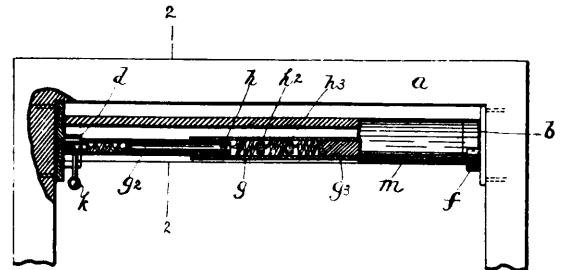
independent of the impulsing mechanism for opening the service pipe to the external air, substantially as described. 6th. In a



pneumatic clock system, the combination of a motor, an impulsing mechanism operated thereby, a service pipe connected with the impulsing mechanism, a lever adapted to open and close communication between the service pipe and the external air, means whereby said motor may move the lever in one direction and a time mechanism working independent of the motor controlling the movement of the lever in the opposite direction, substantially as described. 7th. In a pneumatic clock system, the combination of a motor, an impulsing mechanism operated thereby, a service pipe connected with the impulsing mechanism, means for governing the admission of air to and from the service pipe independent of the impulsing mechanism, and means between the motor and said governing means for closing the admission of air to the service pipe before the movement of the impulsing mechanism to create an impulse, substantially as described. 8th. In a pneumatic clock system, the combination of a motor, an impulsing mechanism operated thereby, a service pipe connected with the impulsing mechanism, a valve for governing admission of air to and from the service pipe independent of the impulsing mechanism, and means between the motor and valve for closing the valve before the impulse is started by the impulsing mechanism, substantially as described. 9th. In a pneumatic clock system, the combination of a motor, an impulsing mechanism operated thereby, a service pipe connected with the impulsing mechanism, means for governing admission of air to and from the service pipe independent of the impulsing mechanism, and a time mechanism adapted to release said governing mechanism and allow it to open the service pipe, substantially as described. 10th. In a pneumatic clock system, the combination of a motor, an impulsing mechanism operated thereby, a service pipe connected with the impulsing mechanism, a valve for governing the admission of air to and from the service pipe independent of the impulsing mechanism, and a time mechanism adapted to release said valve and allow it to open the service pipe, substantially as described. 10th. In a pneumatic clock system, the combination of a motor, an impulsing mechanism operated thereby, a service pipe connected with the impulsing mechanism, a valve for governing the admission of air to and from the service pipe independent of the impulsing mechanism, time mechanism for controlling the movement of the valve in one direction, stop mechanism connected with the impulsing mechanism, and intermediate mechanism between said stop mechanism and the valve whereby a movement of the valve releases the stop mechanism and allows the impulsing mechanism to operate, substantially as described. 12th. In a pneumatic clock system, the combination of a motor, an impulsing mechanism operated thereby, a service pipe connected with the impulsing mechanism, a valve for governing the admission of air to and from the service pipe independent of the impulsing mechanism, time mechanism for controlling the movement of the valve in one direction, stop mechanism connected with the impulsing mechanism, intermediate mechanism between said stop mechanism and the valve, whereby a movement of the valve releases the stop mechanism and allows the impulsing mechanism to operate, and means connected with the motor for returning the parts to their normal position, substantially as described. 13th. In a pneumatic clock system, the combination of a motor, two sets of impulsing mechanisms operated thereby, a service pipe for each impulsing mechanism, a valve for governing the admission of air to and from each service pipe independent of the impulsing mechanism, a single set of time mechanism for con-

trolling the movement of each valve in one direction, a single set of stop mechanism connected with the impulsing mechanisms, and a single set of intermediate mechanism between said stop mechanism and the valves, whereby a movement of the valves on being released by the time mechanism release the stop mechanism; and allows the impulsing mechanism to operate, substantially as described. 14th. In a pneumatic clock system, the combination of a motor, two sets of impulsing mechanism operated thereby, a service pipe for each impulsing mechanism, a valve for governing the admission of air to and from each service pipe independent of the impulsing mechanism, a single set of time mechanism for controlling the movement of each valve in one direction, a single set of stop mechanism connected with the impulsing mechanisms, a single set of intermediate mechanism between said stop mechanism and the valve, whereby a movement of the valves on being released by the time mechanism releases the stop mechanism and allows the impulsing mechanism to operate, and means connected with the motor for returning the parts to their normal position, means for each valve connected with the motor for returning the valves to their closed position, and means connected with the motor for returning the stop mechanism to its normal position, substantially as described.

No. 65,033. Drapery Support. (Support de draperie.)



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Adelia Amanda Gardner, Providence, Rhode Island, U.S.A., 21st November, 1899; 6 years. (Filed 11th October, 1899.)

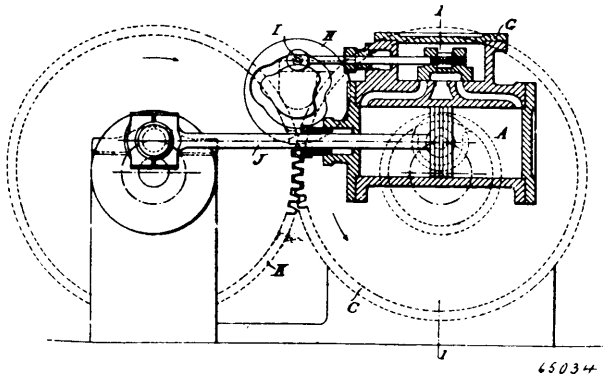
Claim.—1st. A curtain support or holder, comprising two telescopic rods, springs mounted in one of said rods and adapted to bear on the end of the other, one of said rods being also tubular in form at its other end and provided with a spring operated bolt and side plates which are adapted to be secured to a window frame or other support, and which are provided with circular flanges or holders adapted to receive the end of said pole, said flanges or holders being open at their under side and provided with outwardly and upwardly curved arms, and an auxiliary pole which is tubular in form and provided with a longitudinal slot in the bottom thereof and through which the first named pole or support is adapted to be inserted, said auxiliary pole being supported at its end by said outwardly and upwardly curved arms, substantially as described. 2nd. A support for window curtains or other draperies, comprising two end plates which are adapted to be secured to the sides of a window frame or other support, said plates being provided with circular flanges or holders which are open at their lower sides and provided with lateral projections, a tubular pole which is provided in its lower side with a longitudinal slot and the ends of which are adapted to be supported by said projections, and a curtain pole consisting of two telescopic rods one of which provided with springs which bear upon the end of the other, and the outer ends of said rods being adapted to enter the circular flanges or holder of the said plate, and the outer end of one of said rods being provided with a spring operated bolt, substantially as described.

No. 65,034. Steam and other Fluid Pressure Engines. (Machine à vapeur et pression hydraulique.)

Henry E. Gamble, Hoboken, Belgium, 21st November, 1899; 6 years. (Filed 23rd May, 1899.)

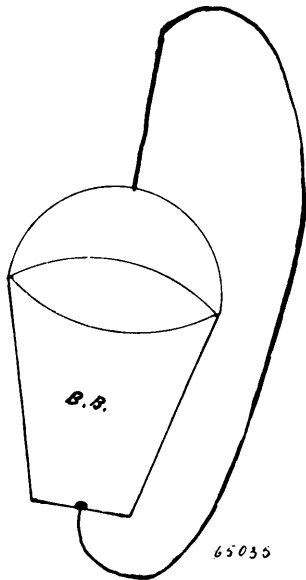
Claim.—1st. In steam and other fluid pressure engines, the combination of a pressure cylinder, a movable support therefor, and a crank, the parts being so connected that pressure in the cylinder

will, at the same time cause the cylinder to rotate in one direction, and the crank to rotate in the opposite direction, substantially as



described. 2nd. In steam and other fluid pressure engines, the combination of a pressure cylinder mounted eccentrically with reference to the disc or shaft which carries it, a piston or connecting rod similarly mounted on a second disc or shaft, and means for connecting and controlling the motion of the two discs or shaft, substantially as described.

No. 65,035. Fruit Emptier. (*Transvideur de fruits.*)



Joseph Weber, Township of Artemesia, Ontario, Canada, 21st November, 1899; 6 years. (Filed 11th July, 1899.)

Claim.—A fruit emptier, comprising a pail, basket or receptacle having a rope or its equivalent attached one end to the bail and the other end to the bottom, as and for the purpose set forth.

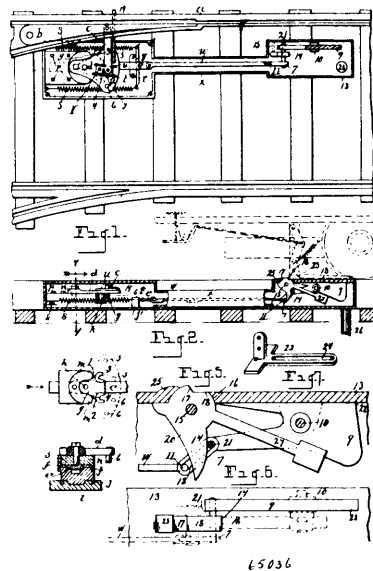
No. 65,036. Switch Actuating Mechanism.

(*Mécanisme à actionner les aiguilles.*)

Samuel Nash, Detroit, Michigan, U.S.A., 21st November, 1899; 6 years. (Filed 6th October, 1899.)

Claim.—1st. In a switch actuating mechanism, the combination with switch point, of a lever connected therewith, a reciprocatory slide provided with an actuating device to engage said lever and throw the switch point, and means to actuate said slide, said lever and actuating device located the one above the other, substantially as set forth. 2nd. In a switch actuating mechanism, the combination with a switch point, of an oscillatory lever connected therewith, a reciprocatory slide, a dog mounted thereupon to engage said lever and throw the switch point into opposite direction from that occupied and means to actuate said slide, said lever located above said dog, substantially as set forth. 3rd. In a switch actuating mechanism, the combination with a switch point, of a box, a support within the box, a slide reciprocatory in said support, a dog mounted upon said slide, an oscillatory lever having a fixed fulcrum on said support, and means actuated by a moving car to actuate said slide, substantially as set forth. 4th. In a switch actuating mechanism, the combination with a switch point, of an oscillatory lever connected therewith, a reciprocatory slide provided with an actuating device

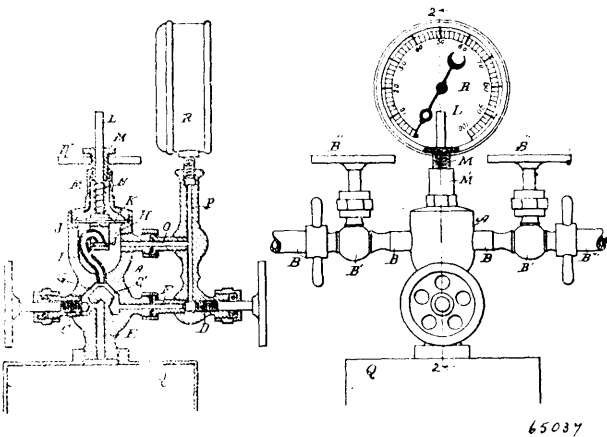
to engage said lever and throw the switch point, means to actuate said slide, and a signalling bar connected with said lever, substan-



tially as set forth. 5th. In a switch actuating mechanism, the combination with a switch point, of an oscillatory lever connected therewith, a slide provided with an actuating device to engage said lever and throw the switch point, and means actuated by a moving car at a point distant from the switch point to actuate said slide, the means to actuate the slide having a free movement for a desired distance without actuating the slide, substantially as set forth. 6th. In a railway switch actuating mechanism, the combination with a switch point, an oscillatory lever, a device connecting the switch point with the lever, a reciprocatory and oscillatory device to engage said lever to throw the lever and actuate the switch point, a slide to actuate said device, a link connected with said slide, and mechanism actuated by a moving car connected with said link to reciprocate the slide, said mechanism arranged to have a free movement for a desired distance without actuating said slide, substantially as set forth. 7th. In a switch actuating mechanism, the combination with a switch point, of a horizontally oscillatory lever, a connecting rod to connect the lever with the switch point having an adjustable connection with the lever, and means to actuate said lever, the lever and the means to actuate the lever located the one above the other, substantially as set forth. 8th. In a switch actuating mechanism, the combination with a switch point, of an oscillatory lever connected therewith, an enclosing case, a support for said lever within said case, a slide reciprocatory in said support, a dog upon said slide to actuate said lever, the lever and dog located the one above the other upon said support, substantially as set forth. 9th. In a switch actuating mechanism, the combination with a switch point, an enclosing case, a support within said case, a slide reciprocatory in said support, an oscillatory lever actuated by said dog, a connecting bar connecting said lever with said point, a cross bar connected with said slide, and springs connected with the extremities of said cross bar located at the sides of the support, and means to actuate said slide, substantially as set forth. 10th. In a switch actuating mechanism, the combination with a switch point, a horizontally oscillatory lever, means to actuate said lever, a connecting bar connected with said switch point, and a slide having an adjustable engagement with the lever, connecting bar at the end opposite the switch point connected with said slide, the lever and the means to actuate the lever located one above the other, substantially as set forth. 11th. In a switch actuating mechanism, the combination with a switch point, of a horizontally oscillatory lever connected therewith, a slide provided with an actuating device to engage and operate said lever, a tilting lever, a link connecting said tilting lever with said slide, an operating lever to actuate the tilting lever, and means actuated by a moving car to actuate said operating lever, said tilting lever having a free movement for a desired distance, substantially as set forth. 12th. In a switch actuating mechanism, the combination with a switch point, of a slide, means to throw the switch point into opposite direction from that occupied actuated by said slide, a link connected with said slide, a tilting lever connected with said link to actuate said slide, an operating lever provided with an upwardly projecting lug or shoulder and arranged to actuate said tilting lever, the tilting lever having a free movement for a desired distance, and arranged to be actuated by a moving car by a suitable device upon a moving car to throw the switch point, substantially as set forth. 13th. In a switch actuating mechanism, the combination with a switch point, a support, a slide having a reciprocatory movement in the sup-

port, an oscillatory dog carried by said slide, a cover for the support, and an oscillatory lever fulcrumed upon said cover above said dog, and connected with said switch point, substantially as set forth. 14th. In a switch actuating mechanism, the combination with a switch point, of an oscillatory lever to actuate said point, a reciprocatory slide, an oscillatory dog carried by said slide to actuate said lever, and means actuated by a moving car to actuate the slide, and means to actuate the slide having a free movement for a desired distance without actuating the slide substantially as set forth. 15th. In a switch actuating mechanism, the combination with a switch point, of means to throw the switch provided with a connecting rod, a tilting lever connected with said rod, an operating lever provided with an upwardly projecting lug or shoulder to engage an operating device on a moving car arranged to actuate said tilting lever, substantially as set forth. 16th. In a switch actuating mechanism, the combination with a switch point, of means to throw the switch provided with a connecting rod, a tilting lever connected with said rod, an operating lever provided with an upwardly projecting lug or shoulder to engage an operating device on a moving car arranged to actuate said tilting lever, said tilting lever having a free movement for a desired distance before actuating said connecting rod, substantially as described.

No. 65,037. Pressure Regulators and Connections.
(*Régulateur de pression et joint.*)



Harley M. Dunlap, Battle Creek, Michigan, U.S.A., 21st November, 1899; 6 years. (Filed 11th October, 1899.)

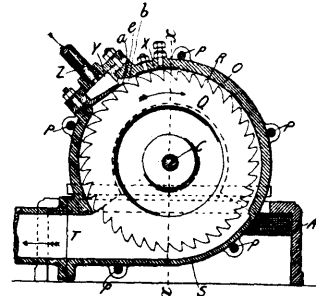
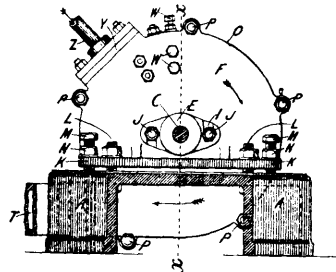
Claim.—1st. In a pressure regulator and connection, the combination of the main casing A, having passage E, provided with stop cock C, passage G and G', leading through the same and having a chamber H therein, a tube I, curved backwardly on itself within the chamber H, a diaphragm K, with a suitable stirrup bearing a packing adapted to raise and close the tube I, a cap M, for retaining the diaphragm in place, a stem L, secured to the diaphragm, a spring surrounding the stem to exert pressure on the same, an adjustable thumb nut for adjusting the tension on the spring, a connecting tube F, delivering to tube P, a pressure gauge connecting with tube P, a second tube O, connecting the chamber H, to the pipe P, and a stop cock or valve D, to close the tube F, all co-acting for the purpose specified. 2nd. The combination in a pressure regulator and connection of a suitable main casing containing means for regulating the pressure, a pipe connecting said main casing below the pressure regulator with a pressure gauge, a valve for closing the same and a pipe connecting the first named pipe and the pressure gauge directly with the casing beyond the pressure regulator so that by opening an additional valve the tank pressure could be read on the same gauge indicating reduced pressure, as specified.

No. 55,038. Rotary Motor. (*Moteur rotatoire.*)

Richard Francis Marsh, East Maitland, New South Wales, Australia, 21st November, 1899; 6 years. (Filed 24th October, 1899.)

Claim.—1st. In rotary motors operated by fluid pressure and having an outer casing and a revolving disc, a fluid pressure chamber connected with the operating fluid supply pipe and placed in the circumferential portion of such casing and having an outlet slot and a lower projecting lip, either fixed, flexible, or adjustable, to serve as a director plate, as described and shown, and for the purposes set forth. 2nd. In rotary motors of the class set forth, the combination, with a fluid pressure chamber as claimed in Claim 1, of an adjustable plate for regulating the dimensions of the outlet slot of the said chamber, as described and shown, and for the purposes set forth. 3rd. In rotary motors of the class set forth, an upper adjustable plate and adjustable side plates, placed within the casing in close proximity to the fluid pressure chamber, as described and shown, and for the purposes set forth. 4th. In rotary motors

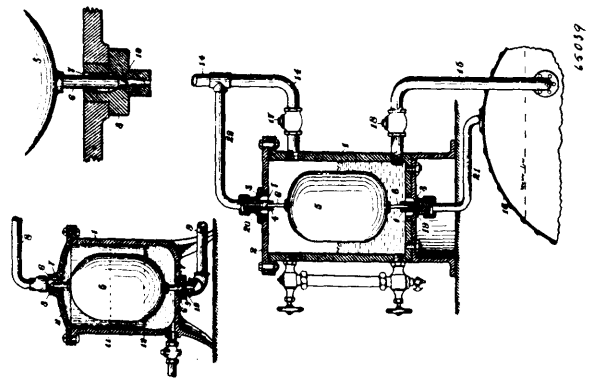
of the class set forth, a projecting lip, a passage in close proximity thereto, an upper and two side directing plates, and, serrations con-



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structed upon a rotary disc, all forming a reaction chamber in communication with an outlet slot of a fluid pressure chamber, as herein described and shown, and for the purposes set forth. 5th. In rotary motors of the class set forth, the combination, with an outer casing provided with pressure chambers, directing plates, and outlet passages and ports, of a rotary disc having serrations whose impelling and following surfaces are so placed as to obtain reverse movements of the disc, as described and shown. 6th. In rotary motors of the class set forth, the combination, with a casing having upper and side adjustable director plates, of adjustable stuffing boxes and foot plates provided with means for adjusting the position of said casing relatively to an enclosed rotary disc whose serrations are in contact with a projecting lip of a fluid pressure chamber, as described and shown, and for the purposes set forth. 7th. In rotary motors of the class set forth, an outer casing having upper and side director plates, and provided with inner side facing strips, the lower part of such casing being of a diminished thickness so as to form an outlet passage for the expended fluid, and communicating with an exhaust port, as described and shown. 8th. The general combination and arrangement of the parts herein described, the whole forming an improved rotary motor operated by fluid pressure, as described, and as illustrated in the drawings.

No. 65,039. Steam Traps. (*Purge à vapeur.*)

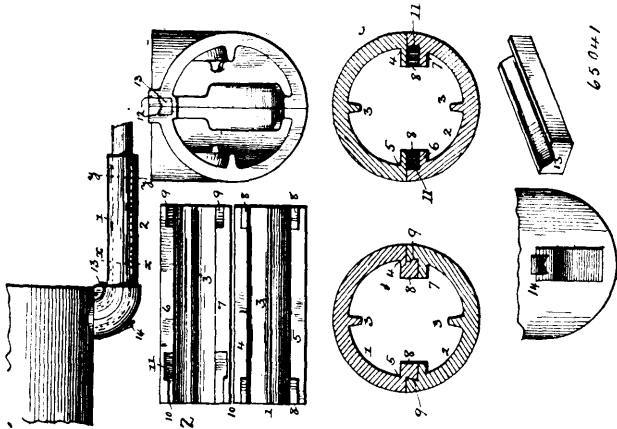


Joseph St. Mary, San Francisco, California, U.S.A., 21st November, 1899; 6 years. (Filed 27th October, 1899.)

Claim.—A steam trap consisting of a main containing vessel or chamber, a vertically moving float therein free to revolve about its vertical axis provided with a central stem forming a valve or valves, operating in the manner substantially as and for the purposes specified.

No. 65,040. Rotary Steam Engine.

(Machine à vapeur rotatoire.)

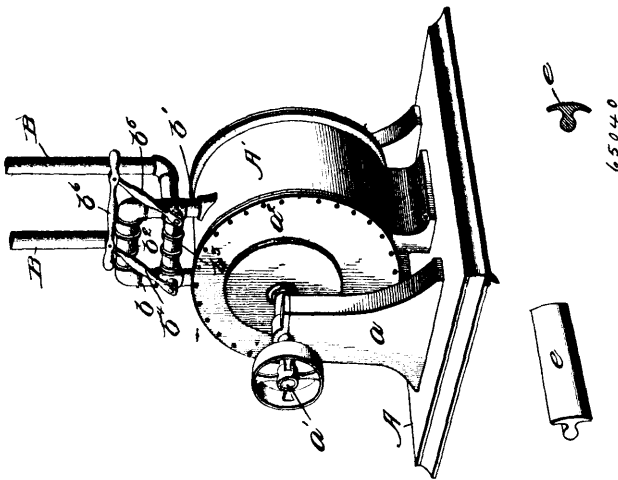


Arthur Guindon, Montreal, Quebec, Canada, 21st November, 1899; 6 years. (Filed 18th October, 1899.)

Claim.—1st. A rotary steam engine comprising a cylinder, a piston eccentrically mounted therein, abutment plates slidably mounted in said piston, and adapted to engage the sides of the cylinder chamber, combined steam inlet and outlet pipes communicating with said chamber at points on the horizontal plane passing through the centre of the piston and adapted to direct the steam against either of said abutment plates, an exhaust pipe communicating with said inlet and outlet pipes, and connected valves separating in said inlet and outlet pipes, substantially as described. 2nd. A rotary steam engine, comprising a cylinder, a piston eccentrically mounted therein, abutment plates slidably mounted in said piston and having a show pivotally connected to the end of each of said plates and adapted to engage the sides of the cylinder chamber, combined steam inlet and outlet pipes communicating with said chamber at points on the horizontal plane passing through the centre of the piston and adapted to direct the steam against either of said abutment plates, an exhaust pipe communicating with said inlet and outlet pipes, and connected valves operating in said pipes, substantially as described. 3rd. A rotary steam engine, comprising a cylinder, a piston eccentrically mounted therein, abutment plates slidably mounted in said piston and adapted to engage the sides of the cylinder chamber, a spring arranged between the abutting ends of said plates, combined steam inlet and outlet pipes communicating with said chamber at points on the horizontal plane passing through the centre of the piston and adapted to direct the steam against either of said abutment plates, an exhaust pipe communicating with said inlet and outlet pipes, and connected valves operating in said inlet and outlet pipes, substantially as described.

No. 65,041. Blow-off Protectors.

(Protecteur d'échappement de la vapeur.)

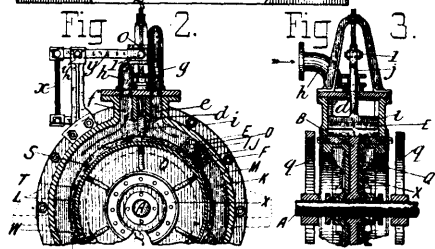
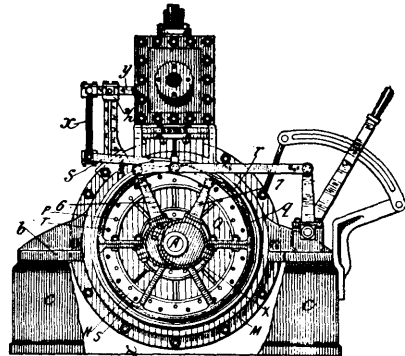


Edmund Mather, Harrisburg, Pennsylvania, U.S.A., 21st November, 1899; 6 years. (Filed 14th October, 1899.)

Claim.—1st. A metallic protector for a blow-off pipe divided longitudinally, and having recesses formed in one part to receive fastening devices formed on the other, substantially as described. 2nd. A protector for a blow-off pipe, divided longitudinally, and pro-

vided with internal ribs and locking devices formed in said ribs, substantially as described. 3rd. An elbow for a blow-off pipe protector divided longitudinally, and having recesses 12 formed in its opposite in combination with the keys 13 constructed to draw the edges together, substantially as described. 4th. A metallic protector for a blow-off pipe, comprising a tube and an elbow each divided longitudinally and provided with internal projections and fastening means formed in said projections, substantially as described.

No. 65,042. Rotary Engine alike adaptable to Rotary Pumps. (Machine rotatoire applicable aux pompes.)



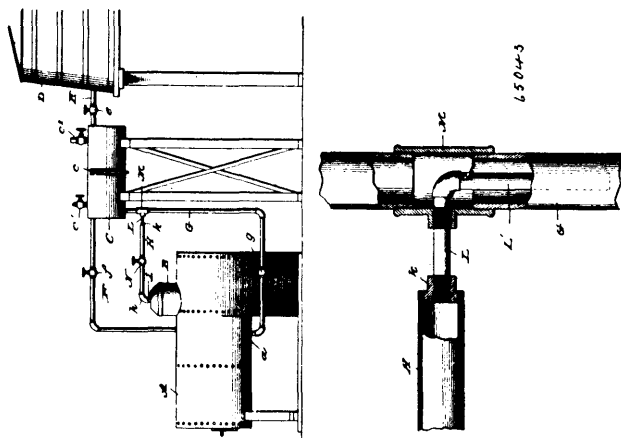
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Henry Alexander Hancox and Robert James Hancox, both of Sydney, New South Wales, Australia, 21st November, 1899; 6 years. (Filed 28th October, 1899.)

Claim.—1st. In rotary engines provided with an annular piston chamber, a piston disc carrying one or more piston blocks provided with top and bottom covering plates having suitable tongues and overlapping margins and actuated by means of concealed springs, as described and shown and for the purposes set forth. 2nd. In rotary engines of the class set forth, the combination with a rotary disc carrying one or more piston blocks of jointing rings having steam lubricating grooves and secured to circular clamping plates and operated by concealed springs, as described and shown and for the purposes set forth. 3rd. In rotary engines of the class set forth, the combination with a rotary disc carrying one or more piston blocks of side covers having stiffening webs, stuffing boxes and adjustable stiffening rings, and secured to circular clamping plates, as described and shown and for the purposes set forth. 4th. In rotary engines of the class set forth, a detachable outer casing divided centrally and a disc whose side surfaces are in contact with the grooved edges of jointing rings, the whole combined to form an annular piston chamber, as described and shown and for the purposes set forth. 5th. In rotary engines of the class set forth, the combination with an annular chamber as claimed in claim 4 of one or more steam admission chambers having a central slide passage and associated steam passages communicating with a valve chamber having inlet ports arranged for the simultaneous inflow and exit of the steam into the said annular chamber, as described and shown and for the purposes set forth. 6th. In rotary engines of the class set forth, the combination with an annular chamber of the kind described of a radial slide with steam cavities formed therein and a central slide block made adjustable and operated in the manner described, as described and shown and for the purposes set forth. 7th. In rotary engines of the class set forth, the combination with an annular chamber constructed in the manner described of a radial slide provided with an adjustable slide block, an actuating lever therefor combined with side levers and retained in position with side springs and actuated by cams, as described and shown and for the purposes set forth. 8th. In rotary engines of the class set forth, the combination with a rotary piston provided with one or more piston blocks whose covering plates are expandible by means of concealed springs, and an annular chamber of the kind described, of a steam admission chamber with its associated ports and passages, whose slide valve is operated in the manner described and shown, and for the purposes set forth. 9th. The combination of a rotary engine of the kind described with a rotary pump whose piston and annular chamber are similarly constructed, as and for the purposes herein described and illustrated in the drawings.

10th. The general combination and arrangement of the parts herein described, the whole forming an improved rotary engine, as described and illustrated in the drawings.

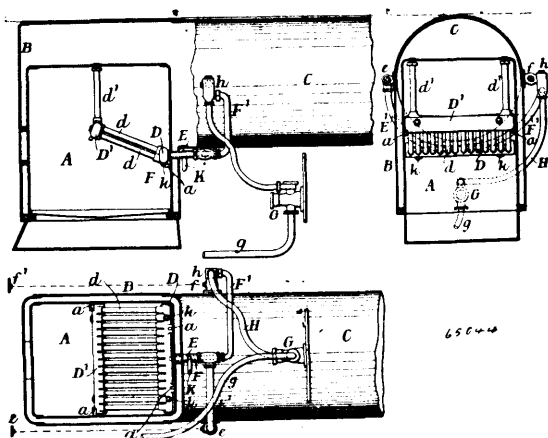
No. 65,043. Steam Boiler Feeders.
(*Alimentateur de chaudières à vapeur.*)



John Alexander Sumner, Tillar, Arkansas, U.S.A., 21st November, 1899; 6 years. (Filed 3rd October, 1899.)

Claim.—1st. An apparatus for feeding hot water to a steam boiler, comprising a supply tank or reservoir, a feeder located intermediate the supply tank and boiler adjoining the latter, a valved supply pipe connecting the supply tank and feeder, a valved feed pipe connecting the feeder with the boiler entering the bottom of the latter, and a steam pipe connecting the upper part of the boiler to the feeder, together with a second steam pipe extending from the dome of the boiler into the feed pipe and discharging in the direction of the flow to the boiler, as herein shown and described. 2nd. An apparatus for feeding hot water to a steam boiler, comprising a supply tank or reservoir, a feeder located intermediate the supply tank and boiler adjoining the latter, a valved supply pipe connecting supply tank and feeder, a valved feed pipe extending from the feeder into the bottom of the boiler, said feed pipe having a T coupling at an intermediate point, and a steam pipe leading from the upper part of the boiler into the feeder, together with a pipe extending from the dome of the boiler, a smaller pipe coupled to the end of the aforesaid pipe and screwed into the T coupling of the feed pipe, and a pipe of smaller diameter connected to the end of the other small pipe and depending in the feed pipe at the centre thereof to direct a jet of steam in the direction of the flow to the boiler, as herein shown and described.

No. 65,044. Apparatus for Heating Feed Water Promoting Water Circulation, and Generating Steam in Locomotive and other Steam Boilers. (*Appareil pour chauffer l'eau d'alimentation, etc.*)

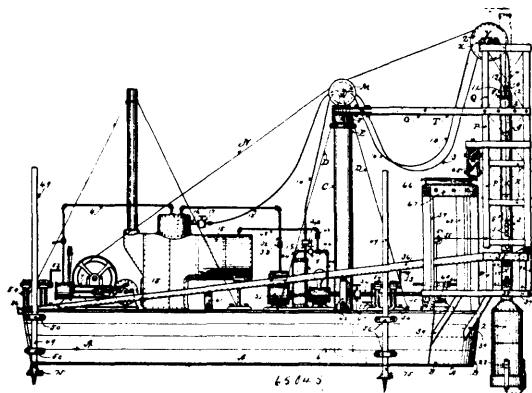


John King, Charles Downes and Mihangel Ap Twan, all of Buenos Ayres, Argentine Republic, 21st November, 1899; 6 years. (Filed 10th October, 1899.)

Claim.—1st. In combination with the fire box of a steam boiler, a feed water heater consisting of two tubular receptacles connected by tubes and placed in an inclined position in the fire box, the lower receptacle being connected by pipes to the feed pump or injector

and the upper being connected by pipes to the water space above the fire box, substantially as described. 2nd. In combination with the feed heater, circulation pipes provided with the barrel of the boiler, substantially as and for the purpose set forth.

No. 65,045. Dredge. (*Draqueur.*)

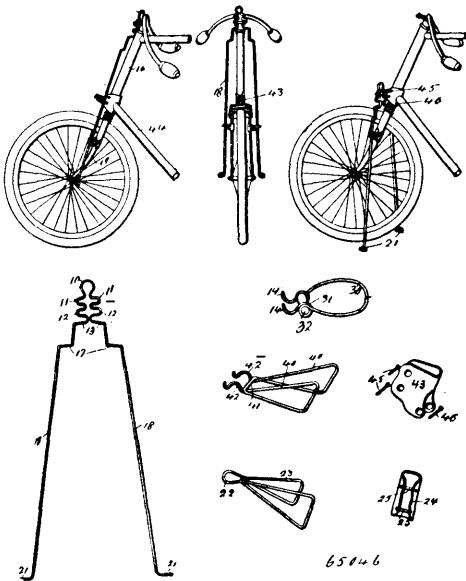


Asahel J. Severance, Denver, Colorado, U.S.A., 21st November, 1899; 6 years. (Filed 31st March, 1898.)

Claim.—1st. The combination in a dredge of the supporting boat, the pivotal post mounted therein, a sweep beam pivoted to said pivotal post, a track curved concentric to said pivotal post, across the bow of said bow of said boat, a cage comprising a trussle frame work attached to said sweep beam and mounted to roll on said curved track, a vacuum suction lift tube adapted to be raised and lowered in said cage and comprising a tube having an enlarged portion at its lower end and a door at the end of the enlarged portion, a hoisting engine on said boat and a hoisting rope connecting said vacuum tube and hoisting engine together and adapted to raise and lower said vacuum tube in said cage, substantially as described. 2nd. The combination in a dredge of a supporting boat, a vacuum suction lift tube operatively supported by said boat and adapted to be raised and lowered to and from the bottoms of rivers and comprising a long tube having an enlarged suction end with door adapted to swing both inwards and outwards and having said door divided by a hinged joint into two parts, the outer or free part of which is adapted to fold in either direction upon the other, a pump and a boiler on said boat for supplying an alternate supply of both steam and water for forming a vacuum in said tube, one or more self closing valves for detecting the presence of an operative volume of steam in the lower portion of said tube, an air inlet valve in the upper portion of said tube, and a perforated diaphragm in the upper portion of said tube, substantially as described. 3rd. The combination in a dredge of the supporting boat having a curved dredging end, a curved track supported above the deck of said boat, a pivotal post slidably stationed on said boat concentric to said boat, a cage arranged to project over the curved end of said boat and adapted to roll on said track, a sweep beam extending from said cage to said post, a vacuum suction lift tube loosely enclosed and confined in an operative vertical position by said cage, and comprising a tube with an enlarged portion at its lower end, a swinging door at the entrance of said enlarged portion and air inlet valve at its central portion, hoisting ropes arranged to support said tube in said cage, rope sleeves mounted on said cage and supporting said tube supporting ropes, a pivotal pin arranged to secure said sweep beam to said pivotal post and provided with an upward extension containing a cross arm, a rope sleeve mounted on each end of said cross arm and supporting said tube supporting ropes arranged and adapted to swivel and be turned by said ropes as the said cage and sweep beam are swung round said curved track and a hoisting engine on said boat to which said boats are connected for raising and lowering said tube, substantially as described. 4th. The combination in a dredge, of a supporting boat, a curved track thereon, a cage mounted to roll on said track and projecting beyond the boat, a pivotal support concentric to said curved track, a sweep beam connecting said cage to said pivotal support, a vacuum suction lift tube suspended in said cage and confined thereby and controlled by a suitable hoisting apparatus, a capstan mounted on said boat, oppositely disposed ropes secured to said capstan and said cage and arranged and adapted to move said vacuum tube along said curved track, substantially as described. 5th. The combination in a dredge of the supporting boat, the curved track mounted thereon, the pivotal post concentric to said track, the cage projecting over said boat, the wheels mounted on said cage and track, the vacuum suction lift tube having the perforated diaphragm, the air inlet valves and the folding, swinging door, and the hoisting engine with the steam generating boiler, the water pressure tank, the steam and water supply pipes connecting said boiler and tank to said tube, the pump, the dumping box and sluice box and the capstan and ropes for operating said vacuum tube, substantially as described. 6th. The combination in a dredge of the vacuum suction lift tube consisting of a tube having a long body portion containing an enlarged portion or mouth portion, the water and steam flexible supply pipes

the steam and the compressed water supplies, the air inlet, a door hinged to said mouth to swing both in and out and arranged to fold upon itself in either direction at substantially the center of its width, and one or more self-closing valves adjacent to the mouth end of said tube, spring keepers arranged to support said door across the mouth of said tube positioned on opposite sides of said tube to engage the parts of said door at their pivotal hinge, an inverted lip or toe on said keepers adapted to extend under said hinge and a third spring keeper arranged to support the free end of said door across the mouth of said tube, substantially as described. 7th. In a dredge for raising gold bearing gravel from the bottoms of rivers comprising a vacuum lifting tube having a door at its suction mouth and adapted to swing inward and outward, spring keepers for locking said door across said mouth, said tube having its upper end closed, a supply of steam arranged to be fed at will into the top portion of said tube, a perforated diaphragm in the top portion of said tube, a supply of water under pressure arranged to be delivered to the top of said tube above said diaphragm, an air inlet valve on said tube, one or more self-opening and self-closing valves near the lower end of said tube, a supporting boat, a steam boiler, a hoisting engine, a pump, a cage surrounding said vacuum tube and adapted to guide it vertically, and suitable ropes and pipes arranged to connect said vacuum tube with said boiler, hoisting engine and pump for operating said vacuum suction lifting tube, substantially as described.

No. 65,016. Bicycle Support. (*Support de bicyclet.*)

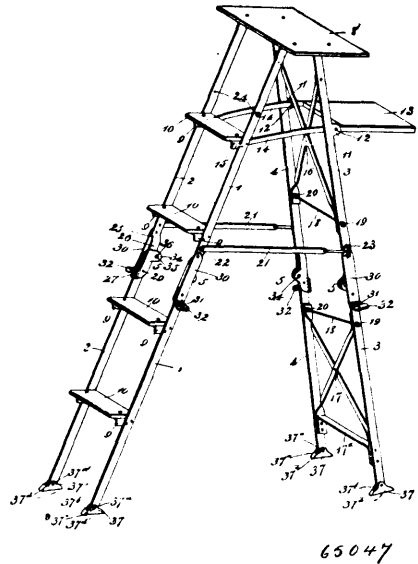


Alfred Brown and Eliza Ann McElroy, Ottawa, Ontario, Canada, 22nd November, 1899; 6 years. (Filed 17th April, 1899.)

Claim.—1st. In a bicycle support, the combination of a single piece of wire bent to form a pair of legs adapted to straddle the front fork of the bicycle, lateral projections formed at the upper end of said legs, a bracket secured rigidly to the steering head of the machine near the upper end thereof to support said legs when not in use, a bearing bracket secured rigidly to the steering head near the lower end thereof to bear upon said lateral projections when the legs are in use, means for securing said bracket rigidly to said steering head, and a pair of guiding brackets secured to the prongs of the said front fork of the machine and adapted to guide the legs of the support when being raised or lowered, substantially as described and for the purpose set forth. 2nd. In a bicycle support, the combination of a single piece of wire bent to form a loop 10, a pair of projections 11, a pair of projections 12, and a pair of legs 18 off-set and horizontally curved at their ends as at 21, and off-set as at 17 and 17, a pair of guiding brackets carried by the prongs of the fork and each consisting of a single piece of wire bent to form a loop 22 and a pair of triangular sides 23, an open sleeve 24 taking around a prong and receiving the bases of said triangular sides, and a pair of pins 25 taking through said bases and into the edges of the side of the opening in said sleeve, a supporting bracket, consisting of a single piece of wire bent to form a loop 30 to take around the upper end of the steering head and coiled as at 31, with its ends 14 upwardly curved, a clamping screw 32 for securing said supporting bracket in place, and a bearing bracket, consisting of a single piece of wire bent to form a pair of triangular side pieces 40, a transverse bracing piece 41 and having downwardly curved ends 42, an open sleeve 42 taking around the steering head near the lower end thereof and receiving the bases of said triangular sides, said sleeve having its lower middle portion cut away, and pins 45

and 46 for securing said bracket to said open sleeve and said sleeve to said steering head, all arranged and combined substantially as shown and described and for the purpose set forth.

No. 65,017. Step Ladder. (*Echelle à marches.*)



Charles H. Likewise, Brooklyn, New York, U.S.A., 22nd November, 1899; 6 years. (Filed 24th October, 1899.)

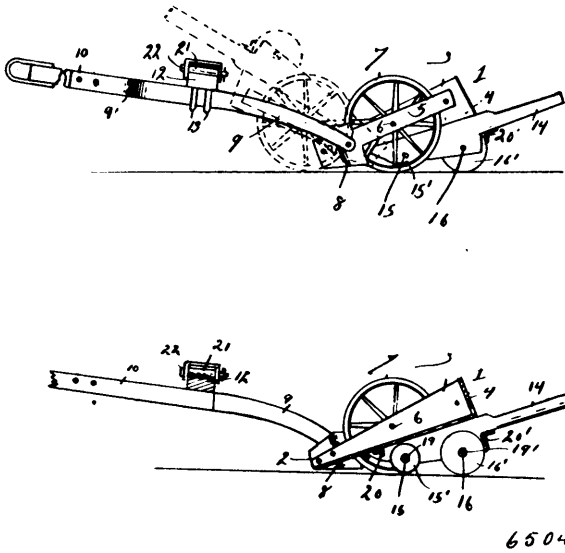
Claim.—1st. In a ladder, supporting legs each composed of two sections hinged together substantially as shown and suitable means to prevent flexing when said legs are in their extended position, as and for the purpose set forth. 2nd. In a ladder, legs having joints near the middle part thereof and sustaining arms pivoted at one end to one section and having locking hooks on the free ends designed to engage keepers in the other section, and suitable means for locking said hooks in position, substantially as specified and for the purpose set forth. 3rd. A ladder composed of two leg sections, a hinge uniting said sections, a finger or extension of the upper section lying against the forward edge of the lower section below said hinge and having a perforation, a registering perforation formed in the lower section and spring controlled pin taking into each of them whereby the hinge will be locked against movement, substantially as specified and for the purpose set forth. 4th. In a ladder, the herein described hinge formed by bending the lower end of the upper section, substantially as shown, and so pivoting the upper end of the lower section thereto that said section will lie substantially in the plane of the upper section, an anti-friction washer interposed between said sections at their point of union, and a spring controlled pin carried by the upper section, and designed to be received by registering perforations in the upper and lower sections as set forth. 5th. A hinge for ladders or the like formed by bending the end of the upper section into a plane substantially parallel with said section and providing the extreme end with a curved lip or vertically disposed hook, a rivet or journal secured to said parallel extension and pivotally uniting the lower section thereto, an anti-friction washer surrounding said journal and disposed between said sections and suitable means for locking the leg sections in an extended position, as and for the purpose set forth. 6th. A ladder, the combination of folding supporting legs, a top shelf or platform, suitable means for connecting said legs and platform, a folding shelf mounted on said legs, reinforcing arms pivoted to one leg and extending to the opposite leg and having a hook upon their free ends, and an anchoring base or foot pivotally connected to each leg, substantially as described and for the purpose set forth. 7th. As an article of manufacture, an anchoring base for ladders, etc., consisting of a body section having ears formed thereon and further provided with stems or points designed to take into the floor, substantially as and for the purpose set forth.

No. 65,018. Road Grader. (*Appareil à régaler les routes.*)

Jason W. Macy, Searsborough, Iowa, U.S.A., 22nd November, 1899; 6 years. (Filed 25th October, 1899.)

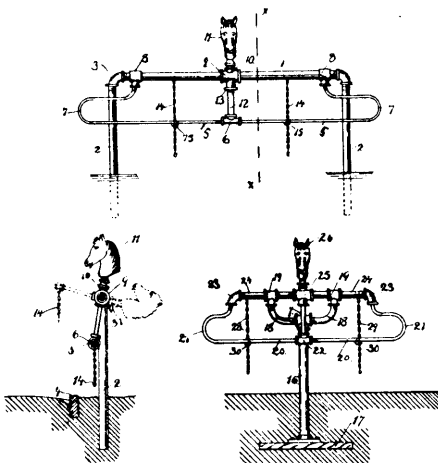
Claim.—1st. In a road grader or scraper, the combination with the scoop, and the parallel handles fixed thereto, of the shafts mounted in said handles, the rollers journaled on said shafts, and the sleeves encompassing said shafts between said rollers, substantially as and for the purpose set forth. 2nd. In a road grader or scraper, the combination with the scoop and the parallel handles fixed thereto, of the shafts formed with a square end and mounted in said handles the bearing rollers journaled on said shafts, and a

plate encompassing the squared ends of said shafts, and means for securing said plate in place, substantially as and for the purpose set



forth. 3rd. In a road grader or scraper, the combination with the scoop, the handles, a shaft mounted therein, and the bearing rollers journaled on said shaft, of the roller scraper fixed transversely to the bottom face of said scoop contiguous to said rollers, substantially as and for the purpose set forth. 4th. In a road grader or scraper, the transverse bar 12 the hinge clips 21 fixed to the outer ends of said bar and formed with the longitudinal socket or sleeve 21¹, in combination with the shoe 23, provided with the bolts 22¹, 22², substantially as and for the purpose set forth.

No. 65,049. Horse Hitch. (Eurenoirc.)



Frank Waith Green, Buffalo, New York, U.S.A., 22nd November, 1899; 6 years. (Filed 25th October, 1899.)

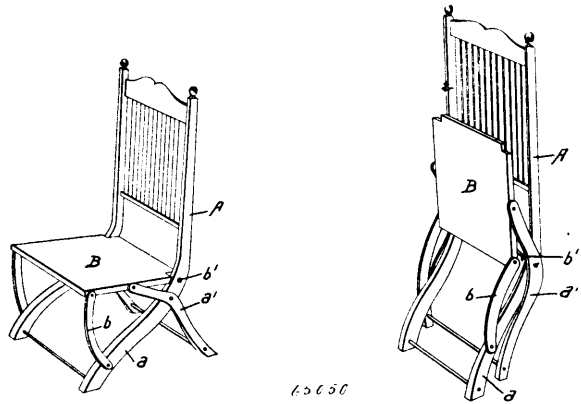
Claim.—A horse hitch consisting of a verticle frame arranged parallel with and adjacent to the curb, an elongated auxiliary frame pivoted to the upper part of the vertical frame, and a counterpoise rigid with the pivoted auxiliary frame, to hold the same in either of its two extreme positions.

No. 65,050. Folding Chair. (Fautuil pliant.)

Amédée Lecourt, Cote St. Paul, Quebec, Canada, 22nd November, 1899; 6 years. (Filed 25th October, 1899.)

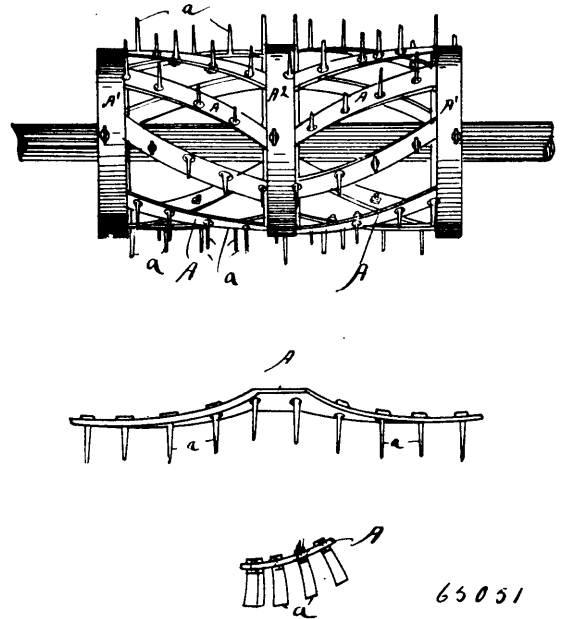
Claim.—A folding chair, comprising a back frame having forwardly extending portions forming the front legs of the chair, levers pivotally connected to said back frame, the lower ends of said

levers forming the rear legs of the chair, a chair seat pivotally connected to the upper ends of said levers, links pivotally connected to



the front legs and to the forward portion of said seat, and a supporting rod secured to said back frame and adapted to support the rear edge of the chair seat, substantially as described.

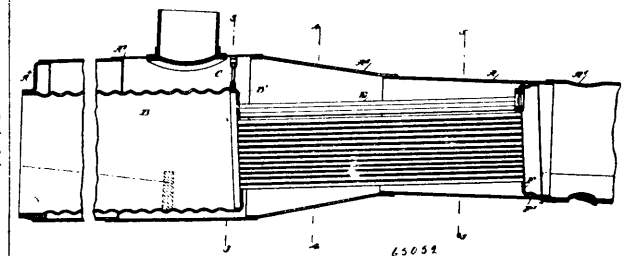
No. 65,051. Threshing Cylinder. (Cylindre à battre.)



Abel K. Porter and Harry S. Porter, both of Quincy, Illinois, U.S.A., 22nd November, 1899; 6 years. (Filed 25th October, 1899.)

Claim.—An open or skeleton cylinder, for threshing machines having the end bands or heads and central band, the blade bars extending from end to end of the cylinder, bent to substantially V-shape with the apex fronting in the direction of the rotation of the cylinder, and curved to conform to the surface contour of the cylinder, and having the threshing blades, substantially as described.

No. 65,052. Locomotive Boiler. (Chaudière de locomotive.)



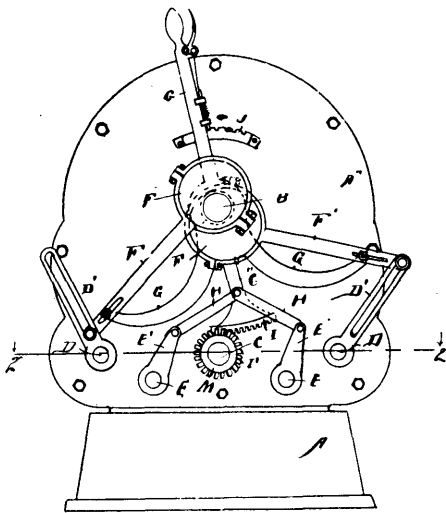
Cornelius Vanderbilt, jr., New York City, New York, U.S.A., 22nd November, 1899; 6 years. (Filed 30th October, 1899.)

Claim.—1st. A locomotive boiler, provided with a fire box made cylindrical in cross section and having its rim or wall corrugated in

a transverse direction, and a fire box section in which the fire box is placed eccentrically, the axis of the fire box section being inclined to the horizontal, to reduce the water space below the fire box, and line of the back end of the fire box, and the forward end of said fire box being submerged to a less extent than the rear end to increase the effective heating surface for a rapid generation of steam, substantially as described. 2nd. A locomotive boiler comprising a shell having a horizontally disposed barrel section, a conical wagon top, a fire box section inclined downwardly and rearwardly from the base of the said conical wagon top section, a fire box hung eccentrically in said fire-box section and with its axis inclined to the horizontal, an inclined flue sheet in the barrel section, and flues extending from the front end of the fire box to the said flue sheet and approximately at right angles thereto, substantially as shown and described. 3rd. A locomotive boiler comprising a horizontal disposed barrel section, a conical wagon top section, a cylindrical fire box section inclined downwardly and rearwardly from the base of said wagon top section, a fire box made cylindrical in cross section and having its wall or rim corrugated in a transverse direction and hung eccentrically in the said fire box section, a flue sheet in the said barrel section, and inclined flues extending upwardly and forwardly from the front of the fire box to the said flue sheet, substantially as shown and described. 4th. In a steam boiler, the shell comprising a horizontally disposed cylindrical barrel, a conical wagon top in axial alignment with the barrel and a cylindrical fire box section in combination with a cylindrical fire box eccentrically disposed in the said fire box section and secured thereto at its open entrance end, and flues extending from the forward closed end of said fire box in an upward and forward direction to connect with the flue sheet in the said barrel, substantially as shown and described. 5th. In a steam boiler, a cylindrical fire box section, and a cylindrical fire box eccentrically mounted in the said fire box section and inclined thereto in a longitudinal direction, substantially as shown and described.

No. 65,053. Reversible Rotary Engine.

(Machine rotatoire.)



65053

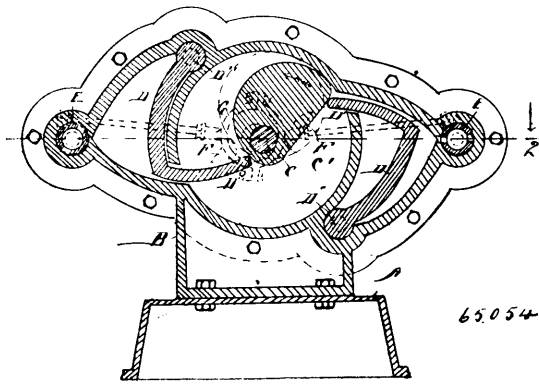
Henry P. White, Kalamazoo, Michigan, U.S.A., 22nd November, 1899; 6 years. (Filed 1st November, 1899.)

Claim.—1st. In a reversible rotary engine, the combination of a cylinder A, with a recess at one side connecting therewith, heads A¹¹, A¹², for the said cylinders each containing suitable bearings for the shafts of the engine, a shaft B, extending through the centre of the main part of the said cylinder and supported in suitable bearings in the heads, a rotating piston B¹, of the eccentric type carries on said shaft B, and contacting at one side with the inner periphery of the main part of the cylinder, a shaft C, extending through the recess of said cylinder outside the circumference of the main cylinder and supported in suitable bearings in the heads, an oscillating piston C¹, supported at its middle on said shaft C, filling the space between the heads of said cylinder and adapted to withdraw within the recess at either side of the centre, the inner forward edges or surfaces thereof being adapted to fit against the rotary piston steam tight, an inlet valve D, opening into the recess back of the oscillating piston at each side, suitable eccentric connections for controlling said valves, corresponding outlet valves to the opposite sides of said piston, a spring connected to put torsion upon the shaft to hold the forward edge of the oscillating piston C¹, in contact with the rotary piston, a lever G, suitably connected to reverse the said valves to reverse the engine, all co-acting together, substantially as described

for the purpose specified. 2nd. In a rotary engine, the combination of a cylinder A, with a recess at one side connecting therewith, heads A¹¹, A¹², for the said cylinders each containing suitable bearings for the shafts of the engine, a shaft B, extending through the main part of said cylinder and supported in suitable bearings for the shafts of the engine, a shaft B¹ extending through the main part of said cylinder and supported in suitable bearings in the heads, a rotating piston B¹, of the eccentric type carried on said shaft B, and contacting at one side with the inner periphery of the main part of the cylinder, a shaft C, extending through the recess of said cylinder outside the circumference of the main cylinder and supported in suitable bearings in the heads, an oscillating piston C¹, on said shaft C, filling the space between the heads of said cylinder and adapted to withdraw within the recess, the inner edges or surfaces thereof being adapted to fit against the rotary piston steam tight, an inlet valve D, opening into the recess back of the oscillating piston, suitable eccentric connections for controlling said valve, corresponding outlet valves to the opposite side of said piston, a spring connected to put torsion upon the shaft C, to hold the forward edge of the oscillating piston C¹, in contact with the rotary piston, all co-acting together substantially as described for the purpose specified. 3rd. In a rotary engine, the combination of a cylinder having a main circular portion with a recess to one side, suitable heads for the cylinder containing apertures for the shafts of the engine, a rotary piston of the eccentric type supported on a shaft at the centre of the circular portion of the cylinder, an oscillating piston supported on a shaft located outside of the circumference of the main portion and of sufficient length to reach beyond the center of rotation of said rotary piston and adapted to move back into the recess to permit the passage of the rotary piston, an inlet port or valve leading to the recess back of the oscillating piston and an outlet port to the opposite side, all co-acting together as specified. 4th. In a rotary engine, the combination of a cylinder having a main circular portion with a recess to one side, a rotary piston of the eccentric type pivoted to rotate at the center of the circular portion of the cylinder, an oscillating piston pivoted at a point outside the circumference of the main circular portion of the cylinder and of sufficient length to reach beyond the centre of rotation of said rotary piston with its inner surface or edge adapted to contact with the rotary piston, an inlet port or valve leading to the recess back of the oscillating piston, and an outlet port to the opposite side of the pistons, co-acting together as specified. 5th. In a rotary engine, the combination of a cylinder having a main circular portion with a recess to one side, a rotary piston of the eccentric type pivoted to rotate at the center of the circular portion of the cylinder, an oscillating piston pivoted at a point outside the circumference of the main circular portion of the cylinder and of sufficient length to reach beyond the center of rotation of said rotary piston, with its inner surface or edge adapted to contact with the rotary piston and combined to expose as a movable piston surface the entire inner surface of the engine steam chamber or cylinder, an inlet port or valve leading to the recess back of the oscillating piston, and an outlet port to the opposite side of the pistons, co-acting together as specified. 6th. In a rotary engine, the combination of a suitable cylinder, a rotary piston of the eccentric type pivoted to revolve within the same, an oscillating piston of sufficient length to reach beyond the centre of rotation of said rotary piston to co-act with said rotary piston and deliver its force thereto, and suitable inlet and outlet ports or valves for the purpose specified. 7th. In a rotary engine, the combination of a cylinder having a main circular portion with a recess to one side, a rotary piston of the eccentric type pivoted to rotate at the centre of the circular portion of the cylinder, an oscillating piston pivoted at its centre outside the circumference of the main portion of the cylinder and of sufficient length to reach beyond the center of rotation of said rotary piston with its inner and forward surface or edge adapted to contact with the rotary piston, an inlet port or valve to each side of the central pivot of the oscillating piston and an outlet port to each side, suitable means of controlling the valve to reverse the engine, co-acting as specified. 8th. In a rotary engine, the combination of a suitable cylinder, a rotary piston of the eccentric type pivoted to revolve within the same, an oscillating piston or pistons with portions extending in opposite directions and of sufficient length to reach beyond the center of rotation of said rotary piston pivoted to co-act with said rotary piston to deliver its force thereto, and inlet valves to reverse the position of the oscillating piston or pistons, outlet ports at the opposite sides and means of controlling said valves to reverse the engine for the purpose specified. 9th. In a rotary engine, the combination of a suitable cylinder, a rotary piston pivoted to revolve within the same, an oscillating piston of sufficient length to reach beyond the center of rotation of said rotary piston pivoted to co-act with said rotary piston and deliver its force thereto, and suitable inlet and outlet ports or valves for the purpose specified. 10th. In a steam engine, the combination of a suitable steam cylinder of the rotary type having a recess at one side, suitable heads for said cylinder, a rotary piston of the eccentric type supported within said cylinder, an oscillating piston pivoted within the recess of said cylinder and of sufficient length to extend beyond the center of rotation of the rotary cylinder and adapted to contact therewith, means of admitting steam back of said oscillating piston, and a suitable exhaust for the purpose specified. 11th. In a steam engine, the combination of a suitable steam cylinder, a rotary piston of the eccentric type therein, an oscillating piston pivoted

one side of the rotary piston with its outer edge adapted to contact with the rotary piston in a line beyond its center of rotation.

No. 65,054. Rotary Engine. (*Machine rotatoire.*)



Henry P. White, Kalamazoo, Michigan, U.S.A., 22nd November, 1899; 6 years. (Filed 1st November, 1899.)

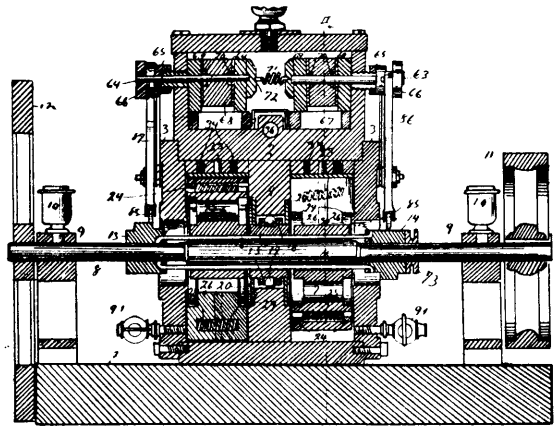
Claim.—1st. In a rotary steam engine the combination, of the cylinder B, containing a main central circular portion with recesses to each side opening by a narrow transverse slot into the central circular portion, suitable heads B¹, for said cylinder, a rotary piston of the eccentric type pivoted to revolve in the centre of the main circular portion, oscillating pistons D, carried on shafts D¹, within the chambers to each side and of sufficient length to reach beyond the centre of rotation of said rotary piston, each oscillating piston having a curved portion D², projecting through the slot of its respective chamber to the rotary piston within and adapted to deliver power thereto, inlet valves opening into said recesses back of the oscillating pistons, and outlet ports F, in the heads of the cylinder with suitable means of controlling the same, and suitable connections from moving parts of the engine to the inlet valves, all co-acting together and substantially described for the purpose specified. 2nd. In a rotary engine the combination of the cylinder B, containing the main central circular portion with a recess to one side opening by a narrow transverse slot into the central circular portion, suitable heads B¹, for said cylinder, a rotary piston C¹, of the eccentric type pivoted to revolve in the main circular portion of the cylinder, an oscillating piston D, carried on a shaft D¹, and of sufficient length to reach beyond the centre of rotation of said rotary piston, within the recess having a curved portion D², projecting through the slot of the recess to the rotary piston within, an inlet valve opening into the recess back of the oscillating piston, and an exhaust port to the opposite side of the rotary piston, and suitable means of controlling the inlet and outlet ports, for the purpose specified. 3rd. In a rotary engine, the combination of the cylinder B, containing a main central circular portion with recesses to the sides thereof opening into the same, suitable heads for the cylinder, a rotary piston of the eccentric type pivoted to revolve within the main circular portion, oscillating pistons of sufficient length to reach beyond the centre of rotation of said rotary piston in the recesses to the sides adapted to actuate the rotary piston, inlet valves opening into the recesses back of the oscillating pistons, corresponding exhaust ports, co-acting for the purpose specified. 4th. In a rotary engine, the combination of a cylinder with a main central circular portion having a recess to one side, suitable heads for the cylinder, a rotary piston of the eccentric type with its rear side flattened or conformed to receive and distribute the force as desired from an oscillating piston in addition to direct steam pressure, an oscillating piston pivoted within the recess and conformed to contact with the rotary piston and extend beyond its centre of rotation to deliver its force thereto, an inlet valve opening into the recess back of the oscillating piston to deliver the force of steam or other fluid directly against the oscillating piston which delivers its force to the rotary piston, for the purpose specified.

No. 65,055. Rotary Engine. (*Machine rotatoire.*)

John Bodam, McFall, Missouri, U.S.A., 22nd November, 1899; 6 years. (Filed 2nd November, 1899.)

Claim.—1st. A rotary engine provided with a piston chamber, having an abutment with sloping approaches and ports at opposite sides of its apex, a steam chest provided with supply and exhaust ports, a slide valve therein provided with a passage communicating with the supply port and with cavities connecting the other part with the exhaust port of the steam chest, a shaft extending through said piston chamber, a rotary piston thereon provided with a radially extending wing, a block upon said valve provided with an opening always registering with the supply port of the valve, a balanced valve arranged to oscillate in said opening and by contact with its opposite sides cut off the passage of steam therethrough, means to operate said slide valve, a cam collar upon the engine shaft, and instrumentalities actuated by said cam collar for oscillat-

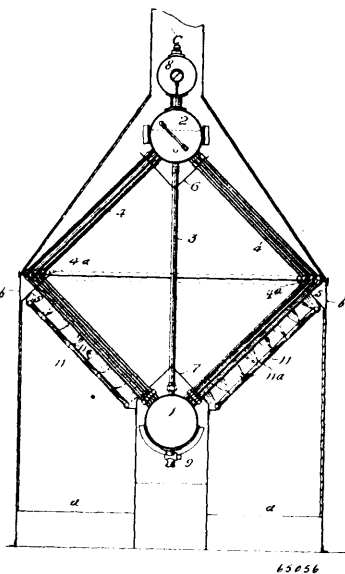
ing said balanced valve, substantially as described. 2nd. A rotary engine provided with two piston chambers, each having an abut-



ment with sloping approaches and ports at opposite sides of its apex, a steam chest provided with supply and exhaust ports, slide valves therein provided with passages communicating with certain of said ports and with cavities connecting the other ports with the exhaust ports of the engine, a shaft extending through said chambers, rotary pistons thereon and provided with radially extending wings set at an angle to each other, a slide plate connecting said valves and provided with openings, a lever carrying shaft journaled in the steam chest and provided with a cog segment engaging the openings of said plate, and means to secure said lever and connecting slide plate at their required point of adjustment, substantially as described. 3rd. A rotary engine provided with two piston chambers, each provided with an abutment having sloping approaches and ports at opposite sides of its apex, a steam chest provided with supply and exhaust ports, slide valves therein provided with passages communicating with certain of said ports and with cavities connecting the other ports with the exhaust port of the engine, a shaft extending through said chambers, rotary pistons thereon and provided with radially projecting wings set at an angle to each other, a slide plate connecting said valves and provided with openings, a lever carrying shaft journaled in the steam chest and provided with a cog segment engaging the openings of said plate, a sector, and a spring actuated dog carried by the lever and adapted to engage said sector and hold the slide valves in one position or the other, substantially as described. 4th. A rotary engine provided with two piston chambers, each provided with an abutment having sloping approaches and ports at opposite sides of its apex, a steam chest provided with supply and exhaust ports, slide valves therein provided with passages communicating with certain of said ports and with cavities connecting the other ports with the exhaust port of the engine, a shaft extending through said chambers, rotary pistons thereon and provided with radially projecting wings set at an angle to each other, blocks mounted in the steam chest and upon the slide valves and provided with openings communicating with the passages of said valves, and balanced valves located in said openings and adapted to permit or prevent steam passing there through, substantially as described. 5th. A rotary engine provided with two piston chambers each provided with an abutment having sloping approaches and ports at opposite sides of its apex, a steam chest provided with supply and exhaust ports, slide valves therein provided with passages communicating with certain of said ports and with cavities connecting the other ports with the exhaust port of the engine, a shaft extending through said chambers, rotary pistons thereon and provided with radially projecting wings set at an angle to each other, blocks mounted in the steam chest and upon the slide valves and provided with openings communicating with the passages of said valves, balanced valves located in said openings, collars provided with cam surfaces mounted upon the shaft, and instrumentalities operated by said cams to oscillate said balanced valves, substantially as and for the purpose set forth. 6th. A rotary engine provided with two piston chambers, each provided with an abutment having sloping approaches and ports at opposite sides of its apex, a steam chest provided with supply and exhaust ports, slide valves therein provided with passages communicating with certain of said ports and with cavities connecting the other ports with the exhaust ports of the engine, a shaft extending through said chambers, rotary pistons thereon and provided with radially projecting wings set at an angle to each other, blocks mounted in the steam chest and upon the slide valves and provided with openings communicating with the passages of said valves, balanced valves located in said openings, collars provided with cam surfaces extending about one-quarter way around the collar, and a pair of cam surfaces extending about half way round the collar, instrumentalities connected to said balanced valves, and means to adjust said collars and thereby

cause the corresponding cam surfaces to actuate said valves through said instrumentalities, substantially as described. 7th. A rotary engine, provided with two piston chambers, each provided with an abutment having sloping approaches and ports at opposite sides of its apex, a steam chest provided with supply and exhaust ports, slide valves therein provided with passages communicating with certain of said ports and with cavities connecting the other ports with the exhaust port of the engine, a shaft extending through said chambers, rotary pistons thereon and provided with radially projecting wings set at an angle to each other, blocks mounted in the steam chest and upon the slide valves and provided with openings communicating with the passages of said valves, shafts journaled in said blocks, a spring forcing said blocks apart, shafts journaled in the steam chest and said blocks, balanced valves mounted thereon in the openings of said blocks, spring depressed crank arms upon said shafts, slotted links suitably guided pivoted to said arms and provided with rollers at their lower ends, cam collars rotating with but adapted to slide upon the shaft, each collar being provided with two one-quarter and two one-half cams, one quarter and one half cam being arranged diametrically opposite each other, tie rods connecting said cam collars, a lever for shifting them longitudinally on the shaft so as to cause the desired cams to engage the rollers of said links, a sector, and a spring actuated dog carried by said lever and engaging said sector, substantially as described. 8th. In a rotary engine, a circular piston provided with a radial notch, a T shaped wing seated therein, consisting of a pair of sections 26, lap jointed together and provided with opposing cavities 27, and with pins 29, projecting inward at opposite sides of the stem of the wing, springs 28, seated in said opposing cavities and exerting outward pressure upon said sections, and springs 30, secured to the pistons and having their opposite ends engaging said pins and pressing outward upon the wing, substantially as described.

No. 65,056. Steam Generator. (*Générateur à vapeur.*)

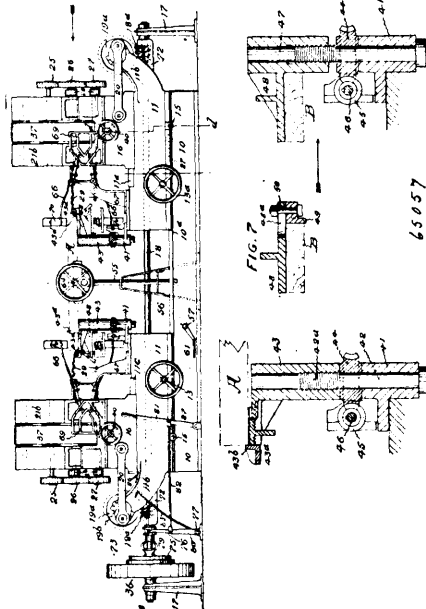


Frank Brockway Turner, Portland, Oregon, U.S.A., 22nd November, 1899; 6 years. (Filed 4th November, 1899.)

Claim.—1st. In a steam generator of the class described, a mud-drum 1, arranged along the centre of the furnace, a drum 2, arranged parallel to and above the drum 1, in combination with straight pipes 3, communicating between the said drums, of pipes 4, projecting upwards and outwards from the drum 1, and converging inwards and communicating with the drum 2, baffles 5, 6 and 7, for protecting the elbows in the pipes 4 and the opposite ends of the pipes 3 and 4 where connected with the said drums, and a superheating drum 8 connected with and arranged above the drum 2, as specified. 2nd. In a steam generator having drums 1 and 2 placed parallel with each other and at a suitable distance apart, a series of straight pipes 3, communicating between the drums, in combination with oppositely projected pipes 4, from each upper side of the mud-drum and from each lower side of the drum 2, said pipes meeting in right angles provided with elbows, a superheating drum 8 placed above the drum 2 and drain cocks 9, at the lowest points in the drum 1, as and for the purpose set forth. 3rd. A steam generator having drums 1 and 2 parallel to each other, down pipes 3, connecting said drums together at intervals, in combination with a series of pipes 4, communicating along the opposite side of the said drums and forming the opposite sides of a rectangle, such pipes being protected by baffles from the heat at their elbows, and at their connections with the drums, as specified.

No. 65,057. Dowel Door Boring Machine.

(*Machine à forer pour portes à goujons.*)



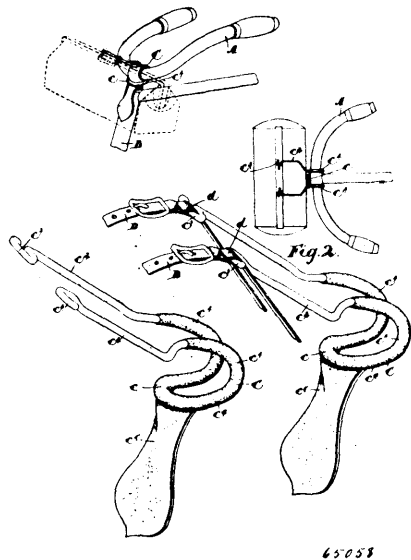
Albert Edwin Woods, New Westminster, British Columbia, Canada, 22nd November, 1899; 6 years. (Filed 30th January, 1899.)

Claim.—1st. In a machine for the purposes set forth, having a bed 10, and adjustable frames 11, mounted thereon, with oppositely projecting ears and crank shafts 19, mounted in suitable bearings on the said ears, in combination with reciprocating frames, mounted on slide-ways on the adjustable frames, connecting rods 20, connecting the cranks of the said shafts with reciprocating frames, and means for imparting an intermittent movement to the shafts 19, whereby the said frames will be reciprocated, as specified. 2nd. In a machine of the class described, having a bed 10, and adjustable frames 11, mounted thereon, and reciprocating frames 16, mounted on the frames 11, carrying a plurality of drills arranged in sets on different horizontal planes, in combination with assembling frames, 43, for supporting the members of a door body on the plane of the upper drills, and frames for supporting the stiles on a plane with the lower drills, and means for automatically clamping the assembled members, for rotating the drills, and for moving the frames forward and back, at intervals, as specified. 3rd. In combination with reciprocating frames 16, carrying sets of drills at different horizontal planes, oppositely faced support bed plate frames 43, and 48, for holding the door rails and stiles, respectively, of means for simultaneously moving the frames, 16, forward and back at intervals, and while being moved forward for automatically clamping the several members of a door, as specified. 4th. In a dowel door boring machine, having a bed and adjustable frames 11, mounted on the same and reciprocating frames 16, slidably fixed on the frames 11, oppositely projecting ears 11^a, integral with the frames 11, shafts 19, having cranks suitably mounted on said ears in combination with a shaft 18, traversing the bed at right angles to the crank shafts 19, worm gears slidably mounted on the opposite ends of said shaft 18, and worm wheels secured on the crank shafts 19, meshing with the said worms and connections from the crank shafts to the reciprocating frames 16, as and for the purpose specified. 5th. In a machine for the purposes set forth, having a bed 10, adjustable frames 11, mounted thereon, and reciprocating frames 16 on the frames 11, in combination with drills mounted in sets on different horizontal planes, movable with the frames 16, of bed plate frames, 43, and 48, arranged between the said drills and positioned so that the door members will be held thereon and thereunder, respectively in direct lines with the planes of the drills, and means for automatically clamping the doors from above and below by the movement of the frames 16, as set forth. 6th. In a machine for the purposes described, having a frame 10, adjustable frames 11, and reciprocating frames 16, carrying drill carriages having drills in sets on different planes, in combination with vertically movable bed plate frames 43^a and 48, supported by the inner sides of the frames 11, means for lowering the frames 43^a and raising the frames 48 simultaneously, and for clamping the members of a door from above and below by the mutual reciprocation of the frames 16, as specified and for the purposes set forth. 7th. In support frames 43^a and 48 for assembling the doors, in combination with adjustable frames 11, arranged on a suitable bed, pedestal brackets 41 secured to the inner sides of said frames 11, vertically placed spindles 42 in such brackets, screw threads on said spindles and nuts 43 on the same, which are integral with door assembling frames 43^a, and means for turning said spindles 42 having their screws whereby the frames

will be raised or lowered, as specified. 8th. A mechanism for raising and depressing door assembling bed plate frames 43^a and 48 simultaneously, consisting of pedestal brackets 41 secured on suitable supports, spindles 42 and 47 having right and left hand screws, respectively, nuts on said screws integral with the assembling frames, shafts 46 arranged in suitable bearings at right angles to and in proximity with said spindles, worm gear on said shafts and worm wheels fixed to the spindles 42 and 47, whereby by the turning of the shaft 46, the frames 43^a will be elevated or depressed and the frames 48 will be moved in the opposite direction simultaneously, as set forth. 9th. Stop mechanism attached to the outer sides of support frames 43^a over frames 48, which consist of rods or way shafts 51 arranged in brackets 43^b, lugs 52^a and 52^b, on brackets 52 secured to the forward ends of said shafts, depending bolts 53 pivoted to the lugs 52^b, and passing through apertures in the said frames 48, and handles 54 affixed to the rear ends of said shafts by which the shafts are turned, whereby the lugs 32^a will be thrust over the plane of the frames 43^a, and the bolts 53 will be projected below the under plane of the frames 48, by the downward movement of the handles 54^a, and will be withdrawn by an upward movement of the same. 10th. In a machine for simultaneously boring rails and stiles of doors, having a bed, adjustable frames 11 arranged on opposite sides thereof, and reciprocating frames 16 mounted on said frames 11, in combination with suitable supports for assembling door bodies, and frames for supporting the stiles, spring levers 66 arranged in sets pivoted on brackets 67 secured on the frame 11, rollers 69 on the ends of the levers, oppositely deflected guide ways in bracket 69 receiving said rollers, and clamping bars 70 secured on the resilient ends of said levers, and means for moving the frames 16 towards each other simultaneously, whereby the upper bars 70 will press downwards and the lower ones will press upwards, as and for the purposes set forth. 11th. In combination with suitable frames 16 carrying drill carriages mounted on suitable slide-ways, bed plate frames 43^a for supporting the assembled body of a door, means for clamping them together, consisting of a clamp bar 54 having a fixed and a movable clamp on its opposite ends, the said clamp being mounted on suitable supports, and means for raising and lowering said clamp to the plane of the assembled portions of the door body, as specified. 12th. In a dowel door boring machine, having a bed 10, adjustable frames 11 mounted thereon, and drill mounted on sets on different planes, in reciprocating frames on said frames 11, in combination with bed plate frames 43^a for assembling the rails and panels of a door, means for adjusting the said frames 43^a to bring the centres of varying thicknesses of said portions of said door in proper alignment with the moving drills, as specified. 13th. In a machine for the purposes set forth, having 43^a on which the members of a door body are assembled, in combination with a clamp arranged to move vertically on suitable supports and means for forcing the same upwards into the plane of the door members and a fixed and a movable clamp on opposite ends thereof for embracing the said members, as specified. 14th. In a dowel door boring machine, having a fixed bed 10, adjustable frames 11, mounted thereof, and reciprocating frames 16, arranged on the frames 11, in combination with rests of spindles carrying drills on different planes, having means for imparting a uniform speed thereto, of bed plate frames for arranging the members of a door body on a plane with upper drills, and for also arranging the stiles thereof on a plane with the lower drills but in an inverted position in respect to the assembled portions of the door, and means for securing said respective members and for moving the drills forward, as specified, and for the purposes set forth. 15th. In a machine, as specified, having a bed, adjustable frames 11, mounted thereon, and reciprocating frame 16, arranged to simultaneously move on the frame 11, and drill carriages adjustably mounted on the frames 16, as shown, in combination with spindle mounted in sets carrying drills on different planes, in said drill carriages, of bed plate frames 43^a, and 48, to receive the face, side of door members, and means for securing the same and of imparting a uniform speed to the drills, and for mutually reciprocating the said carriages, as set forth, and for the purposes described. 16th. In combination with a machine for dowel boring the respective members of doors, having a bed 10, and adjustable frames 11, mounted thereon, with means for moving same laterally along the bed, ears or lugs oppositely projecting from and integral with the frames 11, shafts 19 having cranks at their opposite ends suitable mounted in said lugs, connecting rods secured to said cranks and to reciprocating frames 16, having drill carriages thereon, with drills on different planes, means for arranging the members of the doors in the tracks and on the different planes of the drills and means for imparting and intermitting movement to the shaft 19, whereby the drills will be pushed forward and withdrawn, as specified. 17th. In combination with adjustable frames 11, and reciprocating frames 16, lugs 11^b, integral with the frames 11, shafts 10 having cranks on their opposite ends, connections between the cranks and the reciprocating frames, a shaft 18, arranged in suitable bearings at right angles to the shafts 19, worms 18^a slidably mounted on the opposite ends of the said shafts 18, meshing with worm wheels 19¹¹, fixed on the shaft 19, and means for imparting movement to the shaft 18, and for automatically stopping the same at the return of each stroke of the said reciprocating frames, as specified. 18th. In a dowel door boring machine, having mutual reciprocating frames 16, mounted on suitable slide ways, the same carrying swiftly turning drills or bits in sets on different planes, means for moving the said frames forward and back remittently, which consists of shafts 19 having

cranks mounted in suitable bearings on opposite sides of the said frames, said cranks connecting with the frames, a shaft turning at right angles thereto, having worms secured thereon, meshing with worm wheels secured on the shaft 19, and a clutch mechanism secured on the shafts 18 for gripping and releasing a wheel 36, turning on said shaft, as specified. 19th. In a machine for the purpose described, having a bed 10, adjustable frames mounted thereon, and reciprocating frames 16, caused to move upon the adjustable frames, shafts 19, having cranks on their opposite ends suitably mounted on the opposite sides of the frames 16, and connections from the said cranks to the frames 16, a shaft 18, placed at right angles to the shafts 19, and means for communicating movement from the said shafts 18 to the crank shafts 19, in combination with a clutch secured on the shaft 18, and means for tripping the same automatically at each return stroke of the frames 16, substantially as specified. 20th. In a machine for the purposes described, having a bed 10, adjustable frames mounted on said bed, and reciprocating frames 16, carrying drill carriages, having drills mounted on different planes, and means for moving the said frames carrying the drill carriages forward, and of automatically stopping the same at the return of each stroke, consisting of a shaft 18, arranged to turn at right angles to and beneath the reciprocating frames, said shaft having a loose pulley mounted thereon, a friction clutch on said shaft arranged to connect with an integral cone, and a sleeve slidably fixed on the shaft 18, a rock shaft 77, suitably mounted beneath the shaft 18, having a lever fulcrumed thereon, said lever connecting with the said sleeve, and a resilient lever 83, fulcrumed on said shaft 77, and deflected in the path of the fixed bracket 86, secured to one of the moving frames 16, as specified. 21st. In a machine for the purposes described having a vertically reciprocating frame mounted on the bed, a tripping gear consisting of a clutch mounted on a shaft, in combination with a lever fulcrumed to the shaft 77, operating said clutch, a lever 83, fulcrumed to said shaft 77, and an upwardly curved bracket 86, secured to a frame arranged to move horizontally below the normal plane of the upwardly projecting end of the lever 83, as specified. 22nd. In a machine for the purposes described, having a bed 10, adjustable frames mounted on said bed, and reciprocating frames 16, carrying drill carriages, having drills mounted on different planes, means for supporting the work in different planes, and means for moving the said frames carrying the drill carriages forward, and of automatically stopping the same at the return of each stroke, consisting of a shaft 18, arranged to turn at right angles to and beneath the reciprocating frames, said shaft having a loose pulley mounted thereon, a friction clutch on said shaft arranged to connect with an integral cone, and a sleeve slidably fixed on the shaft 18, a rock shaft 77, suitably mounted beneath the shaft 18, having a lever fulcrumed thereon, said lever connecting with said sleeve, and a resilient lever 83, fulcrumed on said shaft 77, and deflected in the path of a fixed bracket 86, secured to one of the moving frames 16, as specified. 23rd. In combination with a machine of the class described, having a bed frame 10, and adjustable frames 11, and reciprocating frames 16, mounted on opposite sides of door assembling frames 43^a, and 48, aligning rails 43^b, slidably mounted on opposite sides of the frames 43^a, compound levers fulcrumed on the frames 43^a, and on pedestals or brackets 67, on the frames 11, inclined grooves in brackets 69, on the frames 16, connecting with and acting as guide ways for the outer ends of the levers fulcrumed on the brackets 67, and means for moving the frames 16 forward, whereby the aligning rails will be moved forward during part of the travel of the frames 16, substantially as specified. 23rd. In a machine for simultaneously boring rails and stiles of doors having a bed, adjustable frames 11, arranged on opposite sides thereof, and reciprocating frames 16, mounted on said frames 11, in combination with suitable bed plates or frames 43^a, for assembling door bodies, and like frames for supporting the stiles, spring levers 66, arranged in sets to work vertically from above and below pivoted on brackets 67, secured on the frames 11, rollers 68, on the outer ends of the levers, oppositely deflected vertical guideways, in brackets 69, receiving said rollers, and clamping bars 70, secured on the resilient ends of said levers, in combination with laterally moving aligning rails 43^b, slidably mounted on the opposite sides of the supports 43^a, and compound levers communicating between the same and the lower levers 66, and means for moving the frames 16, towards each other simultaneously, whereby the upper bar 70, will press downwards and the lower one will press upwards, and the aligning rails 43^b, will be thrust forward, as and for the purposes set forth. 25th. A mechanism for simultaneously clamping the assembled members of a door body from above and its stiles from below, and for aligning the door body on opposite sides, bed frames 43^a, and 48, on which and under which the door body and the stiles rest, respectively, clamp bars 70, arranged above and below the door members, moving frames 69, arranged on opposite sides of the frames 43^a, and 48, fixed brackets 67, arranged between the moving frames 69, and the frames 43^a, and 48, levers 66, fulcrumed on said brackets 67, and communicating between the bars 70, and the moving frames 69, oppositely deflected guideways in the frames 69, from the ends of the said levers 66, to travel the lower channels of or the guideways engaging the lower levers 66, are of more acute angles than the upper ones, in combination with aligning rails 43^b, slidably fixed on the opposite sides of the frames 43^a, and compound levers communicating between the lower levers 66, and such aligning rails, all substantially as specified.

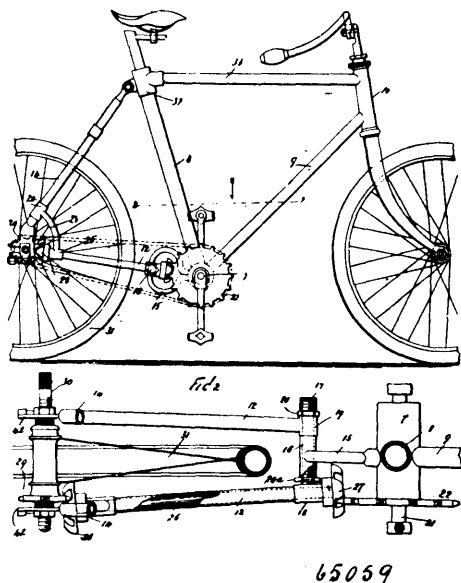
No. 65,058. Bicycle Bracket. (*Console pour bicyclette.*)



Thomas McPherson Buley and William Wellington Wagg, both of Toronto, Ontario, Canada, 22nd November, 1899; 6 years. (Filed 12th May, 1899.)

Claim.—1st. A carrying bracket for bicycles comprising a central spring loop adapted to grip the handle head, vertical spring loop portions adapted to grip the handle bar on each side of the head and spring arms extending forward from said vertical loops having reversely turned hooked ends, said arms being adapted to be pressed toward each other to engage the package and to spring apart to grip the same substantially as described. 2nd. A carrying bracket having loop portions engaging the bicycle and carrying arms, a covering extending around said loop portion and an apron forming a continuation of said covering, said apron depending from the loop portions of the carrier in front of the bicycle head and to the rear of the package supporting ends of said arms, as and for the purpose specified.

No. 65,059. Bicycle. (*Bicycle.*)



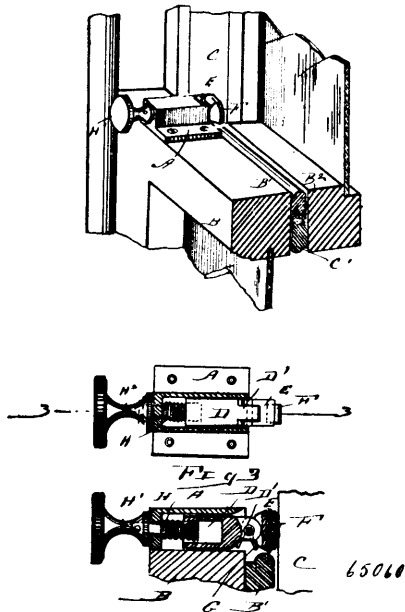
Robert H. Hemmencier, New York City, New York, U.S.A., 22nd November, 1899; 6 years. (Filed 15th October, 1898.)

Claim.—1st. A bicycle, the frame of which is provided with the usual hub through which the pedal shaft passes, and the usual lower horizontal fork in which the drive wheel is mounted, the front end of said fork being connected with the tubular hub by a circular or ring shaped attachment, and one of the sides of said fork being provided with a shaft, the forward end of which is inclined inwardly

toward said attachment, the ends of said shaft being each provided with a face gear, and sprocket wheels mounted on the pedal shaft and on the hub of the drive wheel, and adapted to operate in connection with said face gears, and sprocket wheels being in a vertical plane parallel with the longitudinal central plane of the vehicle, substantially as shown and described. 2nd. A bicycle constructed as herein described, and provided with the usual pedal shaft, and the usual drive wheel, and sprocket wheels mounted thereon in a vertical plane parallel with the longitudinal centre of the vehicle, the lower rear fork of the frame in which the drive wheel is mounted being connected with the tubular hub through which the pedal shaft passes by a circular or ring shaped attachment, and the front end of one side of said fork being tubular in form and inclined inwardly toward said attachment, and a shaft mounted in said side of said frame and provided at its front and rear ends with face gears which operate in connection with said sprocket wheels, substantially as shown and described. 3rd. A bicycle constructed as herein described, and provided with the usual pedal shaft and the usual drive wheel, sprocket wheels mounted on the pedal shaft and on the hub of the drive wheel, said sprocket wheels being in a vertical plane parallel with the longitudinal central plane of the frame of the vehicle, and a shaft mounted between said sprocket wheels, the front end of which is inclined inwardly toward the longitudinal centre of the vehicle, and face gears connected with the front and rear ends of said shaft, and operating in connection with said sprocket wheels, substantially as shown and described. 4th. A bicycle frame provided with the usual lower horizontal fork, and the usual tubular hub in which the pedal shaft is mounted, the forward end of said fork and the said tubular hub being connected by a longitudinal, open, circular, or ring shaped attachment, substantially as shown and described. 5th. A bicycle frame provided with the usual lower horizontal fork, and the usual tubular hub in which the pedal shaft is mounted, the forward end of said fork and the said tubular hub being connected by a longitudinal, open, circular, or ring shaped attachment, and the forward end of said fork being laterally adjustable with reference to said attachment, substantially as shown and described. 6th. A bicycle frame provided with the usual lower horizontal fork, and the usual tubular hub in which the pedal shaft is mounted, the forward end of said fork and the said tubular hub being connected by a longitudinal, open, circular, or ring shaped attachment, and the forward end of said fork being laterally adjustable with reference to said attachment, one side of said fork being provided with a longitudinal shaft having face gears at each end, and corresponding sprocket wheels mounted on the hub of the drive wheel and on the pedal shaft, substantially as shown and described. 7th. A bicycle frame provided with the usual lower horizontal fork, and the usual tubular hub in which the pedal shaft is mounted, the forward end of said fork and the said tubular hub being connected by a longitudinal, open, circular, or ring shaped attachment, and the forward end of said fork being laterally adjustable with reference to said attachment, one side of said fork being provided with a longitudinal shaft having face gears at each end, and corresponding sprocket wheels mounted on the hub of the drive wheel and on the pedal shaft, said sprocket wheels being in a vertical plane parallel with the longitudinal centre of the vehicle, substantially as shown and described. 8th. In a bicycle frame provided with a tubular hub 7 through which the pedal shaft passes, and the usual lower horizontal rear fork in which the drive wheel is mounted, said fork being composed of separate sides connected at their forward ends by a bolt, and said hub and fork being connected with a tubular coupling 16, through which said bolt passes, substantially as shown and described. 9th. A bicycle frame provided with a tubular hub 7 through which the pedal shaft passes, and the usual lower horizontal rear fork in which the drive wheel is mounted, said fork being composed of separate sides connected at their forward ends by a bolt, and said hub and fork being connected by an open or ring shaped attachment 15, provided with a tubular coupling 16, through which said bolt passes, and in which said bolt is adjustable, substantially as shown and described. 10th. A bicycle provided with the usual sprocket wheels mounted on the hub of the drive wheel and on the pedal shaft, a shaft extending between said sprocket wheels and provided at each end with face gears, said face gears being provided with radial teeth which are wider at their outer than at their inner ends, substantially as shown and described. 11th. A bicycle provided with the usual sprocket wheels mounted on the hub of the drive wheel and on the pedal shaft, a shaft extending between said sprocket wheels and provided at each end with face gears, said face gears being provided with radial teeth which are wider at their outer than at their inner ends, and the outer edges and corners of which are bevelled, substantially as shown and described. 12th. A bicycle provided with the usual drive wheel and pedal shaft, each of which is provided with a sprocket wheel, a shaft supported between said sprocket wheels and provided at each end with a face gear, said face gears being provided with radial teeth on one side which are wider at their outer than at their inner ends, and the edges and outer corners of which are bevelled, substantially as shown and described. 13th. A bicycle provided with the usual sprocket wheels on the pedal shaft and the drive wheel, said sprocket wheels being mounted in longitudinal alignment with the frame of the vehicle, and a shaft supported between said sprocket wheels and provided at each end with a face gear in connection with which said sprocket wheels operate, whereby a chainless gear

is formed and whereby a drive chain may be employed in connection with said chainless gear, substantially as shown and described.

No. 65,060. Sash Fastener. (*Attache de croisee.*)

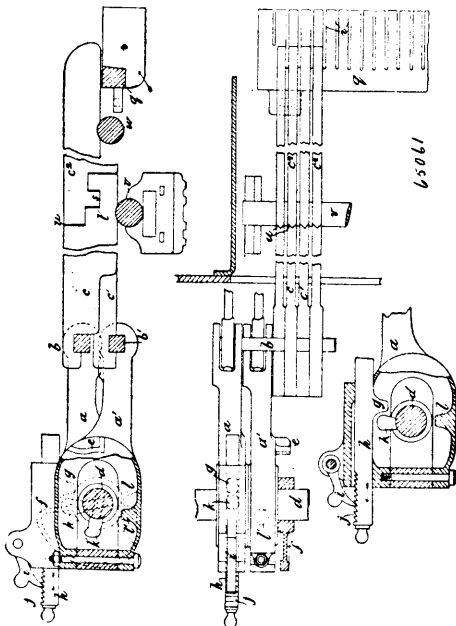


George Feltham, Waycross, Georgia, U.S.A., 22nd November, 1899; 6 years, (Filed 12th July, 1899.)

Claim.—1st. A window sash fastener, comprising a casing adapted to be secured to the lower sash, a laterally movable bar in the said casing, a pivoted head on the outer end of the said bar, and adapted to engage the upper sash, and a spring for holding the said head in position when not in use, substantially as shown and described. 2nd. A window sash fastener, comprising a casing adapted to be secured to the lower sash, a screw rod mounted to turn in the said casing, a bar fitted to slide laterally in the said casing and engaged by the cross rod, and a spring pressed head pivoted on the said bar and formed with an elastic clip, substantially as shown and described.

No. 65,061. Stoker Mechanism.

(*Appareil mecanique à chauffer.*)

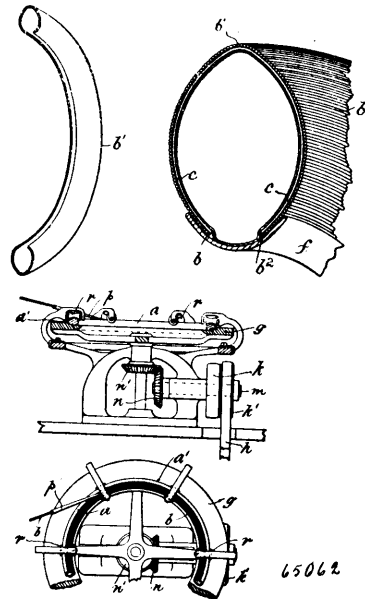


John Vicars, Thomas Vicars, and John Vicars, jr., all of Liverpool, Lancaster, England, 22nd November, 1899; 6 years. (Filed 2nd November, 1898.)

Claim.—1st. In mechanical stoking apparatus, the combination with the yokes or keys for operating the movable fire bars, of adjustable teeth or projections, carried by such yokes, through which

forward travel is imparted to the fire bars, means for adjusting said teeth, and a driving shaft carrying means to engage said teeth or projections to drive forward the fire bars and means for returning, said fire bars all substantially as shown and described. 2nd. In mechanical stoking apparatus, the combination with the yokes or keys for operating the movable fire bars, of adjustable teeth or projections carried by such yokes, through which forward travel is imparted to the fire bars, sliding bars, ratchets thereon and pawls for adjusting said teeth or projections, and a driving shaft carrying means to engage said teeth or projections to drive forward the fire bars and means for returning said fire bars, all substantially as shown and described. 3rd. In mechanical stoking apparatus, the combination with cam and stop devices for temporarily limiting the back travel of one set of fire bars, of adjustable bars whereby a varied forward travel may be given to the whole of the fire bars, substantially as described. 4th. In mechanical stoking apparatus, the combination with the yokes or keys for operating the movable fire bars, of adjustable teeth or projections carried by such yokes through which forward travel is imparted to the fire bars, means for adjusting said teeth, a driving shaft carrying means to engage said teeth or projections, shoulders carried by certain of the yokes or keys and cams carried by the driving shaft whereby an alternate backward travel of the fire bars is secured, all substantially as shown and described. 5th. In mechanical stoking apparatus, the combination with the yokes or keys for operating the movable fire bars, and the driving shaft, or shoulders on the yokes and cams on the driving shaft for temporarily limiting the back travel of one set of fire bars, substantially as shown and described. 6th. In mechanical stoking apparatus, fire bars made in two portions and supported at the junction, substantially as and for the purposes described.

No. 65,062. Inflatable Tire. (*Bandage pneumatique.*)



Walter Swain and Leonard Hartley Swain, both of Bolton, Lancaster, England, 22nd November, 1899; 6 years. (Filed 7th January, 1899.)

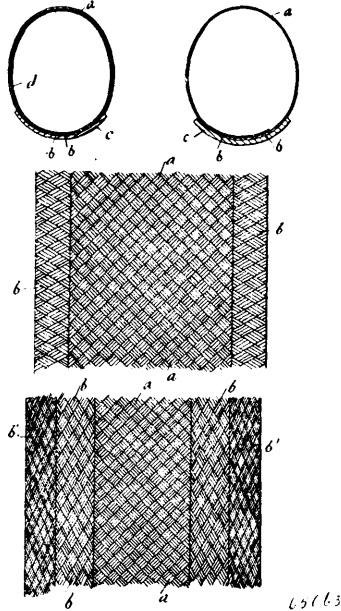
Claim.—1st. In mechanism for producing the canvas part of an inflatable tire, a support, an annular shaping piece removably mounted thereon, and means for winding coils of threads annularly on said shaping pieces, substantially as described. 2nd. In mechanism of the class described, an annular shaping piece, a rotary table arranged to receive said shaping piece, shafts, gearing wheels and pulleys for transmitting motion to said table, and means for laying threads annularly on said shaping piece, substantially as herein specified. 3rd. In mechanism of the class described, an annular shaping piece, a rotary table arranged to receive said shaping piece, means for transmitting motion to said rotary table, a guide for conducting the thread to be wound annularly upon the said shaping piece, and a roller or series of rollers for pressing the same against said shaping piece, substantially as set forth.

No. 65,063. Inflatable Tire. (*Bandage pneumatique.*)

Walter Swain and Leonard Swain, both of Bolton, Lancaster, England, 22nd November, 1899; 6 years. (Filed 7th January, 1899.)

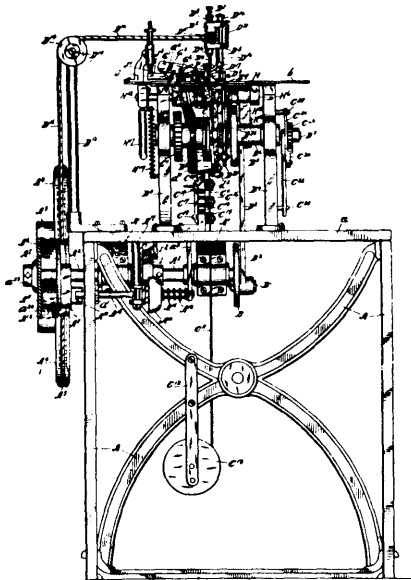
Claim.—1st. The method of manufacturing bicycle tires which consists in forming separate thread and edge sections, and holding said thread section at a different tension from said edge sections while the latter are being united to the former, substantially as set forth. 2nd. A bicycle tire comprising a central tread section, and separate edge sections, all of which are formed by the process of

braiding, and means for uniting said sections while under different tensions, substantially as and for the purpose set forth. 3rd. A



bicycle tire comprising a central tread section, and a plurality of edge sections of different degrees of elasticity, and means for uniting all of said sections while under different tensions, substantially as and for the purpose set forth.

No. 65,064. Perforating, Ring Forming and Inserting Machine. (*Appareil à perforer, former des ronds et insérer.*)



Thomas Hawthorne, London, Ontario, Canada, 22nd November, 1899; 6 years. (Filed 17th November, 1899.)

Claim.—1st. In a machine of the class described, a wiper D, and means for supporting and operating the same, in combination with a sliding bar D³, pivotal toe or arm D¹, stop D², and a head D⁵, carrying a perforating device D⁹, substantially as and for the purpose set forth. 2nd. In a machine of the class described, a disc B⁵, means for supporting and operating the same and a wiper D, in combination with a sliding bar D³, a pivotal toe D¹, stop D², spring D⁴, and a head D⁵, carrying a perforating device D⁹, substantially as and for the purpose set forth. 3rd. In a machine of the class described, a disc B⁵, and a wiper D, in combination with a sliding bar D³, a pivotal toe or arm D¹, a stop D², spring D⁴, a head D⁵, a rotating spindle D⁶, carrying a drill D⁸, a pulley wheel D¹¹, and means for operating the same, substantially as and for the purpose set forth. 4th. In a machine of the class described, a sliding bar

D³, means for supporting and operating the same, a head D⁵, and a perforating device D⁹, in combination with an adjustable standard D¹⁶, provided with a foot D¹⁷, in which a slot D¹⁵, is formed and a resilient device D²¹, substantially as and for the purpose set forth. 5th. In a machine of the class described a sliding bar D³, means for supporting and operating the same, a head D⁵, in which a slot D²⁰ is formed and a perforating device D⁹, in combination with an adjustable standard, D¹⁶, provided with a foot D¹⁷, in which a slot or opening, D¹⁸, is formed a resilient device D²¹, and a guide B¹⁹, substantially as and for the purpose set forth. 6th. In a machine of the class described, a sliding bar D³, head D⁵, perforating device D⁹, spindle D⁶, pulley wheel D¹¹, and means for operating the latter and the sliding bar D³, in combination with an adjustable standard D¹⁶, provided with a foot D¹⁷, in which a slot or opening D¹⁸, is formed and a resilient device D²¹, substantially as and for the purpose set forth. 7th. In a machine of the class described, a sliding bar D³, a head D⁵, in which a slot D²⁰, is formed a perforating device D⁹, spindle D⁶, pulley wheel, D¹¹, and means for operating the latter, and the sliding bar D³, in combination with an independently adjustable standard D¹⁶, provided with a foot D¹⁷, in which a slot or opening D¹⁸ is formed, the resilient device D²¹, and a guide D¹⁹, substantially as and for the purpose set forth. 8th. In a machine of the class described, a disc B⁵, wiper D, sliding bar D³, pivotal toe or arm D¹, stop D², head D⁵, in which a socket D²⁰, is formed and a perforating device D⁹, in combination with an independently adjustable standard D¹⁶, provided with a foot D¹⁷, in which a slot D¹⁵, is formed, a resilient device D²¹, and a guide D¹⁹, substantially as and for the purpose set forth. 9th. A counter die automatically adjustable in a diagonal direction, substantially as and for the purpose set forth. 10th. A counter die automatically adjustable in a diagonal direction, to and from and in combination with a perforating device D⁹, substantially as and for the purpose set forth. 11th. A counter die E⁶, in which an opening or recess E⁷, is formed, in combination with a lever E, and means for operating the latter, substantially as and for the purpose set forth. 12th. A counter die E⁶, in which an opening or recess E⁷ is formed, in combination with and pivotally secured to a lever E, in which a notch E³, is formed, and a wiper E⁴, formed with an angular end E⁵, and means for operating said wiper, substantially as and for the purpose set forth. 13th. A counter die E⁶, in which an opening or recess E⁷ is formed in combination with and pivotally secured to a lever E, in which a notch E³ is formed, a wiper E⁴, formed with an angular end E⁵, the sliding bar D³, and means for operating the latter, substantially as and for the purpose set forth. 14th. A head D⁵, a perforating device D⁹, and an independently adjustable standard D¹⁶, provided with a foot D¹⁷, in which an opening D¹⁸ is formed, and a resilient device D²¹ in combination with a counter die E⁶, and means for supporting and operating the same, substantially as and for the purpose set forth. 15th. A head D⁵, in which a socket D²⁰, is formed, a perforating device D⁹, and an independently adjustable standard D¹⁶, provided with a foot D¹⁷, in which an opening D¹⁸, is formed, a resilient device D²¹, and a guide D¹⁹, in combination with a counter die E⁶, moving diagonally to and from the perforating device D⁹, and means for supporting and operating said counter die, substantially as and for the purpose set forth. 16th. A head D⁵, a spindle D⁶, a perforating device, D⁹, a pulley wheel D¹¹, means for operating the same, an independently adjustable standard D¹⁶, provided with a foot D¹⁷, in which an opening D¹⁸ is formed and a resilient device D²¹, in combination with a counter die E⁶, substantially as and for the purpose set forth. 17th. A head D⁵, in which a socket D²⁰ is formed, a perforating device D⁹, and an independently adjustable standard D¹⁶, provided with a foot D¹⁷, in which an opening D¹⁸ is formed, a resilient device D²¹, and a guide D¹⁹, in combination with a counter die E⁶, moving diagonally to and from said perforating device D⁹, substantially as and for the purpose set forth. 18th. A disc B⁵, a wiper D, pivotal toe D¹, stop D², sliding bar D³, spring D⁴, washer d², bracket d¹, a head D⁵, in which a socket D²⁰ is formed, a perforating device D⁹, and an independently adjustable standard D¹⁶, provided with a foot D¹⁷, in which an opening D¹⁸ is formed, a resilient device D²¹, and a guide D¹⁹, in combination with a counter die E⁶, moving diagonally to and from said perforating device D⁹, substantially as and for the purpose set forth. 19th. A disc B⁵, a wiper D, pivotal toe D¹, stop D², sliding bar D³, wiper E⁴ and E⁵, head D⁵, perforating device D⁹, an adjustable standard D¹⁶, and resilient device D²¹, in combination with a counter die E⁶, and lever E, substantially as and for the purpose set forth. 20th. A disc B⁵, a wiper D, pivotal toe D¹, stop D², sliding bar D³, wiper E⁴, formed with an angular end E⁵, a head D⁵, in which a socket D²⁰ is formed, a perforating device D⁹, and an adjustable standard D¹⁶, provided with a foot D¹⁷, in which a socket D¹⁸ is formed, a resilient device D²¹, and a guide D¹⁹, in combination with a counter die E⁶, and lever E, in which a notch E³, is formed, substantially as and for the purpose set forth. 21st. The combination of a head D⁵, with a spindle D⁶, adjusting screw D⁷, nut D⁸, perforating device D⁹, and set screw D¹⁰, substantially as and for the purpose set forth. 22nd. The combination of a head D⁵, with a spindle D⁶, pulley D¹¹, means for operating the latter in adjusting screw D⁷, nut D⁸, perforating device D⁹, and set screw D¹⁰, substantially as and for the purpose set forth. 23rd. In a ring former, the combination of an inner section F¹, in which a groove F⁵, curved outwards at the upper end is formed, in combination with an outer section F², provided with the longitudinal flanges F³, substantially as and for the purpose set

forth. 24th. In a ring former, the combination of an inner-section F¹, in which a groove F², curved outwards at the upper end is formed, in combination with and adjustable on an outer section F², formed with longitudinal flanges F³, substantially as and for the purpose set forth. 25th. In a ring former, the inner section F¹, in which a groove F², curved outwards at the upper end is formed, and an overhanging forked end F³, in combination with an outer section F², formed with longitudinal flanges F³, and cross flange F⁴, in which a screw threaded socket is formed and a double headed screw F¹⁰, substantially as and for the purpose set forth. 26th. A ring former F, cut away or recessed at F⁷, substantially as and for the purpose set forth. 27th. A ring former F, in combination with a support F¹¹, in which a socket F¹², is formed and said support pivotally secured to a bracket F¹³, substantially as and for the purpose set forth. 28th. A ring former F, a pivotal support F¹¹, in which a socket F¹², is formed, and a bracket F¹³, in combination with the feed wheels C and C', substantially as and for the purpose set forth. 29th. The vertically adjustable slide F¹⁵, the horizontally adjustable slide F¹⁸, and arm F¹⁴, in combination with a ring former F, provided with a stud F¹⁶, and a support F¹¹, pivotally secured to a bracket F¹³, substantially as and for the purpose set forth. 30th. The vertically adjustable slide F¹⁵, the horizontally adjustable slide F¹⁸, and arm F¹⁴, in combination with a ring former formed in two sections adjustable longitudinally on or within the other, and provided with a stud F¹⁶, and a support F¹¹, pivotally secured to the bracket F¹³, substantially as and for the purpose set forth. 31st. In a machine of the class described, the ratchet wheel B¹⁴, and a shaft B³, in combination with a dog B¹⁰, and means for supporting said dog and alternately engaging it with and disengaging it from the teeth of ratchet wheel, substantially as and for the purpose set forth. 32nd. In a machine of the class described, the ratchet wheel B¹⁴, shaft B³, and a cam plate B²⁵, provided with an arm B²⁶, and means for supporting said arm at the position to which it may be adjusted, in combination with a dog B¹⁰, and means for supporting the latter and adjusting it towards said ratchet wheel, substantially as and for the purpose set forth. 33rd. In a machine of the class described, the ratchet wheel B¹⁴, shaft B³, cam plate B²⁵, provided with an arm B²⁶, and adjustably secured to a bar B²⁸, in combination with a dog B¹⁰, spring B¹⁵, and means for supporting and operating said dog, substantially as and for the purpose set forth. 34th. In a machine of the class described, the ratchet wheel B¹⁴, shaft B³, cam plate B²⁵, provided with an arm B²⁶, and adjustably secured to a bar B²⁸, in combination with a dog B¹⁰, in which an opening B⁹, and socket B¹⁶, are formed, and provided with an arm B¹², a stud B¹¹, a spring B¹⁵, and a disc B⁵, in which an elongated slot B¹³ is formed, and means for operating said disc, substantially as and for the purpose set forth. 35th. In a machine of the class described, the grooved feed wheels C and C', ratchet wheel B¹⁴, and a shaft B³, in combination with a dog B¹⁰, and means for supporting said dog, and alternately engaging it with and disengaging it from the teeth of said ratchet wheel, substantially as and for the purpose set forth. 36th. In a machine of the class described, the grooved feed wheels C and C', ratchet wheel B¹⁴, shaft B³, an adjustable cam plate B²⁵, provided with an arm B²⁶, and means for holding said arm at the position to which it may be adjusted, in combination with a dog B¹⁰, and means for supporting the latter and adjusting it towards said ratchet wheel, substantially as and for the purpose set forth. 37th. In a machine of the class described, the grooved feed wheels C and C', ratchet wheel B¹⁴, shaft B³, cam plate B²⁵, provided with an arm B²⁶, and adjustably secured to a bar B²⁸, in combination with a dog B¹⁰, spring B¹⁵, and means for supporting and operating said dog, substantially as and for the purpose set forth. 38th. In a machine of the class described, the grooved feed wheels C and C', ratchet wheel B¹⁴, shaft B³, cam plate B²⁵, provided with an arm B²⁶, and adjustably secured to a bar B²⁸, in combination with a dog B¹⁰, in which an opening B⁹, and socket B¹⁶, are formed, and provided with an arm B¹², a stud B¹¹, a spring B¹⁵, and a disc B⁵, in which an elongated slot B¹³, is formed and means for operating said disc, substantially as and for the purpose set forth. 39th. In a machine of the class described, the ratchet wheel B¹⁴, shaft B³, dog B¹⁰, and a cam plate B²⁵, provided with an arm B²⁶, and means for holding the latter at the position to which it may be adjusted, in combination with the plate B²², substantially as and for the purpose set forth. 40th. In a machine of the class described, the ratchet wheel B¹⁴, shaft B³, cam plate B²⁵, provided with an arm B²⁶, and adjustably secured to a bar B²⁸, and a dog B¹⁰, in combination with a plate B²², in which a shoulder b³, and elongated slot B²¹, are formed and provided with an arm B²³, a spring B²⁴, and a pin B²⁰, secured to a stationary support, substantially as and for the purpose set forth. 41st. In a machine of the class described, the ratchet wheel B¹⁴, shaft B³, cam plate B²⁵, provided with an arm B²⁶, and means for holding said arm at a position to which it may be adjusted, a plate B²² in which a shoulder b³, and an elongated slot B²¹, are formed and provided with an arm B²³, a spring B²⁴, a flanged sleeve B¹⁷, secured to the stationary sleeve B⁷, and provided with a pin B²⁰, in combination with a dog B¹⁰, in which an opening B⁹, and socket B¹⁶, are formed, and provided with an arm B¹², and stud B¹¹, a spring B¹⁵, and a disc B⁵, in which an elongated slot B¹³, is formed, and provided with a sleeve B⁶, substantially as and for the purpose set forth. 42nd. In a machine of the class described, the combination of the shaft B³, the lever C²², the longitudinally adjustable

dog C²⁴, the ratchet wheel C²³, and cam C²⁵, substantially as and for the purpose set forth. 43rd. In a machine of the class described, the shaft B³, the lever C²², the longitudinally adjustable dog C²⁴, and the ratchet wheel C²³, in combination with the cam C²⁵, provided with an arm C²⁶, and means for holding said arm at the position to which it may be adjusted, substantially as and for the purpose set forth. 44th. In a machine of the class described, the shaft B³, the lever C²², the longitudinally adjustable dog C²⁴, and the ratchet wheel C²³, in combination with the cam C²⁵, provided with an arm C²⁶, in which a slot C²⁷, is formed, the screw bolt C²⁸, and sleeve C²⁹, and means for supporting said shaft and said screw bolt, substantially as and for the purpose set forth. 45th. In a machine of the class described, the combination of the cutters H⁹, cutter carrying slides H¹ and H², slide box H, studs H⁴, anti-friction sleeves H⁵, and means for adjusting said cutter carriers and cutters secured thereto, towards one another, substantially as and for the purpose set forth. 46th. In a machine of the class described, the cutters H⁹, L-shaped cutter carrying slides H¹, and H², slide box H, studs H⁴, and anti-friction sleeves H⁵, in combination with the worm shaft H¹², and the right and left worms or cams H¹³, and H¹⁴, substantially as and for the purpose set forth. 47th. In a machine of the class described, the cutters H⁹, L-shaped cutter carrying slides H¹, and H², slide box H, studs H⁴, and anti-friction sleeves H⁵, in combination with a worm shaft H¹², worms or cams H¹³ and H¹⁴, toe H¹⁵, wiper H¹⁶, and disc B⁵, substantially as and for the purpose set forth. 48th. In a machine of the class described, the L-shaped cutter carrying slides H¹, and H², the cutters H⁹, holding screws H¹⁰, set screws H¹¹, slide box H, studs H⁴, and anti-friction sleeves H⁵, in combination with the worm shaft H¹², worms or cams H¹³, and H¹⁴, toe H¹⁵, wiper H¹⁶, and disc B⁵, substantially as and for the purpose set forth. 49th. The combination of the bracket J, an adjustable bar J¹, and means for holding the latter at the position to which it is adjusted, in combination with an indicator J³, substantially as and for the purpose set forth. 50th. The combination of the bracket J, an adjustable bar J¹, and means for holding the latter at the position to which it is adjusted, in combination with a foot J², substantially as and for the purpose set forth. 51st. The combination of the bracket J, an adjustable bar J¹, and means for holding the latter at the position to which it is adjusted, in combination with an indicator J³, and foot J², substantially as and for the purpose set forth. 52nd. In a machine of the class described, an eccentric I, rigidly secured to a shaft A², in combination with a bar I¹, and a spring I², interposed between said bar and the table a, or other rigid abutment, substantially as and for the purpose set forth. 53rd. In a machine of the class described, an eccentric I, and a shaft A², in combination with the bar I¹, bracket I², bolt I³, and spring I², substantially as and for the purpose set forth. 54th. The combination of means for forming rings or loops and simultaneously with their formation inserting them in perforations in sheets of printed matter or other article for the purpose of suspension, means for feeding wire to the ring forming mechanism and means for causing said feed to be intermittent, substantially as described. 55th. The combination of adjustable means for forming rings or loops of different diameter and simultaneously with their formation, inserting them in perforations in sheets of printed matter or other article, means for operating and alternately throwing the perforating mechanism in and out of operation, means for forming rings or loops and simultaneously with their formation inserting them in perforations in the sheets of printed matter or other article for the purpose of suspension, and means for causing the amount of wire presented to the wire feeding mechanism to vary to accord with the diameter of the ring or loop required, substantially as described. 56th. The combination of means for forming perforations in sheets of printed matter or other article, means for operating and alternately throwing the perforating mechanism in and out of operation, means for forming rings or loops and simultaneously with their formation inserting them in perforations in the sheets of printed matter or other article for the purpose of suspension, and means for causing the amount of wire presented to the wire feeding mechanism to vary to accord with the diameter of the ring or loop required, substantially as described. 57th. The combination of means for forming perforations in sheets of printed matter or other article, consisting in part of a vertically adjustable sliding bar carrying rotating perforating mechanism, means for operating and alternately throwing the perforating mechanism in and out of operation, means for forming rings or loops, and simultaneously with their formation inserting them in the perforations in the sheets of printed matter or other article for the purpose of suspension, and means for intermittently feeding wire to form said rings or loops, substantially as described. 58th. The combination of means for forming perforations in sheets of printed matter or other article, consisting in part of an adjustable sliding bar and an adjustable standard provided with a foot and resilient means by which said standard is automatically adjusted to the thickness of the printed matter or other article and to firmly hold the printed matter or other article while the perforation is being formed therein, and while withdrawing the perforating device therefrom, means for

operating and alternately throwing the perforating mechanism in and out of operation, means for forming rings or loops and simultaneously with their formation inserting them in the perforations in the sheets of printed matter or other article for the purpose of suspension, and means for intermittently feeding wire to form said rings or loops, substantially as described. 60th. The combination of means for forming perforations in sheets of printed matter or other article, consisting in part of a counter die moving diagonally to and from the perforating mechanism, means for operating and alternately throwing the perforating mechanism in and out of operation, means for alternately adjusting the counter die towards the perforating mechanism, for holding it under the perforating mechanism while the perforation is being formed, and for adjusting it from the perforating mechanism, means for forming rings or loops and simultaneously with their formation inserting them in the perforations in the sheets of printed matter or other article for the purpose of suspension, and means for intermittently feeding wire to form said rings or loops, substantially as described. 61st. The combination of means for forming perforations in sheets of printed matter or other article, consisting in part of a counter die, a lever formed with a notch and a wiper formed with an angular end for the purpose of operating said lever and adjusting the counter die under the perforating device, means for operating and alternately throwing the perforating mechanism in and out of operation, means for forming rings or loops and simultaneously with their formation inserting them in the perforations in the sheets of printed matter or other article, for the purpose of suspension, and means for intermittently feeding wire to form said rings or loops, substantially as described. 62nd. The combination of means for forming rings or loops, and simultaneously with their formation inserting them in perforations in sheets of printed matter or other article, for the purpose of suspension, means for feeding wire to the ring forming mechanism, means for causing said feed to be intermittent, means for severing the ring or loop from the wire and means for operating the severing mechanism when required, substantially as described. 63rd. The combination of means for forming rings or loops of different diameter, and simultaneously with their formation inserting them in sheets of printed matter or other article, for the purpose of suspension, means for feeding the wire to the ring forming mechanism, means consisting partly of an adjustable cam plate provided with an arm, a ratchet and a longitudinally adjustable dog for causing the amount of wire presented to the wire feeding mechanism to vary to accord with the diameter of the ring or loop required, and means for holding the arm on the cam plate at the position to which it is adjusted, substantially as described. 64th. The combination with means for forming rings or loops and simultaneously with their formation, inserting them in perforations in sheets of printed matter or other article for the purpose of suspension, means for intermittently feeding the wire to the ring forming mechanism, and means for preventing the dog from engaging with the ratchet when said dog is returning to its normal position, substantially as described. 65th. The combination of means for forming perforations in sheets of printed matter or other article, means for operating and alternately throwing said perforating mechanism in and out of operation, means for indicating the place or page at which the perforation is desired, means for forming rings or loops and simultaneously with their formation inserting them in perforations in sheets of printed matter or other article for the purpose of suspension, and means for intermittently feeding wire to form said rings or loops, substantially as described. 66th. The combination of means for forming perforations in sheets of printed matter or other article, means for forming rings or loops and simultaneously with their formation inserting them in perforations in sheets of printed matter or other article for the purpose of suspension, means for intermittently feeding wire to form said rings or loops, means for severing the ring or loop from the wire, and means for stopping the machine at a given point, or just after the operation of perforating, forming, inserting and cutting off of the ring is completed, substantially as described.

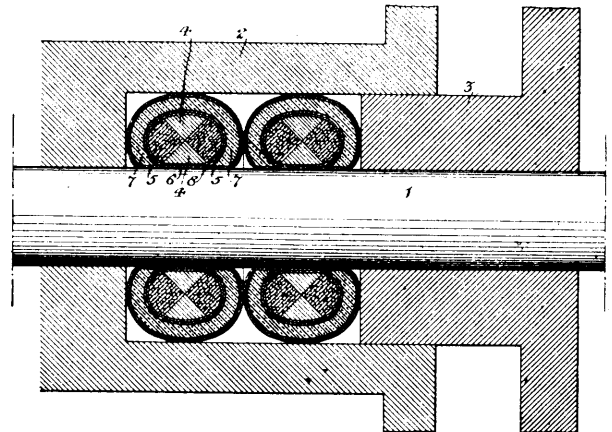
No. 65,065. Piston Rod Packing.

(Garanture de tige de piston.)

James Smith & Co., Charleston, West Virginia, assignee of Norman Bruce Miller and Franklin Brown, both of Philadelphia, Pennsylvania, U.S.A., 23rd November, 1899; 6 years. (Filed 29th September, 1899.)

Claim.—1st. A rod packing consisting of an inner mass of packing material and an elastic, liquid proof, fibrous casing enclosing the same on three sides but open on the side towards the rod and bearing against said rod, substantially as specified. 2nd. A rod packing consisting of an inner portion having wedge shaped rings disposed so as to be forced apart by pressure exerted in the length of the rod, and an outer casing of elastic material containing said inner portion but open on the side towards the rod and having a bearing on the rod on each side of the inner portion, substantially as specified. 3rd. The within described casing for a rod packing, said casing consisting of a segment of a tube incised on the back so as to facilitate the bending of the same around the rod, substantially as specified. 4th. The within described casing for a rod packing, said casing consisting of a segment of a tube having external longitudinal incisions adja-

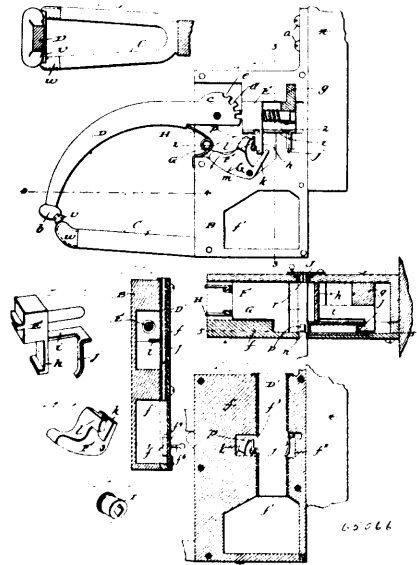
cent to its edges, substantially as specified. 5th. The within described casing for a rod packing, said casing consisting of a seg-



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ment of a tube having external waved or corrugated longitudinal incisions adjacent to its edges, substantially as specified.

No. 65,066. Garment Hook. (Crochet de vêtement.)



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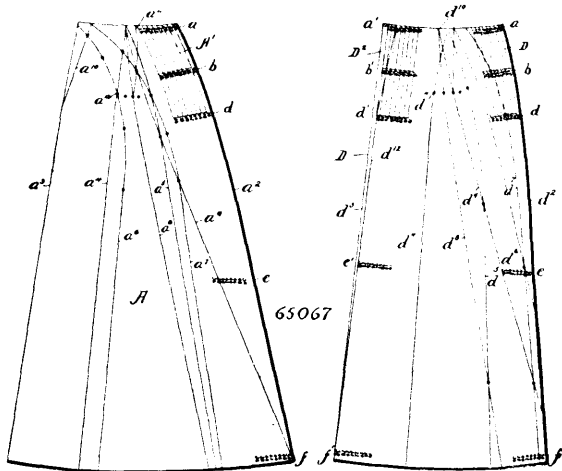
John T. Roddy, New York City, New York, U.S.A., 23rd November, 1899; 6 years. (Filed 21st October, 1899.)

Claim.—1st. In a hook for the purpose described, the combination of a body or casing having an article supporting arm and also having a key hole, a coin chute arranged in the body and having openings in two opposite walls at an intermediate point of its length, a retaining arm pivoted in the body and having one or more depressions in its inner end portion, a spring backed locking bolt arranged in the casing in a position to engage the depression or depressions of the retaining arm and having a portion adapted to normally extend through one opening of the coin chute, the other opening of the said chute being designed for the play of the web of a key introduced through the key hole, substantially as specified. 2nd. In a hook for the purpose described, the combination of a body or casing having an article supporting arm and also having a key hole, a bushing journaled in the body or casing in a position coincident with the key hole and having a socket of angular form in cross section, a coin chute arranged in the body or casing and having openings in two opposite walls at an intermediate point of its length, a retaining arm pivoted in the body or casing and having one or more depressions in its inner end portion, a spring backed locking bolt arranged in the casing in a position to engage the depression or depressions of the retaining arm and having a portion adapted to normally extend through one opening of the coin chute, the other opening of the said chute being designed for the play of the web of a key, and the angular socket of the bushing being designed to receive the correspondingly shaped forward end of said key, substantially as specified. 3rd. In a hook for the purpose described, the combination of a body

or casing having an article supporting arm and also having a key hole, a bushing journaled in the body or casing in a position coincident with the key hole and having a socket of annular form in cross section, a coin chute arranged in the body or casing and having openings in two opposite walls at an intermediate point of its length a retaining arm pivoted in the body or casing and having depressions one of which is of a less depth than the other, a spring backed locking bolt having an arm and also having a portion adapted to normally extend through one of the openings of the coin chute, the other opening of said chute being designed for the play of the web of a key, and the angular socket of the bushing being designed to receive the correspondingly shaped forward end of said key, a gravitating key securer arranged in the body or casing in a position to engage the web of the key and be engaged by the arm of the bolt, and a spring for raising the retaining arm when the same is released, substantially as specified.

No. 65,067. Dress Skirt Pattern.

(*Patron de jupes de robes.*)

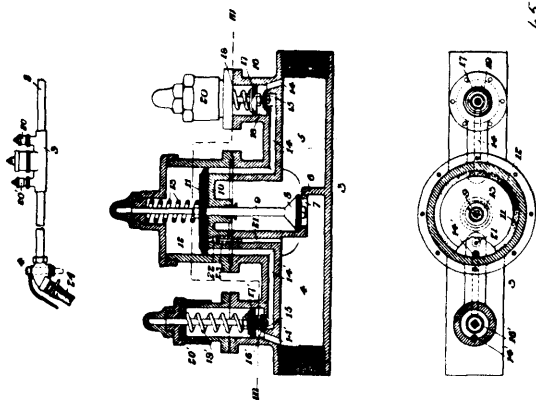


Victorine Lambert, Glen Falls, New York, U.S.A., 23rd November, 1899; 6 years. (Filed 23rd October, 1899.)

Claim.—1st. A skirt pattern, comprising four sections representing the front, two sides and the back of a skirt, a scale for the waist and hips arranged on the front and side sections, and a plurality of guide lines formed on each of said sections, whereby the style of skirt may be varied, substantially as described. 2nd. A skirt pattern, comprising four sections representing the front, two sides and the back of a skirt, a scale for the waist and hips arranged on the front and side sections, a plurality of guide lines formed on each section and adapted to be combined with the edges of the sections to vary the style of the skirt, substantially as described.

No. 65,068. Cut-off for Air Brakes.

(*Détente de frein à air.*)



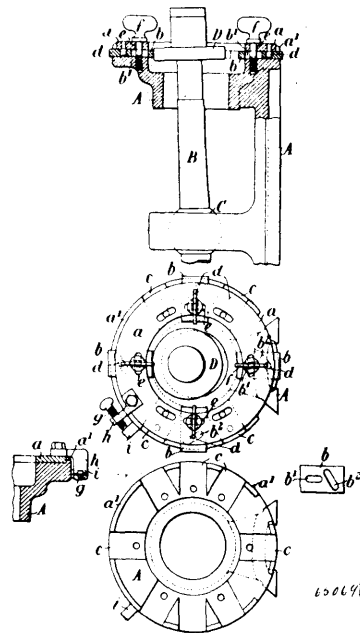
William T. Hamilton, Allegheny, Pennsylvania, U. S. A., 23rd November, 1899; 6 years. (Filed 24th October, 1899.)

Claim.—1st. In air brake apparatus, a cut-off valve connected with the train pipe, and means independent of said cut-off valve adapted automatically to open and close said valve on the variance of pressure beyond a certain point, substantially as described. 2nd.

In air brake apparatus, an automatic cut-off valve, connected with the train pipe, means set to operate conjointly with and to control the movement of said automatic cut-off valve said parts being held open by a predetermined pressure, any abnormal reduction in said pressure causing these parts to completely close the train pipe until the predetermined pressure is restored. 3rd. In air brake apparatus, a cut-off valve connected with the train pipe, and means set automatically to open said valve by a certain pressure in the train pipe, and other means set to open the same by less pressure, whereby when the valve has been opened by the one it can be held open by the other, substantially as described. 4th. In air brake apparatus, a cut-off valve connected with the train pipe and adapted to be moved by the air pressure and air inlets adapted to admit air for moving the same, and mechanism controlling the inlets, one inlet being adapted to open at a lower pressure than that at which the other will open, whereby when the valve has been opened by pressure through the high pressure inlet, it can be held open by pressure acting through the other inlet, substantially as described. 5th. In air brake apparatus, the combination with the train pipe, of a cut-off valve at each end of the car, air operated mechanism adapted to move the cut-off valve, inlet ports on the outside and inside of the cut-off valve respectively, and mechanism adapted to control said inlet ports and to permit the passage of air therethrough at different pressures, substantially as described. 6th. In air brake apparatus, the combination of a cut-off valve, its actuating diaphragm, ports leading to said diaphragm from opposite sides of the cut-off valve, high and low pressure valves controlling said ports respectively, said valves having springs by which they may be adjusted to operate at certain pressures, and a vent passage and valve, substantially as described.

No 64,069. Machine for Drilling and Shaping.

(*Machine à forer et façonner.*)



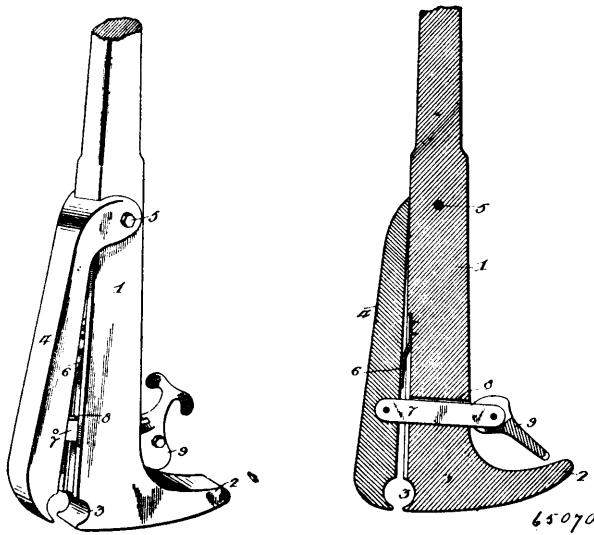
The Angular Hole Machine Company, London, England, 23rd November, 1899; 6 years. (Filed 7th March, 1899.)

Claim.—1st. In a machine for boring, drilling and shaping, the combination with the tool operating shaft provided with a roller of a templet a plurality of separate removable blocks for engaging the said roller to determine the shape of the path of the tool and means for securing said blocks to the templet whereby by removing certain of said blocks the shape of the path of the tool, can be varied without changing the templet, substantially as described. 2nd. In a machine for boring, drilling and shaping, the combination with the tool operating shaft provided with a roller, of a templet, a plurality of separate removable blocks adapted to engage the said roller to determine the shape of the path of the tool means for securing each of said blocks to the templet whereby certain of said blocks can be removed to vary the shape of the path of the tool and adjusting mechanism for said blocks for varying the distance between the points of contact of said roller with said blocks from the axis of the tool operating shaft to increase or diminish the path of the tool without removing the templet, substantially as described. 3rd. In a machine for boring, drilling or shaping, the combination with the tool carrying shaft provided with a roller, of the templet comprising a series of radially movable blocks having portions adapted to engage the roller to regulate the shape of the path of the tool and means for moving said blocks toward and from the axis of said shaft to vary the size of the field of operation of said tool, substantially as

described. 4th. In a machine for boring, drilling or shaping, the combination with the tool carrying shaft provided with a roller of the templet comprising a series of removable radially movable blocks having portions adapted to engage said roller to regulate the shape of the path followed by said tool and means for moving said blocks toward and from the axis of said shaft to vary the size of the field of operation of said tool, substantially as described. 5th. In a machine for boring, drilling or shaping, the combination with the head stock provided with a series of radial grooves and the tool carrying shaft provided with a roller of the templet comprising a series of removable and radially movable blocks having portions adapted to engage said roller located in said grooves, an annular ring having portions engaging said blocks for moving them radially toward and from said roller and an adjusting device for moving said ring annularly, substantially as described. 6th. In a machine for boring, drilling or shaping, the combination with the head stock provided with a series of radial grooves and the tool carrying shaft provided with a roller of the templet comprising a series of removable and radially movable blocks having portions adapted to engage said roller located in said grooves and an annular ring having portions engaging said blocks for moving them radially toward and from said roller an adjusting device for moving said ring annularly to adjust said blocks simultaneously and an independent clamping device for each of said blocks for securing the same rigidly to the head stock, substantially as described. 7th. In a machine for boring, drilling or shaping, the combination with the head stock provided with a central opening and an annular part having a series of radially disposed grooves or recesses therein, of a tool carrying shaft passing through said opening and provided with a roller, a series of blocks located in said grooves or recesses provided each with a part for engaging said roller and with a cam recess, an annular plate provided with a series of pins engaging the cam recesses of said blocks an adjusting device for moving said plate annularly to force said blocks toward or from the said shaft and an independent clamping device for securing each of said blocks to the head stock in its adjusted position, substantially as described.

No. 65,070. Spike and Nail Extractor.

(Arrache-cheville et clou.)



Frank William Gerlach, Kenton, Ohio, U.S.A., 23rd November, 1899; 6 years. (Filed 6th November, 1899.)

Claim.—In combination, the hand lever formed with a guide slot, a gripper jaw and a curved fulcrum toe, the movable jaw pivoted to said hand lever, the interposed spring, the transverse bar pivoted to the movable jaw, and extending through the guide slot, and the cam lever fulcrumed on the projecting end of said bar, substantially as and for the purpose set forth.

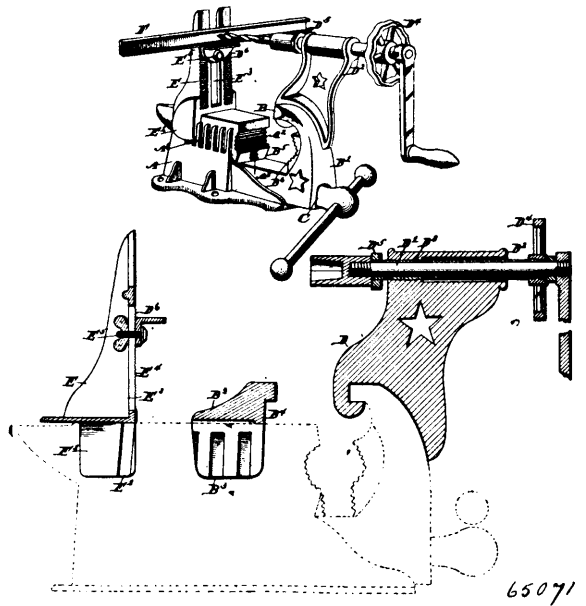
No. 65,071. Anvil, Vise and Drill.

(Enclume, etau et foret.)

James Watson Conchar, Dubuque, Iowa, U.S.A., 23rd November, 1899; 6 years. (Filed 24th October, 1899.)

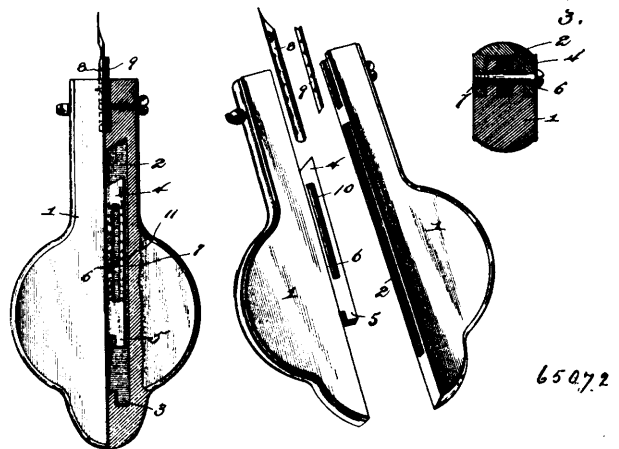
Claim.—1st. The combination of an anvil block adapted to take the stock of a movable vise jaw, and having on each side a series of laterally projecting, upwardly extending ribs terminating near the top of the anvil, a movable vise-jaw mounted on said anvil block, and a removable vise-jaw adapted to rest on the top surface of the anvil, and having downwardly extending wings to embrace said ribs laterally, and provided with recesses opening from the bottom of said wings and on the inner sides thereof, to receive said ribs, substantially as and for the purpose set forth. 2nd. The combination of a movable vise-jaw, an anvil block adapted to retain the stock

thereof, and provided with a series of inclined lateral ribs at each side near the top of the anvil, and a removable vise-jaw having



downwardly extending wings adapted to embrace said ribs, and inclined recesses therein to receive said ribs, substantially as described. 3rd. The combination with a movable vise-jaw and a drill head stock attached thereto, of an anvil block adapted to receive the stock of the vise-jaw, and provided with lateral ribs in a vertical or slightly inclined position, and a tail stock having downwardly extending wings with internal ribs to engage the ribs of the anvil block, and an upwardly extending body having a face perpendicular to the drill spindle, substantially as described. 4th. The combination with an anvil block having a series of lateral lugs near the upper face thereof extending in a slight angle downwardly and backwardly, and a drill head stock adapted to slide back and forth with respect thereto, of a drill tail stock adapted for temporary attachment to the anvil block, having downwardly extending wings with inwardly projecting ribs corresponding to the angle of the anvil lugs, and having a drill face perpendicular to the drill spindle, a slot therein to receive a clamping bolt, an angle plate and a bolt and thumb nut for adjustment of the same, along the face of the tail stock, a portion of both tail stock and angle plate being serrated for mutual engagement, substantially as described.

No. 65,072. Embroidery Machine. (Machine à broderie.)

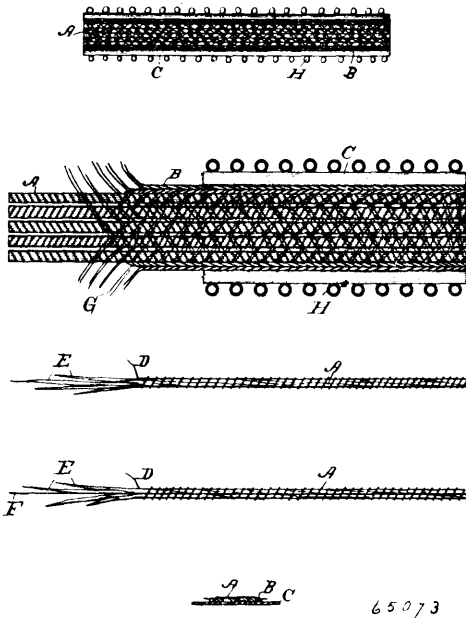


James T. Roberts, Anderson, South Carolina, U.S.A., 23rd November, 1899; 6 years. (Filed 27th September, 1899.)

Claim.—1st. In a fabric tufting implement, the members or parts slidably related, one member having the longitudinal groove 2 at its inner edge with the undercut terminals, a projecting rib 4, fast with the inner edge of the other member, and having the prolonged ends arranged to fit the undercut terminals of the groove 2, the length of said rib being less than the groove and the width of the rib corresponding nearly to the depth of the groove to guide the members in their slidable movement and house the rib entirely within the grooved member, and stop devices to limit the strain of the mem-

bers or parts, whereby the prolonged ends of the ribs are adapted to enter the undercut ends of the groove at the limit of the movement of the members in either direction, substantially as described. 2nd. In a fabric tufting machine, the combination of parts slidably related, one of the parts having a longitudinal slot and the other formed with a longitudinally slotted rib to enter and reciprocate in the aforesaid longitudinal slot, a pin passing transversely through the slotted part and the slot of the rib, and another pin adapted to enter one of a series of openings in the rib and engage with the first mentioned pin and limit the relative sliding movements of the parts, substantially as set forth.

No. 64,073. Stiffening Fabric. (*Tissu à raidir.*)



Edward K. Warren, Three Oaks, Michigan, U.S.A., 23rd November, 1899; 6 years. (Filed 21st September, 1899.)

Claim.—1st. In a stiffening tape the combination of longitudinal composite stiffening strands made up of stiff fibres bound together by a wrapping thread, diagonal threads or strands braided together and over and under the alternate stiffening strands and into a selvage on each edge thereof, a covering ribbon secured by its edges to the edges of said tape by a suitable stitching as specified. 2nd. In a stiffening tape the combination of longitudinal composite stiffening strands made up of stiff fibres bound together by a wrapping thread, diagonal threads or strands braided together and over and under the alternate stiffening strands as specified. 3rd. In a stiffening fabric the combination of longitudinal composite stiffening strands made up of stiff fibres bound together by a wrapping thread, diagonal threads or strands braided together and over and under the alternate stiffening strands as specified. 4th. In a stiffening fabric the combination of longitudinal composite stiffening strands made up of stiff fibres of quills of feathers bound together by a wrapping thread, diagonal threads or strands braided together and over and under the alternate stiffening strands as specified. 5th. In a stiffening tape the combination of longitudinal composite stiffening strands made up of stiff fibres bound together by a wrapping thread, diagonal threads or strands braided together and over and under the alternate stiffening strands and into a selvage on each edge thereof, a covering ribbon secured to one side of said tape, as specified.

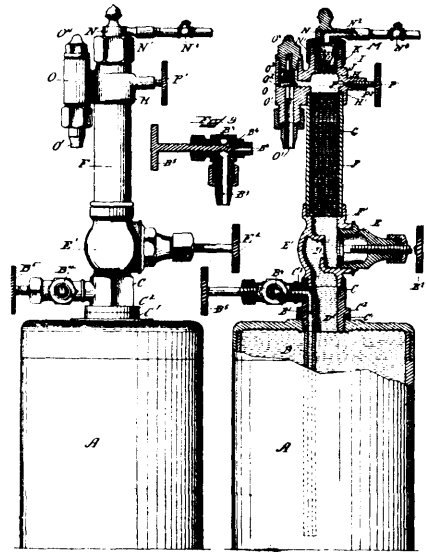
No. 65,074. Carbonating Apparatus.

(*Appareil à carboniser.*)

The New Era Carbonating Company, assignee of Edward E. Murphy, all of Boston, Massachusetts, U.S.A., 23rd November, 1899; 6 years. (Filed 5th September, 1899.)

Claim.—1st. In a carbonating apparatus, a liquid inlet pipe for supplying liquid under pressure, a gas inlet pipe for supplying gas under less pressure than that on the liquid, a mixing chamber in constant open communication with the liquid supply under initial liquid pressure and normally filled with gas and liquid, and a valve normally closing said gas inlet pipe by the pressure in said chamber and adapted to open automatically by the pressure of the gas to admit the gas upon a reduction of the pressure in said chamber below the gas pressure. 2nd. In a carbonating apparatus, a liquid inlet pipe for supplying liquid under pressure, a gas inlet pipe for supplying gas under less pressure than that on the liquid, a mixing chamber in constant open communication with the liquid supply under initial liquid pressure and normally filled with gas and liquid,

a valve normally closing said gas inlet pipe by the pressure in said chamber and adapted to open automatically by the pressure of the



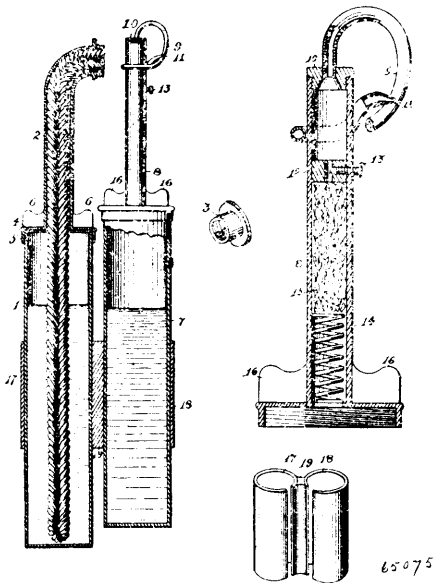
gas to admit the gas upon a reduction of the pressure in said chamber below the gas pressure, and means for subdividing and combining the gas and liquid. 3rd. In a carbonating apparatus, a liquid inlet pipe for supplying liquid under pressure, a gas inlet pipe for supplying gas under less pressure than that on the liquid, a mixing chamber in constant open communication with the liquid supply under initial liquid pressure and normally filled with gas and liquid, a valve normally closing said gas inlet pipe by the pressure in said chamber and adapted to open automatically by the pressure of the gas to admit the gas upon a reduction of the pressure in said chamber below the gas pressure, and a wire sponge through which the liquid and gas are forced for subdividing and combining the same. 4th. In a carbonating apparatus, a liquid inlet pipe for supplying liquid under pressure, a gas inlet pipe for supplying gas under less pressure than that on the liquid, a mixing chamber in constant open communication with the liquid supply under initial liquid pressure and normally filled with gas and liquid, a valve normally closing said gas inlet pipe by the pressure in said chamber and adapted to open automatically by the pressure of the gas to admit the gas upon a reduction of the pressure in said chamber below the gas pressure, means as a nozzle having a restricted outlet for retarding the flow of the liquid from the liquid inlet pipe into mixing chamber, and means in said mixing chamber for subdividing and combining the gas and liquid. 5th. In a carbonating apparatus, a liquid inlet pipe for supplying liquid under pressure, a gas inlet pipe for supplying gas under less pressure than that on the liquid, a mixing chamber in constant open communication with the liquid supply under initial liquid pressure and normally filled with gas and liquid, a valve normally closing said gas inlet pipe by the pressure in said chamber and adapted to open automatically by the pressure of the gas to admit the gas upon a reduction of the pressure in said chamber below the gas pressure, means as a nozzle having a restricted outlet for returning the flow of the liquid inlet pipe into the mixing chamber, means in said chamber for subdividing and combining the gas and liquid, a storage reservoir for holding the carbonated liquid, a passage establishing communication between the mixing chamber and the storage reservoir, a valve controlling said passage, an outlet for the carbonated liquid from the storage reservoir, and a valve controlling said outlet. 6th. The method of charging liquid with gas, which consists, first, in supplying liquid under pressure, second, in supplying gas under less pressure than that on the liquid, third, in bringing the gas and liquid into the presence of each other in the mixing chamber upon a reduction of the pressure in said mixing chamber below the initial gas pressure by the withdrawal of carbonated liquid whereby the gas is caused by its initial pressure to enter said mixing chamber, fourth, in filling said chamber with liquid and normally maintaining the initial liquid pressure in said chamber, and lastly, in subdividing and combining the gas and liquid in said chamber by the pressure on the liquid.

No. 65,075. Blow Pipe. (*Chalumeau ordinaire.*)

Michael P. Froddy and Ellen Rebecca Pender, both of Lena, Illinois, U.S.A., 23rd November, 1899; 6 years. (Filed 5th September, 1899.)

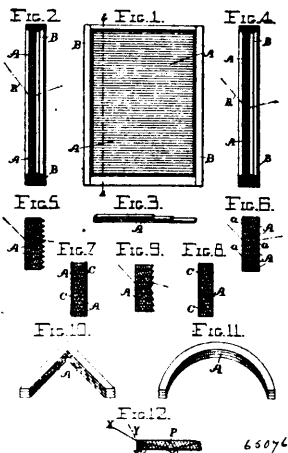
Claim.—1st. A blow pipe, comprising a lamp, a reservoir for a vaporizing fluid, a tube extended from said reservoir, a jet tube connected to said tube and coiled around the same, and a block in

aid tube having a valve regulated perforation, substantially as specified. 2nd. A blow pipe, comprising a reservoir, a jet holding



tube extended from the reservoir, a perforated block in said tube, a purifying material in the tube below the block, a valve for regulating the perforation through the block, a jet tube connected to the jet holding tube and coiled around the same, and means for directing a flame to said jet tube, substantially as specified. 3rd. A blow pipe, comprising a reservoir, a jet holding tube removably connected to said reservoir, a jet tube having removable connection with the first named tube and coiled around the same, a perforated block in the jet holding tube, there being an air space between said block and the material of the jet tube, a packing of cotton or the like in the jet holding tube below said block, and a spring in the tube for holding the cotton under pressure, substantially as specified. 4th. A blow pipe comprising a reservoir, a jet holding tube extended from the reservoir, a jet tube having removable connection with the jet holding tube and coiled around the same, means for regulating the passage of vapour through said tube, a lamp comprising a fount and a curved wick tube, and means for connecting the fount and reservoir so that the fount and reservoir may be adjusted one relatively to the other, and from which means both the fount and reservoir are removable, substantially as set forth. 5th. A blow pipe, comprising a reservoir, a jet holding tube extending from the reservoir, means for regulating the flow of vapour through said tube, a jet tube engaging with said tube and coiled around the same, a lamp having a fount and a wick tube, and a clamping device consisting of two connected cylindrical sections open at one side and adapted to engage the fount and reservoir, substantially as specified.

No. 65,076. Illuminating Panel. (*Panneau lumineux.*)

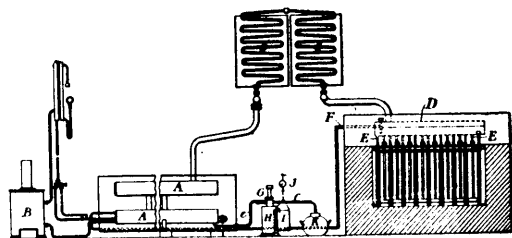


Charles Edward Manning, Chicago, Illinois, U.S.A., 23rd November, 1899; 6 years. (Filed 20th May, 1899.)

Claim.—1st. In an illuminating structure, a panel formed of a series of flat transparent blocks of greater width than thickness,

and having the faces corresponding to their width in contact, and having the faces corresponding to their thickness exposed upon the opposite faces of the panel, substantially as described. 2nd. In an illuminating structure, a panel formed of a series of transparent rectangular blocks of greater width than thickness, arranged with the faces corresponding to their width in close proximity, receiving and discharging light through the faces corresponding to their width in close proximity, receiving and discharging light through the faces corresponding with their thickness, and reflecting light at their faces corresponding with their width, substantially as described. 3rd. In an illuminating structure, a panel formed of a series of transparent blocks of greater width than thickness, arranged with their faces of greater width in contact, receiving and discharging light through the faces of their lesser dimension corresponding with their thickness, and reflecting light at their contacting faces by virtue of the films of air between said contacting faces, substantially as described. 4th. In an illuminating structure, a panel formed of a series of flat transparent blocks of greater width than thickness, arranged with the faces corresponding to their width in contact, and having the faces corresponding to their thickness exposed upon the opposite faces of the panel, and ground to a smooth surface upon either side thereof, substantially as described. 5th. In an illuminating structure, a panel formed of a series of transparent blocks arranged one in contact with another in permanent relation, said panel having opposite light receiving and light discharging surfaces, the contacting faces of the blocks lying in planes transverse to the light receiving and light discharging surfaces, and forming reflecting surfaces, substantially as described. 6th. In an illuminating structure, a panel formed of a series of transparent blocks arranged one in contact with another in permanent relation, said panel having opposite light receiving and light discharging surfaces, the contacting faces of said blocks lying in planes inclined from a perpendicular with respect to the light receiving and light discharging surfaces, and forming reflecting surfaces, substantially as described. 7th. In an illuminating structure, a panel comprising transparent strips arranged one above the other, said panel receiving and discharging light through opposite faces of said strips, and said panel having light reflecting surfaces at opposite faces of each said strips, at an angle to such light receiving and light discharging surfaces, said light reflecting surfaces being of greater width than the distance between the two opposite reflecting surfaces of a strip, substantially as described. 8th. In an illuminating structure, a panel formed of a series of transparent blocks arranged one in contact with another in permanent relation, and a transparent sheet fitted upon one face of said panel in contact with said blocks, said panel having opposite light receiving and light discharging surfaces, and the contacting faces of the blocks lying in planes transverse to the light receiving and light discharging surfaces, and forming reflecting surfaces, substantially as described. 9th. In an illuminating structure, a panel formed of a series of transparent blocks arranged one in contact with another in permanent relation, and transparent sheets fitted upon the faces of said panel in contact with said blocks, said panel having opposite light receiving and light discharging surfaces, and the contacting faces of the blocks lying in planes transverse to the light receiving and light discharging surfaces, and forming reflecting surfaces, substantially as described.

No. 65,077. Refrigerating Apparatus.
(*Appareil réfrigérant.*)

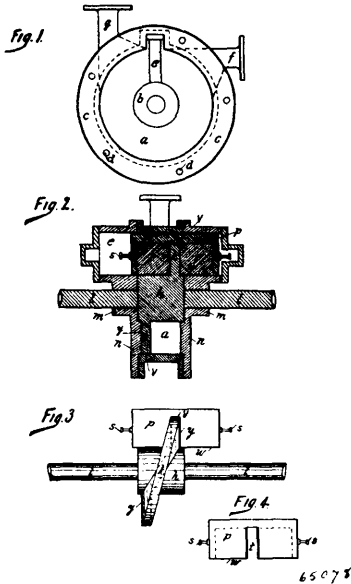


William Wellington Harris, London, Middlesex, England, 23rd November, 1899; 6 years. (Filed 11th April, 1899.)

Claim.—1st. An intermittently acting absorption refrigerating apparatus, the liquifier of which contains pure liquified anhydrous ammonia or like gas in greater quantity than the amount which passes from the combiner to the liquifier each time the combiner is heated. 2nd. The hereinbefore described process for filling the liquifier of absorption apparatus with pure liquified anhydrous ammonia or like gas in greater quantity than the amount of gas which passes from the combiner to the liquifier each time the combiner is heated. 3rd. The pump swivelling on an axis and adapted to be used either as a force pump or an exhausting pump, substantially as hereinbefore described. 4th. The combination of the combiner, the liquifier, the pump, the conical plug valve at the bottom of the pump barrel, the corresponding valve seat in which this plug

rests, a port in the valve seat from which a pipe passes to the combiner, a second port in the valve seat from which a pipe passes to a vessel containing ammonia solution, the pump inlet and outlet valves carried at the top of the conical plug and the passages through the plug from below the inlet and outlet valves to ports in the side of the plug by which the exhaust valve can be put into connection with one port in the conical valve seat and the delivery valve with the other port, and so that by giving a partial turn to the pump barrel the connections may be reversed.

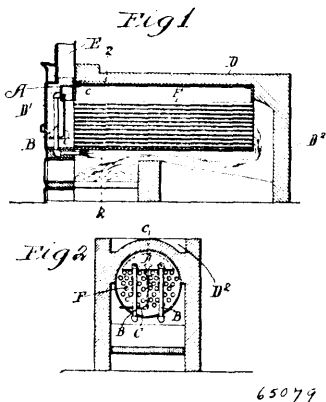
No. 65,078. Rotary Pump. (Pompe rotatoire)



Alfred Ernest Luttrell, Launceston, Tasmania, 23rd November, 1899; 6 years. (Filed 8th July, 1899.)

Claim.—1st. A rotary pump, having a circular chamber, an inlet and an outlet communicating with said chamber, a helical disc journaled in said chamber, and a sliding stop operatively connected with said disc, substantially as described. 2nd. A rotary pump, having a circular chamber, an inlet and an outlet communicating with circular chamber, a helical disc journaled in said chamber, and a sliding stop operatively connected with said disc by means of a rectangular slot in which said disc engages, the edge of the helical disc forming a joint with the inside periphery of the said chamber, substantially as described. 3rd. A rotary pump having a circular chamber, an inlet and an outlet communicating therewith, a helical disc journaled in said chamber, and a sliding stop operatively connected with said disc by means of a rectangular slot in which said disc engages, the edge of the helical disc forming a joint with the inside periphery of the said chamber, said sliding top having a rectangular passageway therethrough, substantially as described.

No. 65,079. Furnace. (Fournaise.)

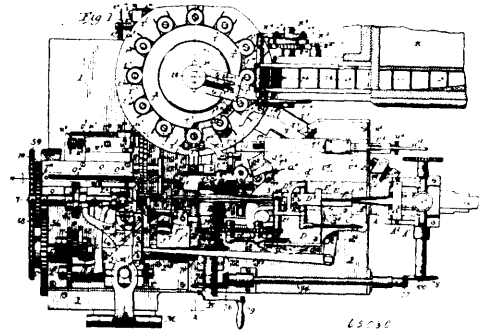


Dennis H. Burns, Chicago, U.S.A., 23rd November, 1899; 6 years. (Filed 8th July, 1899.)

Claim.—1st. In combination with a furnace and a return flue boiler therein, of a hood consisting of connected top and inner and

outer side walls, located between the front wall of the furnace and the front flue sheet of the boiler, above the uppermost line of flues of said boiler, said hood being of such size as to be entirely contained within the circumference of the front end of the boiler, and arranged with its open side or mouth directed downwardly, two return pipes opening into the hood through the outer wall thereof, and leading downwardly into the combustion chamber, and directed rearwardly at their lower ends substantially in line with the lower side of the boiler, and a pipe leading from the boiler provided with laterally separated nozzles adapted to deliver steam under pressure to the interior of the hood adjacent to the upper ends of said return pipes. 2nd. In combination with a furnace and a return flue boiler therein, of a hood located between the front wall of the furnace and the front flue sheet of the boiler, and above the uppermost line of flues of said boiler, said hood consisting of a connected inner and outer side and top walls, the lower side of said walls of the hood being horizontal, and located at such distance apart as to provide a relatively wide downwardly opening mouth for said hood, two return pipes opening into the interior of the hood through the outer wall thereof and above the level of the uppermost line of flues of the boiler, and leading downwardly and directed at their extreme lower ends rearwardly into the combustion chamber, and a pipe leading from the boiler provided with laterally separated nozzles adapted to deliver steam under pressure to the interior of the hood adjacent to the upper ends of said return pipes.

No. 65,080. Machine for Making Mouth Piece Cigarettes. (Machine pour faire des portes-cigarettes.)



James Albert Bonsack, Philadelphia, Pennsylvania, U.S.A., 23rd November, 1899; 6 years. (Filed 30th May, 1899.)

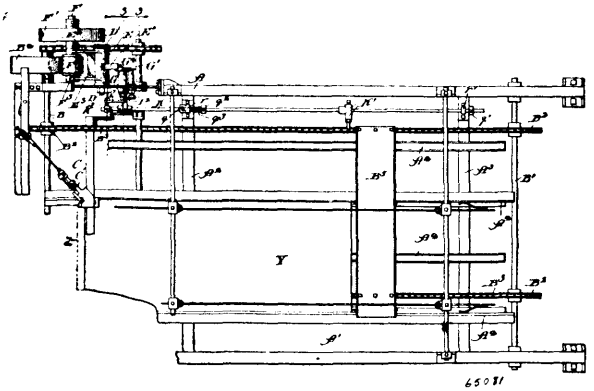
Claim.—1st. The combination of mechanism for forming a continuous tube from a web, mechanism for severing from the continuous tube sections of the desired length, mechanism for cutting and winding blanks from a web of reinforcing material, and mechanism for inserting the wound blanks into the ends of the tubular sections, substantially as set forth. 2nd. The combination of mechanism for making a continuous tube by uniting the edges of a web, mechanism for severing therefrom tubular sections of definite length, mechanism for forming blanks from a web of reinforcing material, mechanism for winding each blank into tubular formation, and mechanism for inserting a wound blank into one end of each of the tubular sections, substantially as set forth. 3rd. The combination of mechanism for forming a continuous tube from a web by lapping its edges so as to form a longitudinal seam, mechanism for severing the continuous tube into tubular sections of equal length, mechanism for severing blanks from a continuous web of reinforcing material, mechanism for winding the blanks into tubular form, mechanism for inserting a blank into one end of each tubular section, and means for regulating the longitudinal seam with respect to the position of the outer end of the wound blank, substantially as set forth. 4th. The combination of mechanism for severing from a continuous tube tubular sections of substantially equal length, mechanism for cutting blanks from a web of reinforcing material and winding them into tubular form, mechanism for inserting a tubular blank into one end of each tubular section, and mechanism for introducing filling material into the opposite end of the said section, substantially as set forth. 5th. In a cigarette machine, the combination of wrapper forming and seaming mechanism for making a continuous tube by folding into tubular form a web of wrapper material, a knife for severing the continuous tube into sections of equal length, a carrier for the severed sections, means for cutting blanks from a web of reinforcing material, a winding spindle for rolling the blanks into tubular form, mechanism for inserting rolled blanks into the severed tubular sections, a filler forming mechanism, and mechanism for inserting the fillers into the tubular sections, substantially as set forth. 6th. In a cigarette machine, the combination of wrapper forming and seaming mechanism for making a continuous tube by folding into tubular form a web of wrapper material, a knife for severing the continuous tube into sections of equal length, a carrier for the severed sections, means for cutting blanks from a web of reinforcing material, a winding spindle for rolling the blanks into tubular form, mechanism for inserting rolled blanks into the severed tubular sections, a tobacco feed, a compressing device, a filler forming mold,

and mechanism for inserting the fillers into the tubular sections, substantially as set forth. 7th. In a cigarette machine, the combination of mechanism for making a continuous tube from a web of wrapper material, a travelling knife for severing the continuous tube into sections of equal length, a carrier for the severed tubular sections, knives for cutting blanks from a web, a spindle for rolling the blanks into tubular form, mechanism for inserting the rolled blanks into ends of the severed tubular sections, mechanism for inserting previously prepared fillers into the opposite ends of said tubular sections, and a final shaping device, substantially as set forth. 8th. In combination with a winding spindle, mechanism for intermittently feeding flexible material, such as paper, from a reeled web, knives for severing from the paper a direct and also a reversed blank, and means for rotating the reversed blank, and means for feeding the reversed blank, after rotation, to the winding spindle, substantially as set forth. 9th. In combination with a winding spindle, intermittently driven rolls for feeding flexible material, such as paper, knives for severing from the paper a direct and also a reversed blank, means for rotating the reversed blank, means for feeding the reversed blank, after rotation, to the winding spindle, and means for removing, endwise from the winding spindle, each blank after being wound thereupon, substantially as set forth. 10th. In combination with a winding spindle, means for feeding a web of paper, a knife for separating, at an angle of preferably forty-five degrees, a double blank from the web, a second knife for dividing the double blank into two single blanks, means for rotating one of the blanks, and means for feeding the rotated blanks to the winding spindle, substantially as set forth. 11th. The combination with means for drawing a length of paper from a web, of a knife for separating, at an angle of preferably forty-five degrees, a double blank from the web, a second knife for dividing the double blank, at a right angle to its length, into two equal single blanks, and means for rotating one of the blanks, substantially as set forth. 12th. In a cigarette machine, the combination of a continuous tube forming mechanism for severing the continuous tube into cigarette lengths, a carrier for the cigarette tubes, a winding spindle, means for intermittently feeding a length of paper from the web to the winding spindle, a knife for cutting, at an angle of preferably forty-five degrees, a double blank from the web, a second knife for dividing the double blank into two blanks, means for rotating one of the blanks, means for feeding the rotated blank to the winding spindle, and means for removing from the spindle each wound blank, and inserting it into one end of a cigarette tube, substantially as set forth. 13th. In a cigarette machine, the combination of mechanism for forming a continuous tube of a web of wrapper material, a knife for severing the continuous tube into sections suitable for cigarette tubes, mechanism for automatically inserting a mouthpiece into one end of a cigarette tube, and mechanism for inserting a filler into the other end of said cigarette tube, substantially as set forth. 14th. In a cigarette machine, the combination of mechanism for forming a continuous tube of a web of wrapper material, a knife for severing the continuous tubes into sections suitable for cigarette tubes, mechanism for automatically cutting and winding severed blanks from a web of material to form mouthpieces and inserting a mouthpiece into one end of each cigarette wrapper, automatic mechanism for separating from a mass of tobacco equal quantities thereof, pressing and forming it into fillers and inserting a filler into the opposite end of each cigarette wrapper, substantially as set forth. 15th. In a cigarette machine, a mouthpiece forming mechanism consisting of the following elements in combination, intermittently operated feed rolls for the mouthpiece material, a table over which the material passes, knives for cutting the material into blanks, one of which blanks is reversed, means for rotating the reversed blank, a secondary feed mechanism, and a winding spindle, substantially as described. 16th. In a cigarette machine, a mouthpiece-forming mechanism consisting of the following elements in combination, intermittently operated feed rolls for the mouthpiece material, a table over which the material passes, knives for cutting the material into blanks, one of which blanks is reversed, a cover plate for holding the material while being cut, means for rotating the reversed blank, a secondary feed mechanism, and a winding spindle, substantially as described. 17th. In a mouthpiece forming mechanism for cigarette machines, the combination of a table, cutting blades thereon, knives set at an angle to each other and adapted to co-act with the cutting blades, a pin extending through the table and situated between the cutting blades, and means for rotating the pin, substantially as set forth. 18th. In a mouthpiece forming mechanism for cigarette machines, the combination of a table, cutting blades thereon, knives set at an angle to each other and adapted to co-act with the cutting blades, a cover plate above the table, a pin extending through the table, and means for rotating the pin in one direction only, substantially as set forth. 19th. In a mouthpiece forming mechanism for cigarette machines, the combination of a table, cutting blades secured thereon, knives set at an angle to each other and adapted to co-act with the cutting blades, a cover plate above the table, a pin extending through the table, a rotatable button in the cover plate above the pin, and means for rotating the pin, substantially as set forth. 20th. In a mouthpiece forming mechanism for cigarette machines, the combination of a table, cutting blades secured thereon, knives having their cutting edges set at an angle to each other and adapted to co-act with the cutting blades, a cover plate above the table, a pin extending through the table, a rotatable button in the cover plate above the pin, and means for rotating the pin, substantially as set forth. 21st. In a mouthpiece forming

mechanism for cigarette machines, the combination of a table, cutting blades thereon, knives adapted to co-act therewith, a cover plate above the table, a pin extending through and above the table, a rotatable button in the cover plate projecting below the bottom of the cover plate, means for lowering the button into contact with the pin, and means for rotating the pin, substantially as set forth. 22nd. In a mouth piece, forming mechanism for cigarette machines, the combination of a table, cutting blades thereon, knives placed at an angle to each other and adapted to co-act therewith, a cover plate, a rotating pin extending through and above the table, a rotatable button in the cover plate and projecting below it, means for raising and lowering the cover plate, a secondary feeding device, and a winding spindle, substantially as set forth. 23rd. In a mouth piece mechanism for cigarette machines, the combination of a winding spindle having a stop, means for engaging and disengaging said stop, and means for rotating the spindle and varying its speed of rotation, whereby the spindle is caused to start to revolve slowly and gradually increase its speed, substantially as set forth. 24th. In a mouth piece forming mechanism for cigarette machines, the combination of a winding spindle having a stop, a rocking lever having a finger adapted to engage the stop on the winding spindle, means for moving the lever into and out of engagement with the stop, and means for rotating the spindle, substantially as set forth. 25th. In a mouth piece forming mechanism for cigarette machines, the combination of a constantly revolving shaft, a crank thereon, a rack bar connected to and operated by the crank, a clutch member oscillated by the rack bar, a pulley carrying the second clutch member and adapted to be rotated in one direction, and a winding spindle rotated by the pulley, substantially as set forth. 26th. In a mouth piece forming mechanism for cigarette machines, the combination of a shaft, a crank thereon, a rack bar connected to and operated by the crank, a clutch member oscillated by the rack bar, a pulley carrying the second clutch member and adapted to be rotated in one direction, a winding spindle rotated by the pulley, and a device for stopping the winding spindle irrespective of the rotation of the pulley, substantially as set forth. 27th. In a cigarette machine, the combination of a cigarette tube carrier, a sleeve on one side thereof, a mouth piece winding spindle within the sleeve, an ejector surrounding the winding spindle, a revolving spindle on the opposite side of the tube carrier, and means for moving the revolving spindle in the axial line of the sleeve and winding spindle, whereby the end of the said revolving spindle is caused to enter one end of the cigarette tube and push the other end of said tube into the mouth of said sleeve, substantially as set forth. 28th. In a cigarette machine, the combination of a cigarette tube carrier, a sleeve on one side thereof, a revolving spindle on its opposite side, a finger, and means for moving the revolving spindle longitudinally in the axial line of the sleeve, and into one end of a cigarette tube, substantially as set forth. 29th. In a cigarette machine, the combination of a cigarette tube carrier, a fixed sleeve on one side thereof, a spindle on the opposite side adapted to revolve, and also to move longitudinally in the axial line of the fixed sleeve, and a second sleeve q' , near the end of the spindle, movable endwise, substantially as set forth. 30th. In a cigarette machine, the combination of a cigarette tube carrier, a fixed sleeve on one side thereof, a spindle on the opposite side adapted to revolve and also to move longitudinally in the axial line of the fixed sleeve, a thimble on the end of the spindle, a second sleeve movable endwise on the said spindle, back of the thimble, and a finger q^{13} , substantially as set forth. 31st. In a cigarette machine, in combination with the tubular support Q, a cylindrical slide arranged to move therein, a longitudinally movable spindle passing axially through and adapted to revolve within said slide, a collar having fingers fitting in slots or grooves in the slide, and means for moving the spindle and the slide endwise, substantially as set forth. 32nd. In a cigarette machine, the combination of a tubular support, a cylindrical slide arranged to move therein, a revolving spindle passing axially through the slide, means for moving the spindle and slide endwise, a collar within the tubular support provided with fingers which fit in slots or grooves in the slide, the said collar having means whereby it may be rotated for the purpose of rotating the slide around the spindle, and a finger pivoted to the slide and rotatable with it, substantially as set forth. 33rd. In combination with a carrier for supporting cigarette tubes, a rotating spindle adapted to be moved into one end of a cigarette tube for rotating said tube, and means for engaging with the seam of the tube to stop rotation, substantially as set forth. 34th. In a tobacco feed mechanism for cigarette machines, the combination of a hopper, a toothed feed cylinder rotating therein at one side, and a hopper bottom travelling towards the feed cylinder, substantially as set forth. 35th. In a tobacco feed mechanism for cigarette machines, the combination of a hopper, a toothed feed cylinder rotating therein, a travelling endless apron forming the bottom of the hopper, and means for driving the apron, substantially as set forth. 36th. In a tobacco feed mechanism for cigarette machines, the combination of a hopper, a toothed feed cylinder rotating therein, a travelling endless apron forming the bottom of the hopper, rollers around which the apron runs, one roller being in proximity to the cylinder, and means for driving the roller, substantially as set forth. 37th. In a cigarette machine, the combination of a tobacco feed belt having partitions attached thereto, a driving rollers around which the belt passes, a cam plate and a ratchet plate both fixed to the shaft of the driving roller, a curved rack turning on the said shaft and having a pawl to engage the ratchet plate, a vibrating

door, an arm on the shaft of the vibrating door being adapted to be operated by the cam plate, and means for oscillating the curved rack, substantially as set forth. 38th. In a cigarette machine mechanism, an intermittently moving roller and a segment, between which roller and segment the cigarette is rolled and the mouth piece is finally shaped, and means for delivering the cigarette to said roller and segment, substantially as set forth. 39th. In a cigarette machine mechanism, stationary delivering frame, a frame Y adapted to move in a circulatory path within said frame for moving the cigarettes away from the carrying mechanism, an intermittently moving roller and a segment between which roller and segment the cigarette is finally shaped, substantially as set forth. 40th. In a cigarette machine mechanism for printing in bronze upon a web of wrapping material, the combination of a bronze powder reservoir and web cleaning brushes, the reservoir being placed under said brushes, whereby the surplus bronze powder is swept back to the reservoir and saved, substantially as set forth. 41st. In cigarette machine mechanism for printing in bronze upon a web of wrapper material, the combination of the following elements: a printing device, a receptacle for bronze powder, a wheel rotating therein, a belt for carrying the bronze powder from the wheel and depositing it on the printed surface of the web, and brushes for removing superfluous powder from said web, substantially as set forth. 42nd. In combination with a mould carrying wheel, a series of fixed mould sections secured thereon, a series of movable mould sections sliding on said mould carrying wheel, means for sliding a movable section in one direction to open the mould, a wiping mechanism adapted to be inserted in the opened mould, and a yielding cam arranged to close the movable section upon or against the wiper, substantially as set forth. 43rd. The combination, in a mould wiping mechanism, of a plate having a head on one end and adapted to be advanced into a mould, a cleaning belt, and means for moving said belt, substantially as set forth. 44th. The combination, in a mould wiping mechanism, of a plate having a head on one end and adapted to be advanced into a mould, a cleaning belt arranged to pass over the head and around a roller, and means for rotating the roller and moving the cleaning belt upon the withdrawal of the wiper from the mould, substantially as set forth. 45th. The combination, in a mould wiping mechanism, of a plate having on one end a head and adapted to be advanced into a mould, a cleaning belt, means for moving the cleaning belt, upon the withdrawal of the wiper from the mould, and a brush for cleaning the belt, substantially as set forth. 46th. The combination, in a mould wiping mechanism, of a plate having on one end a head and adapted to be advanced into a mould, a cleaning belt adapted to pass over the head and around a roller, means for rotating the roller and moving the cleaning belt upon the withdrawal of the wiper from the mould, and a brush for cleaning the belt, substantially as set forth. 47th. The combination, in cigarette making machinery, of a mould wiping mechanism, a cleaning belt, and means to advance a clean portion of the belt after each wiping operation, substantially as set forth. 48th. The combination in a mould wiping mechanism, of a cleaning belt, adapted to pass over a suitable support, and means, operated by the movement of the brush carrier, to advance a clean portion of the belt after each wiping operation, substantially as set forth. 49th. In cigarette making machinery, a mould wiping mechanism, a cleaning belt and means for giving the belt side movement in the mould for the purpose of cleaning the same, substantially as set forth. 50th. In cigarette making machinery, a mould wiping mechanism, a cleaning belt, and means for moving the belt in the mould for the purpose of cleaning the same, substantially as set forth. 51st. In cigarette making machinery, a support for the end of a cigarette tube having a hole of less diameter than the said tube formed therein and through which the cigarette tube is charged, the outer end of said hole, for a suitable distance, being of diameter substantially equal to that of said cigarette tube and then flared, substantially as set forth. 52nd. In a cigarette machine, the combination of mechanism for automatically forming a mouth piece, mechanism for automatically inserting the mouth piece into one end of a cigarette tube, and mechanism for inserting a filler into the other end of said cigarette tube, substantially as set forth. 53rd. In a cigarette machine, the combination of positively operated feed rolls for drawing a web of wrapper paper from a reel, wrapper forming devices, and crimping wheels having a speed of rotation greater than that of the feed rolls, substantially as set forth. 54th. In a cigarette machine, the combination of feed rolls and means for delivering the web of wrapper paper to said rolls in a different plane from, or out of line with, the plane of contact between said rolls, whereby the web of wrapper paper is carried and tensioned against one of said rolls, before passing through said feed rolls, substantially as set forth. 55th. In a cigarette machine, the combination of a looped ejector O¹, a slotted sleeve O², and a winding spindle P, substantially as set forth. 56th. In a cigarette machine, the combination of an ejector O³ looped and slotted to form a guide for the point of the mouth piece blank as it is inserted into the winding mandrel, a slotted sleeve O⁴, and a winding spindle P, substantially as set forth. 57th. In a mouth piece inserting mechanism for a cigarette machine, devices for holding the wrapper tube during the time the mouth piece is being inserted, and a yielding pusher for preventing the crushing of the wrapper tube, substantially as set forth.

No. 65,081. Feed Mechanism for Box Blank Material.
(*Mécanisme d'alimentation pour blanc de boîtes.*)



William P. Healy, assignee of Frederick Peter Rosback, both of Chicago, Illinois, U.S.A., 24th November, 1899; 6 years. (Filed 6th June, 1899.)

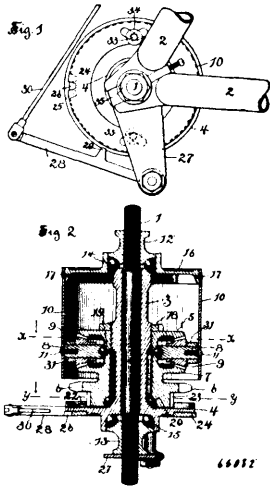
Claim.—1st. The combination with the feed belt, and regular main feed mechanism therefor, of preliminary feed mechanism operating without interference from the main feed mechanism to drive the belt comprising in combination a drive shaft, driving gear between said shaft and the belt, a stop projecting from and movable with the belt, and disengaging means for said gear in the path of said stop, said stop and disengaging means being relatively adjustable, substantially as and for the purpose set forth. 2nd. The combination with the feed belt and regular main feed mechanism therefor, of preliminary feed mechanism, operating without interference from the main feed mechanism to drive the belt, comprising in combination a drive shaft, driving gear between said shaft and the belt, a stop projecting from and movable with the belt, and adjustable disengaging means for said gear in the path of said stop, substantially as and for the purpose set forth. 3rd. The combination with the feed belt, preliminary feed drive shaft, driving gear between said shaft and belt, of a stop carried by the belt, gear disengaging mechanism, a longitudinally movable and laterally turning shoulder piece connected with said gear disengaging mechanism and extending into the path of said stop to be engaged and moved thereby to operate the gear disengaging mechanism, and means for turning the shoulder piece out of the path of the stop in said movement, substantially as and for the purpose set forth. 4th. The combination with the feed belt, preliminary feed drive shaft and driving gear between said shaft and belt, of a stop carried by the belt, gear disengaging mechanism, a longitudinally and axially movable rod connected with said gear disengaging mechanism, and a shoulder piece on said rod to extend into the path of said stop and operate, substantially as and for the purpose set forth. 5th. The combination with the feed belt, preliminary feed drive shaft and driving gear between said shaft and belt, of a stop carried by the belt, gear disengaging mechanism, a longitudinally and axially movable rod connected with said gear disengaging mechanism, and an adjustable shoulder piece on said rod to extend into the path of said stop and operate, substantially as and for the purpose set forth.

No. 65,082. Bicycle. (*Bicycle.*)

Fred Pearly Snow, Lynn, Massachusetts, U.S.A., 24th November, 1899; 6 years. (Filed 12th April, 1899.)

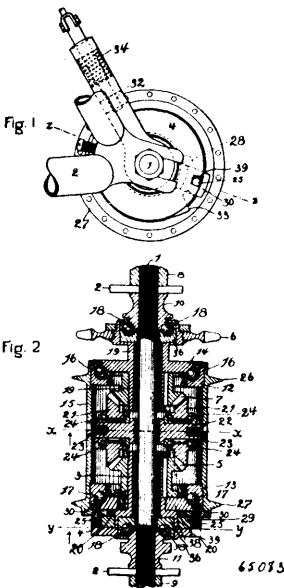
Claim.—1st. A stationary axle, a sleeve and a gear wheel, which are connected to rotate in unison on said axle, a sprocket wheel and a gear wheel, which are connected to rotate in unison on said sleeve, a rotary spider on said sleeve, and a pinion, which is journalled on said spider, and continually engages both said gear wheels, in combination with a hub shell, which is made fast to the spider, and alternate locking mechanism, whereby all the rotary parts of the hub may be fastened to revolve in unison, and whereby the first mentioned gear wheel may be fastened so as not to rotate at all, substantially as and for the purpose specified. 2nd. In the driving wheel of a bicycle or other like vehicle, an axle that is made fast to the frame of such vehicle, a sleeve which is rotatable on that axle, a sprocket wheel and a gear wheel, which are united with each other, and are rotatable on said sleeve, a stationary gear wheel on said sleeve, a spider that is rotatable on said sleeve, and a pinion, journalled on said spider, and continually engaging said gear wheels, in combination with a rotary cylindrical shell, made fast to said spider, and mechanism for locking said sleeve alternately to the sprocket wheel and to the frame of the vehicle, substantially as and for the purpose specified. 3rd. A stationary axle, a rotary sleeve thereon a sprocket wheel and a gear wheel, connected to rotate in

unison on said sleeve, a stationary gear wheel on the same sleeve, a spider that is rotatable on said sleeve, a pinion, journalled on said



spider, and engaging both said gear wheels, a rotary shell, made fast to said spider, a notched flange on said sleeve, and one or more pawls mounted on said flange, and adapted to engage the sprocket wheel, in combination with a notched cam, actuating said pawls, and a dog to catch said flange and said cam, substantially as and for the purpose specified. 4th. A stationary axle, a sleeve and gear wheel, which are connected to rotate in unison on said axle, a sprocket wheel and a gear wheel, which are connected to rotate in unison on said sleeve, a pinion, which meshes continually with both said gear wheels, and a hub shell, to which the journal of said pinion is made fast, in combination with alternate locking mechanism, substantially as and for the purpose specified.

No. 65,083. Bicycle. (Bicycle.)

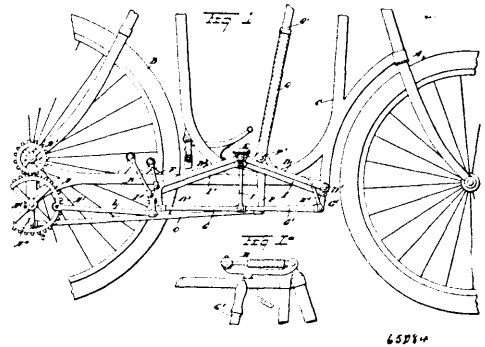


Fred Pearly Snow, Lynn, Massachusetts, U.S.A., 24th November, 1899; 6 years. (Filed 12th April, 1899.)

Claim.—1st. In the hub of a driving wheel, two separate rotary sleeves confined on the axle by two mutually adjustable bearings, and provided each with a fixed bevel gear wheel, in combination with an intermediate bevel pinion attached to the hub shell and continually engaging said gear wheels, substantially as and for the purpose specified. 2nd. A stationary axle, two rotary sleeves thereon, two bevel gear wheels united with said sleeves respectively, and an intermediate bevel pinion which is attached to a hub shell and which continually engages both said gear wheels, in combination with two ball bearings which hold said sleeves and intermediate pinion between them and are mutually adjustable on said axle, substantially as and for the purpose specified. 3rd. A stationary axle, two rotary sleeves thereon, two bevel gear wheels united with said sleeves respectively, an intermediate bevel pinion,

a hub shell attached to the journal of said pinion, and two mutually adjustable bearings which are located between said axle and said sleeves respectively and are adapted to hold said gear wheels continually in mesh with said pinion, in combination with alternate locking mechanism, substantially as and for the purpose specified. 4th. A stationary axle, two rotary sleeves thereon, two bevel gear wheels united with said sleeves respectively, a sprocket wheel united with one of said sleeves, a hub shell, a bevel pinion which is attached to said shell and continually engages both said gear wheels, and two mutually adjustable bearings on said axle which hold said sleeves, gear wheels and pinion between them, in combination with alternate locking mechanism whereby all the rotary parts of the hub may be fastened to rotate in unison with the sprocket wheel, and whereby one of said gear wheels may be locked so as not to rotate at all, substantially as and for the purpose specified. 5th. In the hub of a driving wheel, two rotary sleeves, two bevel gear wheels united with said sleeves respectively, and two intermediate bevel pinions which are attached to the hub shell, in combination with two ball bearings which hold the gear wheels and pinions in continual engagement and which are mutually adjustable on the axle of the wheel, substantially as and for the purpose specified. 6th. In the driving wheel of a bicycle or other like vehicle, a stationary axle, two rotary sleeves thereon, two bevel gear wheels united with said sleeves respectively, a pair of pinions which are journalled to a spider spanning said axle and which continually engage both said gear wheels, in combination with a rotary cylindrical hub shell made fast to said spider, and mechanism for locking one of said gear wheels alternately to the frame of the vehicle and to the hub shell, substantially as and for purpose specified. 7th. In the hub of a driving wheel, an axle, two separable sleeves which are rotary thereon and are provided each with a fixed bevel gear wheel, in combination with an intermediate bevel pinion, all held together with variable closeness of engagement by and between two cone nuts upon the axle, substantially as and for the purpose specified.

No. 65,084. Bicycle. (Bicycle.)



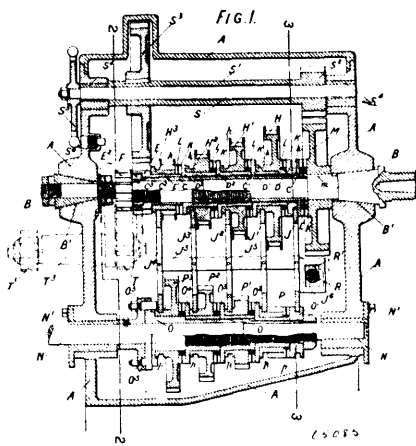
Arthur Doyle, Seattle, Washington, U.S.A., 24th November, 1899; 6 years. (Filed 12th May, 1899.)

Claim.—1st. A driving gear, comprising a primary toggle one end of which has a fixed fulcrum and the other end is mounted on a swinging support, a pedal for the primary toggle, a secondary or auxiliary toggle having one end connected with the driving mechanism, the said end being mounted on a swinging support, and a connection between the other end of the secondary toggle and the end of the primary toggle having the swinging support, substantially as described. 2nd. A driving gear, comprising a primary toggle, having one end pivot fixed, a secondary or auxiliary toggle connected at one end with the driving mechanism, and links for connecting the free end of the primary toggle with said secondary toggle at a point remote from the connection with the driving mechanism, substantially as shown and described. 3rd. A driving gear, comprising a primary toggle having two members pivotally connected with each other, and of which the outer end of one member has a fixed pivot, a secondary toggle having two members pivotally connected with each other, the free end of one member being connected with the driving mechanism, and links intermediate the free end of the primary toggle and the secondary toggle, substantially as shown and described. 4th. A driving gear, comprising a primary toggle having two members pivotally connected with each other, and of which the outer end of one member has a fixed pivot, a toggle having two members pivotally connected with each other, the free end of one member being connected with the driving mechanism, links intermediate the free end of the primary toggle and the secondary toggle, and supporting links for the free ends of the primary and secondary toggles, said supporting links having fixed fulcrums, substantially as shown and described. 5th. A driving gear, comprising a primary toggle having two members pivotally connected with each other, the outer end of one member being fulcrumed on a fixed pivot, the other end of the other member being formed with an angular arm, a link for supporting the outer end of the member having the angular arm, a pair of connected links having pivotal connection with said said angular arm, one of the links

having an angular arm, and a secondary toggle having two members pivotally connected with each other, one member being pivotally connected with the angular arm of the said link and the other member being connected with the driving mechanism, substantially as shown and described. 6th. A driving gear, comprising a primary toggle having two members pivotally connected with each other, the outer end of one member being fulcrumed on a fixed pivot, the other end of the other member being formed with an angular arm, a link for supporting the outer end of the member having the angular arm, a pair of connected links having pivotal connection with said angular arm, one of the links having an angular arm, a secondary toggle having two members, one member being pivotally connected with the angular arm of the said link, and the other member being connected with the driving mechanism, and a connecting link between the pivotal connection and the members of the secondary toggle and the pivotal connection of said pair of links, substantially as shown and described. 7th. A driving gear for bicycles and the like, comprising a primary toggle having two pivotally connected members, the outer end of one member having a fixed fulcrum, and the outer end of the other member being formed with a downwardly extending angular arm, a link fulcrumed at one end on the frame of the machine and pivotally connected with the end of the primary toggle having the angular arm, a pair of links pivotally connected with each other, the outer end of one member of the pair being connected with the downwardly extending angular arm of the primary toggle, and the outer end of the other member of the pair having an upwardly extending angular arm, a secondary toggle having two members pivotally connected with each other, the outer end of one member being pivotally connected with the upwardly extending angular arm of said link, the outer end of the other member of the secondary toggle being connected by a link with the frame of the machine, the said end being also connected with the driving mechanism, a link connecting the outer end of the link having the angular arm, with the member of the primary toggle having the fixed fulcrum, at a point near said fulcrum, and a link extending from the junction of said connected pair of links to one of the toggles, substantially as set forth. 8th. In a bicycle or the like machine, the combination with the frame of the machine, of the primary toggles located on opposite sides of the machine, and each having a fixed fulcrum at one end, pedals connected with the primary toggles, the secondary or auxiliary toggles also located on opposite sides of the machine, pitmen connected with the secondary toggles at one end thereof, crank wheels journaled on each side of the machine, and driven from the said pitmen, the said crank wheels having a driving connection with the drive wheel of the machine, and links connecting the free ends of the primary toggles with the respective secondary toggles, substantially as shown and described.

No. 65,085. Change Speed Gear.

(Engrenage pour changement de vitesse.)

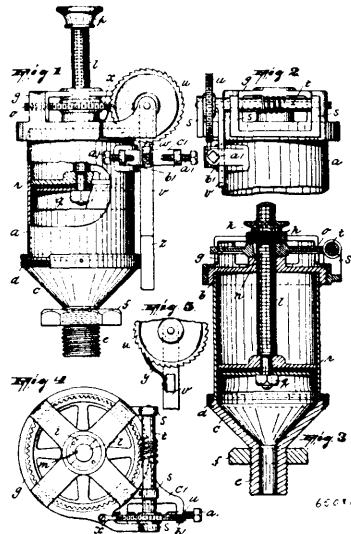


Frank George Hampson, 17 Clitheroe Road, Clapham Road, Surrey, England, 24th November, 1899; 6 years. (Filed 14th April 1899.)

Claim.—1st. In a change speed gear, the combination of a driving spindle, a driving sleeve encircling it, driving gears on that sleeve, a clutch to engage each gear therewith, a driven spindle, a driven sleeve encircling it, a clutch to engage and disengage that driven sleeve and spindle, driven gears on that driven sleeve, and a clutch to engage each gear therewith, the driving and the driven gears being operatively connected, substantially as set forth. 2nd. In a change speed gear, the combination of a spindle, a sleeve encircling it, and a clutch to engage and disengage that sleeve and spindle, gears on that sleeve, and a clutch to engage each gear therewith, substantially as set forth. 3rd. In a change speed gear, the combination of a driving spindle, driving gears on that spindle, a clutch to engage each gear therewith, a driven spindle, driven gears on that driven spindle, and a clutch to engage each gear therewith, the

driving and the driven gears being operatively connected, substantially as set forth. 4th. In a change speed gear, the combination of a driving spindle, a driving sleeve encircling it and movable endwise, driving gears on that sleeve, a clutch to engage each gear therewith, a driven spindle and driven sleeve encircling it and movable endwise, a clutch to engage and disengage that driven sleeve and spindle, driven gears on that driven sleeve, and a clutch to engage each gear therewith, the driving and the driven gears being operatively connected, cross pieces connecting the driving and driven sleeves and connecting in pairs the driving and driven gears, mechanism for moving all the cross pieces simultaneously and also individually, substantially as set forth. 5th. In a change speed gear, the combination of a driving spindle, a driving sleeve encircling it and movable endwise, driving gears on that sleeve, a clutch to engage each gear therewith, a driven spindle and driven sleeve encircling it and movable endwise, a clutch to engage and disengage that driven sleeve and spindle, driven gears on that driven sleeve, and a clutch to engage each gear therewith, the driving and the driven gears being operatively connected, cross pieces connecting the driving and driven gears, and mechanism for moving all the cross pieces simultaneously and also individually, substantially as set forth. 6th. In a change speed gear, the combination with cross pieces operatively connecting the parts supported by the driving and driven shafts, of an eccentric bush, a spindle supported therein and provided with a projection, and clutches appropriated to the several related pairs of driving or driven gears, with which clutches individually said projection is adapted to make operative connection, substantially as described. 7th. In a change speed gear, the combination with cross pieces operatively connecting the parts supported by the driving and driven shafts, of an eccentric bush, a spindle supported therein and provided with a projection having a recess opposite to it, and frames each fitting the spindle, and each connected with an individual cross connection, substantially as and for the purpose specified.

No. 65,086. Lubricator. (Graisseur.)

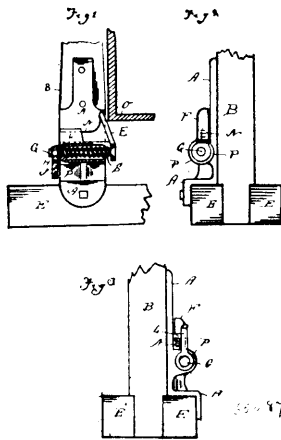


Grant Y. Merrill, Paterson, New Jersey, U.S.A., 24th November, 1899; 6 years. (Filed 3rd July 1899.)

Claim.—1st. In a lubricating device, the combination of a receptacle having a suitable outlet, a piston in said receptacle, a removable cover for said receptacle, a screw penetrating said cover and connected to the piston, sustaining means for said screw operatively and disconnectively engaging the same, a gear arranged above and supported by said cover and also penetrated by and keyed to said screw, and a yoke spanning the cover and the gear, in approximate contact with the upper surface of the latter and carrying said sustaining means, substantially as described. 2nd. In a lubricating device, the combination of a receptacle having a suitable outlet, a piston in said receptacle, a removable cover for said receptacle, a screw penetrating said cover and connected to the piston, a flanged split nut for said screw operatively and disconnectively engaging the same, a gear arranged above and supported by said cover and also penetrated by and keyed to said screw, and a yoke spanning the cover and the gear, in approximate contact with the upper surface of the latter and carrying said split nut, said split nut being screwed into the yoke, substantially as described. 3rd. In a lubricating device, the combination of a receptacle having a suitable outlet, a piston in said receptacle, a removable cover for said receptacle, a screw penetrating said cover and connected to the piston, sustaining means for said screw operatively and disconnectively engaging the same, a gear arranged above and supported by said

cover and also penetrated by and keyed to said screw, a yoke spanning the cover and the gear, in approximate contact with the upper surface of the latter, and carrying said sustaining means, a worm engaging said gear and journaled in the cover, a ratchet wheel connected to said worm, and a weighted lever pivotally connected to the cover and provided with a spring actuated pawl engaging said ratchet wheel, substantially as described.

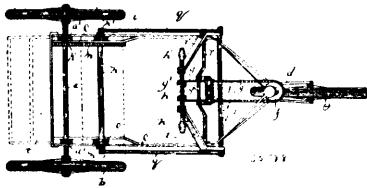
No. 65,087. Waggon (Wagon.)



Charles A. Roberts, Rensselaer, Indiana, U.S.A., 24th November, 1899; 6 years. (Filed 2nd June 1899.)

Claim.—1st. The combination of the standard B and bolster E, plate A having the barrel P and box L, coil spring S seated in said barrel, bolt G carried in said spring, bolt N carried in box L, and having the inclined head F connected with the head of bolt G and carried thereby, and the nut H having a tailpiece J, said nut being turned on the rear end of bolt G, all arranged to operate substantially as and for the purpose set forth. 2nd. In the attachment for wagon standards, the combination of a pair of spring bolts having inclined heads adapted to engage the waggon box, substantially as and for the purpose set forth.

No. 65,088. Tricycle. (Triplet.)



George R. Paine, Bridgewater, Massachusetts, U.S.A., 24th November, 1899; 6 years. (Filed 27th May 1899.)

Claim.—1st. A vehicle of the character specified, comprising driving axle, a seat, two levers fulcrumed side by side on the frame of the vehicle, a handle bar journaled in bearings in the upper ends of said levers, a foot supporting cross bar connecting the lower ends of the levers, driving connections between the levers and the driving axle, a steering fork having a steering wheel, and connections between said fork and the handle bar whereby rotary movements of the handle bar are caused to operate the steering fork. 2nd. A vehicle of the character specified, comprising a driving axle, a seat, two levers fulcrumed side by side on the upper frame of the vehicle, a handle bar journaled in bearings in the upper ends of said levers, a foot supporting cross bar connecting the lower ends of the levers, driving connections between the levers and the driving axle, a steering fork having a steering wheel, a sprocket wheel affixed to the fork, a chain engaged with said sprocket wheel, and having its ends engaged with and adversely wound on the handle bar, and idle pulleys arranged to guide the chain between the fork and handle bar.

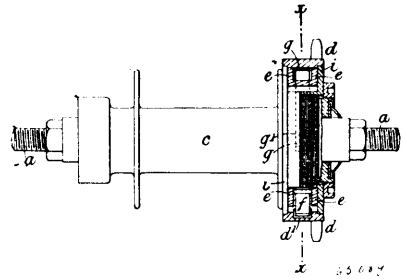
No. 65,089. Clutch for Driving Gear.

(*Engrenage pour roues de commande.*)

James Price, Maidstone, England, 24th November, 1899; 6 years. (Filed 20th April, 1899.)

Claim.—1st. A clutch wherein a band or ring having one or more levers pivoted thereto is arranged between two concentric rotary parts, one of which is mounted loosely upon the other and is provided with one or more cams or shoulders to act upon said lever or levers and thus cause the said band or ring to clutch the other

rotary part and thus operatively connect the two parts, for the purposes specified. 2nd. A clutch, comprising a band or ring arranged



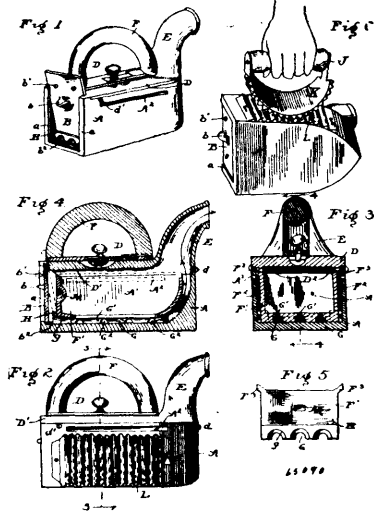
between two concentric rotary parts, one of which is mounted loosely upon the other, a lever or levers pivoted to the said band or ring, one or more cams or shoulders on one of the said rotary parts adapted to act upon the said lever or levers and thus cause the said band or ring to clutch the other rotary part, and suitable means for temporarily preventing engagement of the said shoulder or shoulders with the said lever or levers, for the purposes specified. 3rd. A clutch, comprising a band or ring arranged between the hub of a driving wheel and a toothed wheel or sprocket wheel mounted loosely upon the said hub, levers pivotally connected to the said band or ring, and a cam or shoulders on the said toothed wheel or sprocket wheel adapted, when the said wheel is rotated in either direction, to turn the corresponding lever about its pivot and thus cause the said band or ring to clutch the hub, for the purposes specified. 4th. Driving gear constructed with a clutch such as is hereinbefore described, so that the inner rotary part is free to rotate independently of the outer rotary part, but will be connected therewith through the said clutch when motion is imparted in either direction to the outer rotary part, for the purposes specified. 5th. Driving gear for cycles constructed with a clutch such as is hereinbefore described, so that the rear or driving wheel is free to rotate while the pedals are held stationary, but will be connected through the said clutch to the rear wheel of the driving gear both when the pedals are driven forward and when they are driven backward, for the purposes specified. 6th. A clutch, comprising a band or ring carrying two pivoted clamping levers and arranged between the hub of a driving wheel and a toothed wheel or sprocket wheel mounted loosely thereon, a cam or shoulders on the said toothed wheel or sprocket wheel adapted, when the said wheel is rotated in one or the other direction, to engage with one or the other of the said levers, and suitable means for temporarily preventing engagement of the said cam or shoulders with the said levers while the said toothed wheel or sprocket wheel is held stationary, substantially as hereinbefore described and for the purposes specified. 7th. A clutch, comprising a band or ring arranged between two concentric rotary, one of which is mounted loosely upon the other, a clutch lever pivoted to the said band or ring and adapted to press against the inner rotary part, and a disengaging lever pivoted to the outer rotary part and operated by an external adjustable device to turn the said band or ring through a small angle relatively to the said outer rotary part and thus temporarily disengage the clutch lever from the inner rotary part, for the purposes specified.

No. 65,090. Sad Iron. (Fer à repasser.)

Edwin E. Crook, Indianapolis, Indiana, U.S.A., 24th November, 1899; 6 years. (Filed 27th October 1899.)

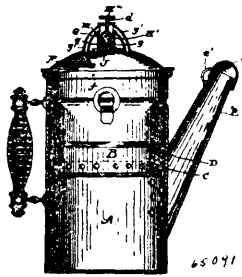
Claim.—1st. The herein described sad iron having a hollow body or chamber open at one end and communicating at the other end with an upwardly projecting flue, the walls of said chamber being slotted at or near the upper edge thereof, a removable open top fire box removably secured within the chamber and adapted to be inserted through the open end of the latter into the hollow body, said fire box having a grooved and slotted bottom as described to permit the ashes falling therein to be blown out through the chimney, said fire box having an offset at its rear end, and outside flanges at or near its upper edge to hold the fire box away from the chamber, whereby air passages will be formed between the chamber and the fire box walls leading from the upper slotted openings in the walls of the chamber to the grooves in the bottom of the fire box, and the sliding or removable door or gate in one end of the iron adapted to be tilted inward to rest upon the offset on the end of the fire box to allow the air to be fed into the grooves from the end of the fire box, substantially as and for the purposes hereinbefore set forth. 2nd. The herein described sad iron having a two-part hollow body or chamber comprised of a lower one-piece bottom with sides which converge into a pointed front with opposite open end, said sides being slotted longitudinally at or near the top edges for a suitable distance, a lid portion having a chimney and an under side flange with bevelled lower edge, said flange fitting inside of the walls of the bottom piece and secured thereto as described, a hollow open top fire box with grooved and slotted bottom and outside flanged rim, said fire box having a projecting

portion or offset at its rear end, and a socket or opening to enable the fire box to be grasped by a lifter, and a door or gate in the end



of the iron adapted to be tilted forward to rest on the offset of the gre box to allow the air to be fed directly from the rear into the grooves in the bottom of the fire box, all substantially as and for the purposes hereinbefore set forth.

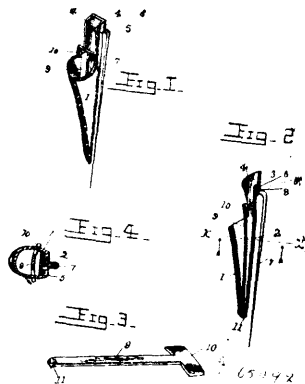
No. 65,091. Tea and Coffee Pot. (Thière et cafetière.)



Edwin E. Crook, Indianapolis, Indiana, U.S.A., 24th November, 1899; 6 years. (Filed 27th October, 1899.)

Claim.—The combination with a tea or coffee pot of a cylinder secured to the top of the pot and connected through its lower portion with the atmosphere, and at its upper portion tubular openings with the interior of the pot, and a plunger or bucket working in the cylinder to force outside air into the pot, substantially as set forth.

No. 65,092. Bouquet Holder. (Porte-bouquet.)

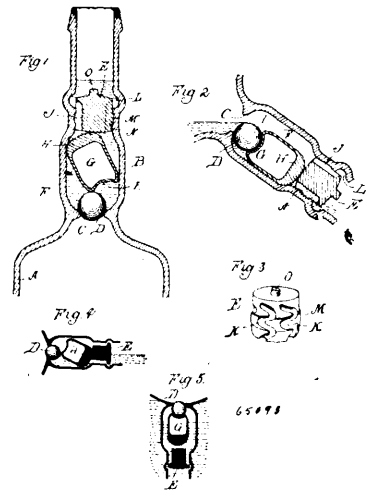


Nathan M. Worley, Victor, Colorado, U.S.A., 24th November, 1899; 6 years. (Filed 27th October, 1899.)

Claim.—1st. A bouquet holder, comprising a hollow body having an open upper end, and a spring clamp housed within the body and having its free end projecting outwardly beyond the open

end of the body, substantially as shown and described. 2nd. A bouquet holder, comprising a hollow body having an open upper end, and provided with an extension projecting beyond the open end thereof, and a spring clamp housed within the body, and having its free end projecting outwardly beyond the open end thereof and engaging with the extension, substantially as shown and described. 3rd. A bouquet holder comprising a hollow body having an open upper end, an extension projecting beyond the open end of the body and provided with opposite longitudinal flanges, a spring clamp housed within the body, the free end of the clamp projecting outwardly beyond the open end of the body and provided with a transverse jaw engaging with the opposite flanges, substantially as shown and described. 4th. A bouquet holder, comprising a hollow body having an open upper end, an extension projecting beyond the open end of the body, and provided with opposite longitudinal flanges, and a spring clamp housed within the body, the free end of the clamp projecting outwardly beyond the open end of the body, and provided with a transverse jaw projecting at opposite sides of the clamp and also extending laterally beyond the opposite flanges, substantially as and for the purpose set forth. 5th. A bouquet holder, comprising a hollow body having an opening formed through the lower end thereof, and a spring clamp, having a shank housed within the body, the lower end of the shank projecting through the opening in the body, and provided with a transverse bend or flange engaging across said lower ends, substantially as shown and described. 6. A bouquet holder, comprising a body having a transverse shoulder provided upon the back thereof, and a substantially L-shaped stick pin having the free end of its transverse head connected to the back and against the shoulder thereof, substantially as shown and described.

No. 65,093. Non-refillable Bottle Stopper. (Bouchon de bouteille non-réemplissable.)



Ernest R. Meyer, Detroit, Michigan, U.S.A., 24th November, 1899; 6 years. (Filed 2nd November, 1899.)

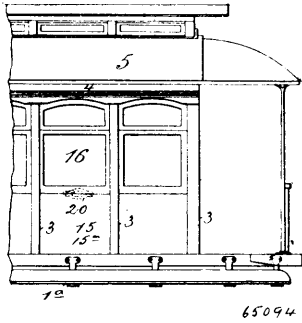
Claim.—1st. In a bottle, a valve seat formed in the neck thereof, a valve therefor, a baffle plug some distance above said seat forming a chamber between, and a float in said chamber weighted at its upper end and adapted when turned in an inclined position in the chamber to wedge the valve in its seat, substantially as described. 2nd. In a bottle, a valve seat in the neck thereof, a valve therefor, a baffle plug secured in the neck above the valve, and a weighted float between the valve and plug, adapted to seat and hold the valve to its seat in different positions of the bottle, substantially as described. 3rd. In a bottle, a valve seat formed in the neck thereof, a baffle plug some distance above said seat forming a chamber between, a float in said chamber having a socket at its inner end and weighted at its outer end, and a ball valve between said float and valve seat, of lesser weight than the weighted end of the float, and adapted to be forced to its seat by the lifting of the inner end of said float, substantially as described. 4th. In a bottle, a valve seat formed in the neck thereof, a valve therefor, a baffle some distance above said seat, a float between the baffle and the valve adapted when the bottle is in an inclined position to wedge the valve to its seat.

No. 65,094. Convertible Railway Car. (Char de chemin de fer.)

John A. Brill, Philadelphia, Pennsylvania, U.S.A., 24th November, 1899; 6 years. (Filed 24th October, 1899.)

Claim.—1st. A car having side openings, defined by upright posts, and grooves formed in the sides of the posts opposing each other, combined with means for closing said openings, comprising a panel

moving bodily in and guided by said grooves, and another panel having trunnions projecting into the grooves by which said latter



panel is guided up and down, the grooves being adapted to bring the panels into perpendicular alinement, substantially as described. 2nd. The combination in a car having side posts provided with a plurality of grooves, of panels movable between the posts, one of said panels moving bodily within the opposing grooves of said posts, the other panel being provided with trunnions or pins which move in the other set of opposing grooves, the latter being free of the grooves, except as to its trunnions, substantially as described. 3rd. The combination in a car having side posts provided with a plurality of grooves, of panels movable between the posts, one of said panels being flexible between its ends and moving bodily within the opposing grooves of said posts, and another panel having sections hinged together, said sections having outwardly extending pins or trunnions which move in the other set of opposing grooves, the latter panel being free of the grooves except as to its trunnions, substantially as described. 4th. A car having side openings, defined by upright posts, and grooves formed in the sides of the posts opposing each other, combined with means for closing said openings comprising a lower panel sliding in the opposing grooves, and another panel guided by trunnions, moving in a separate set of opposing grooves, the grooves being adapted to bring the panels into perpendicular alignment, substantially as described. 5th. A car having side openings defined by upright posts, a plurality of intercommunicating grooves formed in the opposing sides of the posts, combined with means for closing said openings comprising a panel moving bodily in and guided by one set of said grooves, and another panel having trunnions projecting into the other set of grooves by which said latter panel is guided up and down, substantially as described. 6th. A car having side openings defined by upright posts, and a plurality of grooves formed in the opposing sides of said posts, said grooves being as to each post of varying depth combined with means for closing said openings, comprising a panel moving bodily in and guided by the set of grooves of less depth, and another panel having trunnions projecting into the grooves of greater depth by which said latter panel is guided up and down the posts, substantially as described. 7th. A car having side openings defined by upright posts, and a plurality of grooves formed in the opposing sides of each of said posts, said grooves being intercommunicating for a portion of their length and divergent thereafter, combined with means for closing said opening, comprising a panel moving bodily in and guided by one set of said grooves and another panel having trunnions projecting into the other set of said grooves by which said latter panel is guided up and down, the divergent grooves separating the panels in different paths, substantially as described. 8th. A car having side openings defined by upright posts, and a plurality of grooves formed in each of the opposing sides of said posts, said grooves being intercommunicating, and as to each set one groove being wider and the other deeper, combined with means for closing said openings, comprising a panel moving bodily in each of the wide grooves, and another panel having trunnions projecting into the deeper set of grooves by which said latter panel is guided up and down the posts, substantially as described. 9th. A car having side openings defined by upright posts, a plurality of intercommunicating grooves formed in each of the opposing sides of said posts, said grooves being intercommunicating for a portion of their length and diverging from each other thereafter, one of said grooves as to each set being wider and the other deeper, combined with means for closing said opening, comprising a panel moving bodily in and guided by said wider set of grooves and another panel having trunnions projecting into the deeper set of grooves which said latter panel is guided up and down, substantially as described. 10th. A car having one or more side openings defined by upright posts, combined with separate panels adapted to close said opening, means on the opposing sides of said posts for guiding said panels up and down said posts in substantial perpendicular alignment, and further means on said posts adapted to separate said panels and cause them to lie in different planes as said panels are bodily moved upward, substantially as described. 11th. A car having side openings defined by upright posts, pockets or receiving spaces formed above said openings between the posts, a plurality of independent panels

movable between said posts and in said pockets, and means carried by said posts adapted to cause said panels to be brought into substantial perpendicular alinement for a portion of the length of said posts, and further means adapted to allow of a movement of the panels in said pockets and to separate them thereat and to cause them to lie in different planes therein, substantially as described. 12th. A car having side openings defined by upright posts, grooves formed in the opposing sides of said posts, combined with means for closing said openings comprising a set of separate panels, the lower or base panel consisting of an exterior sheet of flexible self-supporting material backed by transversely disposed ribs or cleats movable in the opposing grooves, and an upper panel consisting of two sections hinged together, said sections being provided with means for supporting them in the opposing grooves independently of the base panel, substantially as described. 13th. A car having side openings defined by upright posts, grooves formed in the opposing sides of said posts, combined with means for closing said openings comprising a set of separate panels, the lower or base panel comprising a flexible sheet or body, and an upper panel consisting of two sections hinged together, said sections being provided with means for supporting them in the opposing grooves independently of the base panel, substantially as described. 14th. A convertible car comprising a body having posts, a roof, horns or extensions on said posts under said roof, said posts and horns or extensions having grooves that lie one at the bottom of the other and diverge and pass in separate lines along said horns or extensions, a lower section or panel guided in one pair of grooves, and a sash guided by the other pair of grooves, substantially as described. 15th. A convertible car comprising a body having posts, a roof, horns or extensions on said posts under said roof, said posts and horns or extensions having grooves that lie one at the bottom of the other and diverge and pass in separate lines along said horns or extensions, a lower section or panel guided in one pair of grooves, and a sash guided by the other pair of grooves, said sash having two portions pivotally connected together, substantially as described. 16th. A convertible car comprising a body having side posts, a roof, horns or extensions on said posts under the roof, said posts and horns or extensions having grooves one at the bottom of the other that diverge at the upper part of the posts and pass in separate lines along the horns or extensions, lower sections or panels adapted to slide in one opposed pair of grooves, and a sash having pins adapted to travel in the corresponding pair of grooves and to lie one above the other beneath the roof of the car, substantially as described. 17th. A convertible car comprising a body having side posts, horns or extensions on said posts under the roof, said posts having grooves one at the bottom of the other that diverge at the upper part of the posts and pass in separate lines along the horns or extensions, a lower section or panel adapted to slide in one opposed pair of grooves and a sash having pins adapted to travel in the corresponding pair of grooves and to lie one above the other beneath the roof of the car, said sash being composed of two portions pivotally connected together, substantially as described. 18th. A convertible car comprising a body having side posts, horns or extensions on said posts under the roof, said posts having grooves one at the bottom of the other that diverge at the upper part of the posts and pass in separate lines along the horns or extensions, a lower section or panel adapted to slide in one pair of opposed grooves and composed of flexible pieces, and a sash adapted to be guided by the other pair of grooves, said section or panel and sash being adapted to pass up under the roof, substantially as described. 19th. A convertible car comprising a body having posts, a roof, horns or extensions on said posts under the roof, grooves leading along said posts and horns or extensions, a lower section or panel guided in one pair of grooves, and a sash guided by the other pair of grooves, said sash having two portions pivotally connected together, substantially as described. 20th. A convertible car comprising a body having posts, a roof, horns or extensions on said posts under the roof, a pair of grooves, one lying at the bottom of the other and extending along said posts and horns or extensions, the lower section or panel guided by one pair of grooves and composed of a flexible plate having cleats, and a sash adapted to be guided by the other pair of grooves, substantially as described. 21st. A convertible car comprising a body having posts, a roof, horns or extensions on said posts under said roof, said posts having grooves that lie one at the bottom of the other, and diverge and pass in separate lines along said horns or extensions, a lower section guided in one pair of grooves and a sash guided by the other pair of grooves, a curtain carried by a spring roller and pivotally disposed between a pair of horns or extensions, and grooves in said posts adapted to receive pins or projections extending from said curtain, substantially as described. 22nd. A convertible car comprising a body having posts, a roof, horns or extensions on said posts under said roof, said posts having grooves that lie one at the bottom of the other and diverge and pass in separate lines along said horns or extensions, a lower section or panel guided in one pair of grooves, and a sash guided by the other pair of grooves, the upper edge of the lower section and the lower edge of the sash having a corresponding bead and groove for one part to fit snugly upon the other, substantially as described. 23rd. A convertible car comprising a body having posts, a roof, horns or extensions under the roof on said posts, said horns or extensions having grooves and the posts, a double groove, one lying at the bottom of the other, said grooves being formed by steps 10^a, 10^b in the post, and a strip 12 having steps 12^a, 12^b, secured along the side of the posts, sub-

stantially as described. 24th. A convertible car comprising a body having posts, a roof, horns or extensions under the roof on said posts, said horns or extensions having grooves, and the posts, a double groove, one lying at the bottom of the other, said grooves being formed by steps 10^a, 10^b in the posts, a strip 12 having steps 12^a, 12^b secured along the side of the posts, said posts also having a groove 13 formed by the step 13^a in the strip 12, and a cleat 14 secured upon the face of the post, substantially as described. 25th. The combination of a post or stanchion for a car, having formed therein a single groove comprising a plurality of depressions of varying depth, and a plurality of panels independently movable in said grooves, substantially as described. 26th. As an article of manufacture, the post or stanchion for a car having formed therein two grooves, one opening into or communicating with the other for a portion of their length, and diverging from each other at a point intermediate their ends, substantially as described. 27th. As an article of manufacture, a post or stanchion for a car having formed therein two grooves, one opening into or communicating with the other for a portion of their length and diverging from each other at a point intermediate their ends, one of the grooves being of greater length than the other, substantially as described. 28th. As an article of manufacture, a post or stanchion for a car having formed therein two grooves, one extending to the lower end of the post, the other being located within the former and being of less downward extension, both diverging from each other at a point intermediate their ends, substantially as described. 29th. The combination of a post or stanchion for a car having two grooves formed therein, one of greater width than the other, the latter being located within the former and of greater depth, and panels adapted to move in the separate grooves, substantially as described. 30th. As an article of manufacture, a post or stanchion for a car having two grooves formed therein, one of greater width than the other, the latter being of greater depth and located within the wider groove for a portion of the length of said wider groove, substantially as described. 31st. A car post or stanchion having grooves formed therein, comprising a wide groove extending to the bottom of the post, and a narrower and deeper groove in the wider groove, said latter groove starting from a point above the termination of the wider groove, both grooves being parallel for a portion of their length, and diverging from each other above said parallel portion, substantially as described. 32nd. A car post or stanchion having an enlargement or horn at one end, and grooves formed in said post which are intercommunicating for a portion of their length, and which diverge from each other at and on said horn, substantially as described. 33rd. A car post or stanchion having an enlargement or horn at one end, grooves formed in said post which are intercommunicating for a portion of length, which diverge from each other at said horn, and which are disposed in said horn on the arcs of circles, substantially as described. 34th. A car post or stanchion 3 having an enlargement or horn 8 extending therefrom, and grooves 10, 11 formed therein, the groove 10 being of greater width and extending from the bottom of the post to and along the inner edge of said horn, the groove 11 being within the groove 10 and deeper and extending from a point above the end of groove 10 to and diverging from the latter at the horn, and extending along the horn above the groove 10, substantially as described. 35th. A car post or stanchion 3 having an enlargement or horn 8 extending therefrom, and grooves 10, 11 formed therein, the groove 10 being of greater width and extending from the bottom of the post, to and along the inner edge of the horn on the arc of a circle, the groove 11 being within the groove 10 and deeper and extending from a point above the end of groove 10 to and diverging from the latter at the horn, and extending along the horn above the groove 10 on the arc of a circle for a portion of its length of lesser radius than said groove 10, substantially as described. 36th. A car post or stanchion having a portion extending away from the perpendicular, the post and extension having the two grooves 10 and 11 formed therein, and a certain groove 13, formed in the post between said grooves 10 and 11 and the inner edge of the post, said grooves 13 terminating substantially at the point of divergence of the extension, substantially as described. 37th. A post comprising the part 3, an added horn or extension 8, and grooves 10 and 11 formed in the said post and diverging at and upon said horn, a groove 13 formed in the post and terminating adjacent the point of divergence of grooves 10 and 11, substantially as described. 38th. A post comprising the part 3, an added horn or extension 8, and grooves 10 and 11 formed in said post and diverging at and upon said horn, a groove 13 formed in the post and terminating adjacent the point of divergence of grooves 10 and 11, combined with a curtain fixed adjacent the horn and termination of groove 13, and adapted to have one end moved therein, substantially as described. 39th. A post comprising the part 3, an added curved horn or extension 8, and grooves 10 and 11 formed in said post and diverging at and upon said horn, substantially as described. 40th. A post comprising a part 3 having the steps 10^a, 10^b, stepped strips 12 secured to the face of said parts to form with the steps 10^a, 10^b, grooves therein, and a finishing strip 14 secured to the inside face of the post to form with the strips 12 another groove, substantially as described. 41st. A car post comprising the part 3, a stepped recess formed in the inner transverse face of the post at the top by the riser 3^a and shoulder 3^b, a horn 8 secured to said post and provided with interlocking surfaces to engage with said stepped recess, the horn being flush at its side faces with the side faces of the post and with the riser and shoulder, and grooves on the part 3 continued on the horn, substantially as

described. 42nd. A car having openings and opposing side posts, intercommunicating grooves formed in posts, and panels adapted to move in said grooves, one of said panels moving bodily in one set of the grooves, the other having trunnions moving in the other grooves, substantially as described. 43rd. A car having side openings and opposing side posts, intercommunicating grooves formed in said posts, one of said grooves being deeper than the other, and separate panels, one of which is wider than the other and adapted to move bodily in the shallow grooves, the other having trunnions moving in the deeper grooves, the latter panel being free of the grooves, substantially as described. 44th. A car having side openings and opposing side posts, said posts having grooves formed therein, the grooves being intercommunicating for a portion of their length and divergent thereafter, and separate panels adapted to move in said grooves, substantially as described. 45th. A car having side openings and opposing side posts, said posts having grooves formed therein, the grooves being duplex and intercommunicating for a portion of their length and divergent thereafter, and separate panels adapted to be moved in and brought into vertical alignment in the duplex portion of said groove and separately from each other in the divergent portion, substantially as described. 46th. A car having side openings and opposing side posts, said posts having grooves formed therein, the grooves being duplex or intercommunicating for a portion of their length and divergent thereafter, a lower panel adapted to move bodily in one of said grooves, and an upper sash panel having articulated sections provided with trunnions, said trunnions moving in the other of said grooves with the sash clear of both grooves, substantially as described. 47th. A car having side openings and opposing side posts, said posts having grooves formed therein, the grooves being duplex or intercommunicating for a portion of their length and divergent on curved lines thereafter, a lower panel adapted to move bodily in one of said grooves, and upper sash panel comprising a lower deep and an upper shallow sash both hinged together and provided with trunnions which move in the other groove with both sashes clear of both grooves, substantially as described. 48th. A car, adapted to be converted into an open or closed car by means comprising side sections formed in separate parts, and posts having opposing grooves extending under the roof of the car, said grooves where they lie under the roof being disposed in different horizontal planes, and where they are perpendicularly disposed, or substantially so, being disposed in the same horizontal plane, the separate parts of the side sections standing in alignment in the perpendicular portion of the grooves, and in the separate grooves under the roof, substantially as described. 49th. A car having posts with opposing grooves, and a panel comprising a single flexible sheet or plate of self-supporting material adapted to move in said grooves, substantially as described. 50th. A car having posts with opposing grooves, each of said grooves being in part straight and curved, and a panel comprising a single flexible sheet or plate of self-supporting material adapted to move in the straight and curved portions of said grooves, substantially as described. 51st. A car having posts with opposing grooves, and a flexible sheet or plate of self-supporting material, having longitudinally disposed cleats or ribs secured on one side thereof and adapted to move in said grooves, substantially as described. 52nd. A car having posts with opposing grooves, and a flexible sheet or plate of self-supporting material having longitudinally disposed cleats or ribs spaced apart and secured on one side thereof, and adapted with the sheet to move in said grooves, substantially as described. 53rd. A car having posts with opposing grooves curved in part and a flexible sheet or plate of self-supporting material forming an exterior car panel having longitudinally disposed spaced cleats or ribs secured to said sheet on the inside thereof relative to said curve, substantially as described. 54th. A car having openings therein, grooves disposed about said openings and a single sheet of flexible and self-supporting material adapted to move in said grooves to wholly or partly close said opening and to form an exterior panel of the car, substantially as described. 55th. A car having an opening therein, grooves disposed about said openings, and a flexible sheet of self-supporting material having ribs or cleats secured thereto and adapted to move in said grooves to close said opening, substantially as described. 56th. A car having an opening therein, grooves disposed about said opening, and a flexible sheet of self-supporting material having longitudinally disposed and spaced ribs or cleats secured thereto and adapted to move in said grooves to close said opening, substantially as described. 57th. A flexible sheet metal panel, combined with grooved supports partly straight and partly curved for supporting said panel, and additional means for stiffening said sheet transversely, said means moving in the groove conjointly with the panel, substantially as described. 58th. A flexible sheet metal panel having transversely disposed ribs or cleats secured thereto, combined with guides for movably supporting the said panel, substantially as described. 59th. A flexible panel, composed of a single and homogeneous sheet of metal of sufficient thickness to constitute a self-supporting body, and posts having opposing grooves curved in part for movably supporting the said panel, the panel being adapted to be transversely flexed by the curved portions of the groove and to move freely up and down therein, substantially as described. 60th. A car panel, comprising a single homogeneous sheet of flexible metal having transversely disposed ribs or cleats secured thereto, combined with guides for movably supporting the panel, substantially as described. 61st. A flexible base panel of

self-supporting material having transversely disposed ribs secured on one side, and a flexible fabric secured on the ribs to cover the panel, substantially as described. 62nd. A car having posts with opposed grooves formed therein, a panel of self-supporting material having transversely disposed ribs secured on the inside of the panel, the latter being exposed, a sheet of flexible fabric secured over the ribs, the panel and the ribs working in the grooves, substantially as described. 63rd. A compound sash, comprising the sections 16^a, 16^b, hinged together, the section 16^b being shorter, the sections having side pieces 17^a, trunnions extending from the side pieces of sections 16^a at or near the cross pieces thereof, and a single trunnion extending from the side pieces of section 16^b at or near its cross-piece only, substantially as described. 64th. The combination of grooved posts and a perpendicularly-separable panel 15, 16, the panel 15 having a top rib 18^a, an intermediate and longitudinal bead 16^b on the top rib, and a superposed and medially-located groove in the lower cross-piece of panel 16 to receive the bead, substantially as described. 65th. The combination with the fixed benches 45, the ends of which oppose each other, said ends having the upright bracket 51 having U-shaped bearings, the detachable swinging back 55, and means for rotatably and detachably securing the back in said bearings, substantially as described. 66th. The combination with the fixed benches having the brackets 51, the detachable back 55, having the frames 56 and studs 57 on the frames, enlargements 50 on the brackets, and an open recess in the enlargements to receive the studs, substantially as described. 67th. The combination with the opposing ends of the fixed benches 45, having detachable plates 59 in their said ends adjacent their longitudinal edges, the plates being provided with bearings or recesses opening upwardly, of the detachable bench 53 having the outwardly extending studs 58 on its cross pieces for detachable engagement with the said recesses on the opposing fixed seat ends, substantially as described. 68th. A car having upright posts 3, having the horns or extensions 8, the ventilator rail 9 secured to the inner end of said horn, the panel 4 secured at the outer side of said posts, the car lines secured at their ends to the rail 9 and panel 4, the roof 5 secured to said rail 9 and panel 4, the rail 24 secured to the inner side of the posts adjacent the panel 4, and the inner lining 6 extending between the rails 9 and 24, substantially as described. 69th. A car having transverse seats and side posts at the ends of the seats, said posts defining the sides of openings in the car side extending from the floor upward, the posts having a plurality of opposing grooves extending wholly or in part to the floor, said grooves being exterior to the seat ends, a curtain movable in the inner of said grooves to close the space between the flooring and posts, and a plurality of panels adapted to work in the outer set of grooves to close the said space, both the curtain and panels being independently movable, substantially as described. 70th. The combination with the arms or supports 51 and the back 55, the arms having enlargements 50, upwardly opening recesses 63 in said enlargements, and studs secured to said back for engagement with said recesses, substantially as described. 71st. The combination with the fixed seats 45 of the detachable seat section 52, having the seat 53 and central leg 54, the lugs 58 extending from the ends of the seat 53, one on each side of the centre of each seat, and the plates 59 having the recesses 60 secured to the ends of the seats 45 and adapted to let in the lugs 58 from above, substantially as described. 72nd. The panel *a*, having the rib *a*¹ on its exterior, and grooves 10 and 13 formed in its sides, the post 3 having a shoulder *a*² resting on the rib *a*¹, and having grooves 10, 13 aligning with the rib grooves, and an extension *a*⁴ of the post passing inside of the panel *a*, substantially as described. 73rd. A flexible sheet metal panel having an exterior surface artificially oxidized to conform to the colour scheme of the car, combined with grooved supports partly straight and partly curved for supporting said panel, and additional means for stiffening said panel transversely, said means moving in the grooves conjointly with the panel, substantially as described. 74th. A flexible sheet metal panel having its exterior surface artificially oxidized, said panel having transversely disposed ribs or cleats secured thereto, combined with guides for movably supporting the said panel, substantially as described. 75th. A flexible panel composed of a single and homogeneous sheet of metal of sufficient thickness to constitute a self-supporting body, the exterior surface of said panel being artificially oxidized, and posts having opposing grooves curved in part for movably supporting the said panel, the panel being adapted to be transversely flexed by the curved portions of the groove and to move freely up and down therein, substantially as described. 76th. A car panel comprising a single homogeneous sheet of flexible metal having transversely disposed ribs or cleats secured thereto, the exterior surface of said panel being oxidized, combined with guides for movably supporting the panel, substantially as described. 77th. A flexible sheet of metal of sufficient thickness to constitute a self-supporting body artificially oxidized on the exposed side to conform, without the use of paint, to the colour scheme of the car or other vehicle, combined with grooves for supporting the said sheet, said sheet being adapted to slide into said grooves, substantially as described. 78th. A flexible sheet of self-supporting metal oxidized on the exposed side to conform, without the use of paint, to the colour scheme of the car, ribs secured transversely to said sheet of metal, and grooves in part straight and curved formed in supports for said sheet, substantially as described. 79th. A brass plate or other coloured metal oxidized on its exposed side to conform, without

the use of paint, to the colour scheme of the car, said plate being provided with transversely disposed ribs or cleats, combined with grooves formed in suitable supports for movably guiding said plate, substantially as described. 80th. A self-supporting and flexible plate of brass oxidized on its exposed side to conform, without the use of paint, to the colour scheme of the car, ribs secured transversely to said plate on the side opposite its oxidized surface, and posts having opposing grooves in which said plate and ribs are movable, substantially as described.

No. 65,095. Collar and Cuff Button.

(*Bouton de col et poignet.*)



Fig. 2.

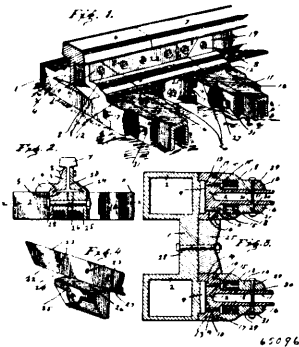


Frank W. Taylor, St. Paul, Minnesota, U.S.A., 24th November 1899; 6 years. (Filed 25th October, 1899.)

Claim.—1st. A collar or cuff button, consisting of a shank provided with a disc button, a cylindrical head, and a bar passed through said cylindrical head, having its ends inclined in opposite directions. 2nd. A collar or cuff button, comprising a shank having opposing flat faces and cylindrical faces between the flat faces, a disc bottom and a cylindrical head, and a bar passed through said head, the end surfaces of the bar having a downward and an outward inclination, as described.

No. 65,096. Rail Joint and Cross Tie.

(*Joint de rail et traverse.*)

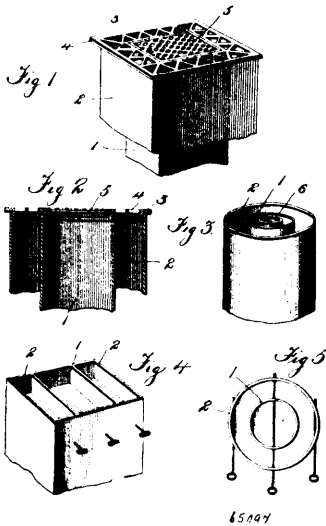


John Kline, Mifflinville, Pennsylvania, U.S.A., 24th November, 1899; 6 years. (Filed 25th October, 1899.)

Claim.—1st. In a device of the class described, the combination with a stationary rail joint member having an upstanding fish plate, and a flange or ledge adapted to support the rail sections, of cross ties having at the ends thereof upstanding ears and adapted to be connected to the stationary member so that the ears may co-operate with the fish plate of the latter member, and a detachable fish plate fitted between the ends of the cross ties and bringing the space there between, substantially as shown and described. 2nd. In a device of the class described, the combination with a stationary rail joint member having an upstanding fish plate, and a longitudinal ledge or flange adapted to support the rail sections, of adjacent cross ties, each tie being provided at its opposite ends with a transversely enlarged head, an upstanding ear provided upon the head, and a detachable fish plate located between the ears of the respective cross ties and provided with a pendant shoulder fitting snugly between the heads of the ties and forming a continuous seat for the flanges of the rail sections, in conjunction with the heads of the ties and the longitudinal flange of the stationary member, substantially as shown and described. 3rd. In a device of the class described, the combination with a stationary rail joint member having an upstanding longitudinal fish plate, and a longitudinal flange or ledge adapted to support the rail sections, of adjacent cross ties having transversely enlarged heads adapted to be connected to the base of the stationary member and provided with upstanding ears adapted to co-operate with the stationary fish plate, and a detachable fish

plate adapted to be fitted between the ears of the adjacent cross ties and provided with a pendant block or shoulder intermediate the ends of the fish plate, said block being adapted to fit snugly between the heads of the adjacent cross ties and the ends of the detachable fish plate resting upon the heads of the cross ties, substantially as shown and described. 4th. The combination with a stationary rail joint member, having a laterally projecting threaded pin or bolt provided with a nut, of a tie provided with an opening adapted to receive the threaded pin or bolt, and a cap pivoted or hinged to the tie and adapted to embrace the nut, substantially as and for the purpose set forth. 5th. The combination with a stationary rail joint member, having laterally projecting threaded pins or bolts provided with nuts, of a tie provided with a transversely enlarged head having openings extending therethrough and located at opposite sides of the tie, caps pivoted or hinged to the opposite side of the head of the tie and provided with sockets adapted to receive the nuts of the respective pins or bolts, and a fastening device passing transversely through the tie and the opposite caps, substantially as and for the purpose set forth.

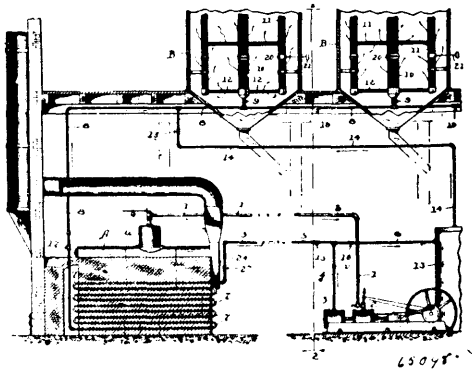
No. 65,097. Heating System. (*Système de chauffage.*)



John Stuart McLraith, Balderson, Ontario, Canada, 24th November, 1899; 6 years. (Filed 8th March, 1899.)

Claim.—1st. A heating system, comprising a hot air flue, and a cold air flue surrounding said hot air flue, each of said flues being open at their ends, substantially as described. 2nd. A register for heating systems, comprising an outer casing having openings for the passage of air heat, and an inner removable section, substantially as described. 3rd. The combination with a hot air flue, and a cold air flue formed outside of said hot air flue, of a sectional damper located within said cold air flue, substantially as described.

No. 65,098. Grain Drying and Cooling Bin. (*Coffre à sécher refroidir le grain.*)

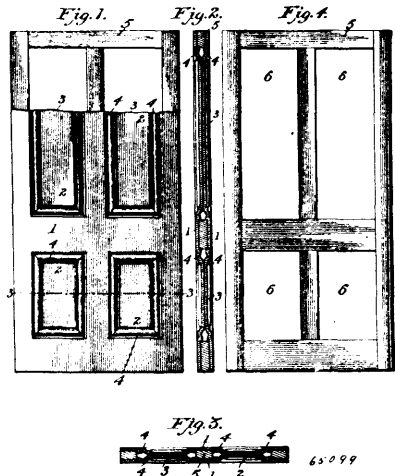


George Russell Gorman, Chicago, Illinois, and Abel Riley Angle, Indianapolis, Indiana, U.S.A., 25th November, 1899; 6 years. (Filed 6th June, 1898.)

Claim.—1st. The combination in a grain treating apparatus, of the furnace and boilers, an air compressor driven from said boilers, coils of pipe arranged within said furnace, a heating drum arranged adjacent thereto and heated therefrom, a pipe running

from said air compressor and connected both with said coils and with said drum, a pipe connected both with said coils and said drum and running past the grain bins, said grain bins, perforated columns therein, said pipe being connected by branches to said column, and valves arranged in the various pipes, whereby the air may be directed through one or both of said heating devices, and any or all of said bins, substantially as set forth. 2nd. The combination in a grain treating apparatus, of the bins, vertical perforated columns within the bins, valves interposed in said columns at intervals whereby the effective height thereof can be varied, air pipes connected to the bottom of said columns, and an air compressor for supplying air to said pipes, said several parts being arranged and operating, substantially as shown and described. 3rd. The combination in a grain treating apparatus, of a furnace and boiler, an air compressor driven therefrom, heating coils arranged within the structure of said furnace, a cold air reservoir suitably located, a pipe leading from the compressing cylinder of said air compressor having branches which lead to said coils and to said reservoir, valves whereby the flow of air can be caused to travel in either direction from said air compressor, pipes leading from said coils and said air reservoir to a common point where they unite, a continuation of one of said pipes past grain bins, said grain bins, perforated columns extending vertically up in said grain bins, connections between said pipe and said columns, and suitable valves interposed in said several pipes whereby the flow of air can be controlled, and whereby either cold or hot air can be driven by means of said air compressor into said perforated columns and thus through the grain in said bins, substantially as and for the purposes set forth.

No. 65,099. Door, Shutter, etc. (*Porte, volet, etc.*)



Lewis A. Hall and Robert H. Munson, Bay Mills, Michigan, U.S.A., 25th November, 1899; 6 years. (Filed 18th August, 1899.)

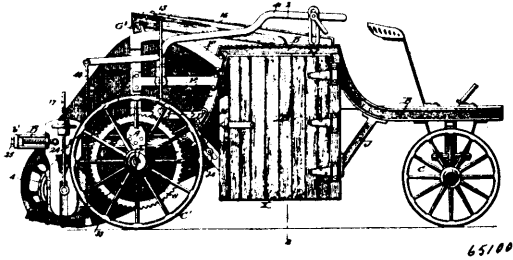
Claim.—1st. A door or like article of manufacture, consisting of a wooden core, two pieces of sheet material arranged back to back respectively upon opposite sides of the frame or core, and adhesive means for tightly joining together the contacting portions of the sheets and the frame or core, substantially as set forth. 2nd. A door or like article of manufacture, consisting of a skeleton wooden frame or core having panel openings therein, two duplicate sheets of paper or pulp material arranged respectively upon opposite sides of the frame or core, and adhesive means for tight joining together the contacting portions of the sheets and the frame or core, substantially as set forth. 3rd. A door or like article of manufacture, consisting of a wooden frame or core, having panel openings therein, two duplicate sheets of paper or pulp material arranged respectively upon opposite sides of the frame or core, said sheets being out of adhesive contact, and adhesive means for tightly joining together the contacting portion of the sheets, and a frame or core, substantially as set forth.

No. 65,100. Street Sweeper. (*Balayeuse de rue.*)

Alvin Brown, Aurora, Illinois, U.S.A., 25th November, 1899; 18 years. (Filed 28th October, 1899.)

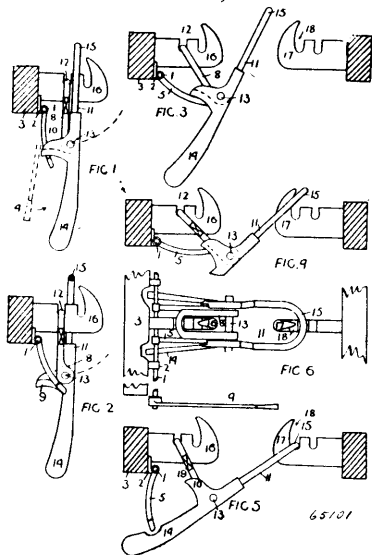
Claim.—1st. The frame work for a street sweeper, consisting of continuous side rails B, having their front and rear ends horizontal, with an upward bend near the front for a suspended dirt chamber, the vertical posts A extended below the side rails B, and having at their lower ends, at a point below the side rails, bearings for the wheel axle, the bars E and D separately bolted in front to the rails B and in the rear to post A, and bearing respectively a lever fulcrum and pinion bearing, and cross bars connecting said side rails and posts substantially as shown and described. 2nd. In a street sweeper, the combination of continuous side rails B bent upwardly

as described, of a suspended dirt chamber attached at its upper end to the upper bend of said rails, and having inclined braces extending



from the lower part of the dirt chamber to the lower part of said side rails, the rear inclined brace having a longitudinal slot in it, an adjusting screw working in line with said slot, and a dirt pan hung to a shaft extending through said slots, and made thereby adjustable to or from the brush in direction at right angles to the lower run of the brush substantially as and for the purpose described. 3rd. In a street sweeper, the combination with the dirt chamber, and a brush delivering into the same, of an adjustable apron or plate fixed to the top of the dirt chamber opposite that portion of the brush which moves away from the dirt chamber and into the brush casing and made adjustable to the brush substantially as and for the purpose described. 4th. In a street sweeper, the combination with the dirt chamber having an open bottom, and a removable receptacle in the same, of an adjustable apron or plate fixed to the top of the dirt chamber opposite that portion of the brush which moves away from the dirt chamber into the brush casing and made adjustable to the brush, substantially as and for the purpose described. 5th. In a street sweeper, the combination with a dirt chamber, of a dirt receptacle having a high front side, low rear side, and inclined ends, a hinged flap overlapping its low side, a hinged flap overlapping its high side, and an adjustable apron at the top of the dirt chamber extending toward the brush, substantially as and for the purpose described.

No. 65,101. Car Coupler. (*Attelage de chars.*)



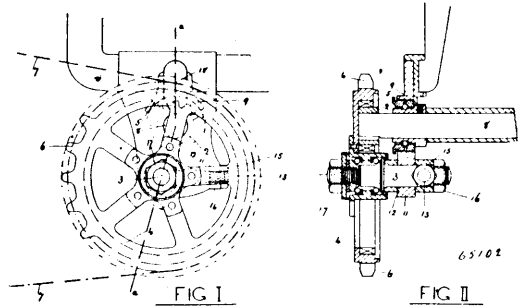
William Silver, Tamworth, New South Wales, Australia, 25th November, 1899; 6 years. (Filed 28th October, 1899.)

Claim. - 1st. A car coupling consisting of a pendular hanging link, a catching link, and a placing lever acting on said links to extend the same, the catching link being counterbalanced lightly, and formed with runner beaks against which the ends of the placing lever bear to cant it so that its outer end will move in a path approximately as shown in the accompanying drawing, substantially as described. 2nd. A car coupling wherein a lightly counterbalanced catching link is supported pendularly, and acted upon by a placing lever which simultaneously moves its pendular support and cants it by pressing against runners in beaks set at an angle upon it, so that its outer end moves in path approximately as shown in the accompanying drawings, substantially as described. 3rd. A car coupling wherein a placing lever presses upwardly and outwardly respectively against a pendular link and a lightly counterbalanced catching link which is supported by said hanging link, to extend the coupling and by pressing against runners on said catching link to simultaneously

depress its upper end at its pivotal support is raised, substantially as described. 4th. In a car coupling, the combination of a hanging link capable of pendular motion, a lightly counterbalanced catching link supported pivotally by the hanging link, curved runners on beaks on said catching link and a placing lever for moving the pendular support of the catching link outwardly and simultaneously canting the catching link by pressing against said runners thereby extending the upper end of the catching link approximately as shown in the accompanying drawings, substantially as described. 5th. In a car coupling, the combination of a hanging link capable of pendular motion, a lightly counterbalanced catching link supported pivotally by the hanging link, and a placing lever with cam ends working against said runners for moving the pendular support outwardly whilst canting said catching link, whereby the outer end of said catching link is made to move along a path approximately as shown in the accompanying drawings, substantially as described. 6th. The combination of the pendular hanging link 8, the counterbalanced catching link 11, the pin 13, the beaks 10 with runners 9, and the placing lever 5, substantially as described.

No. 65,102. Motor Car Mechanism.

(*Mécanisme pour moteurs de chars.*)



John Kemp Starley, Coventry, Warwick, England, 25th November, 1899; 6 years. (Filed 12th June, 1899.)

Claim. - 1st. In driving gear for motor cars, the combination of a rotatable shaft, a spur pinion fixed to such shaft, a stud adapted to be moved about such shaft as centre, an internally toothed wheel mounted on the said stud and always gearing with the said spur pinion, means for transmitting motion from the periphery of the said internally toothed wheel and means for moving and fixing the said stud, for the purposes set forth. 2nd. In driving gear for motor cars, the combination of a rotatable shaft, a spur pinion fixed to such shaft, an internally toothed wheel gearing with the said spur pinion, a flexible transmitting member engaging with the periphery of the said internally toothed wheel, a stud adapted to carry the said internally toothed wheel situated in a line passing through the axis of the spur pinion and standing at right angles to the end of the driving run of the flexible transmitting member, for the purpose set forth. 3rd. In driving gear for motor cars, the combination of a rotatable shaft, a spur pinion fixed to such shaft, a stud adapted to be moved about such shaft as centre, an internally toothed wheel mounted on the said stud and gearing with the said spur pinion, a fixed plate, there being a transverse slot in the said plate curved with the axis of the said shaft as centre and adapted to carry the said stud, an apertured right angle projection on the said plate, a draw screw engaging the said stud and passing through the said projection, an adjusting nut on the said draw screw and a lock nut on the said stud, substantially as and for the purpose set forth. 4th. In driving gear for motor cars, the combination of a rotatable shaft, a spur pinion fixed to such shaft, a stud adapted to be moved about such shaft as centre, an internally toothed wheel mounted on the said stud and gearing with the said spur pinion and a flexible transmitting member engaging with the periphery of the said internally toothed wheel, substantially as and for the purpose set forth.

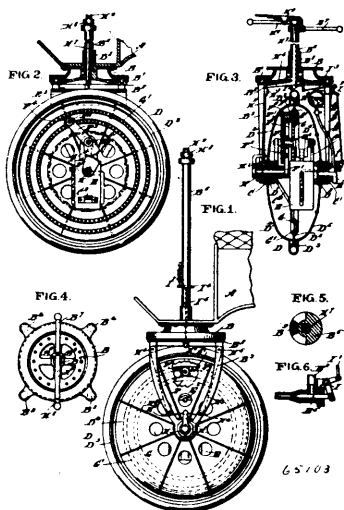
No. 65,103. Vehicle Motor Wheel.

(*Roue motrice de véhicules.*)

Julius William Walters, New York City, New York, U.S.A., 25th November, 1899; 6 years. (Filed 17th June, 1899.)

Claim. - 1st. A device of the character described, comprising a wheel, supports therefor, a motor within the wheel, a starting mechanism for said wheel having a portion interior and exterior to the wheel, and a connecting device between the said interior and exterior parts, said connecting device being concentric with the wheel, substantially as described. 2nd. A device of the character described, comprising a wheel, supports therefor, a motor within the wheel, and a starting mechanism for said wheel having an outward extending portion concentric with the wheel, and by means of which the starting mechanism is operated, substantially as described. 3rd. A device of the character described, comprising a wheel, a frame on which said wheel is journaled, one of the supporting journals of the frame being hollow, a motor within the wheel, a starting

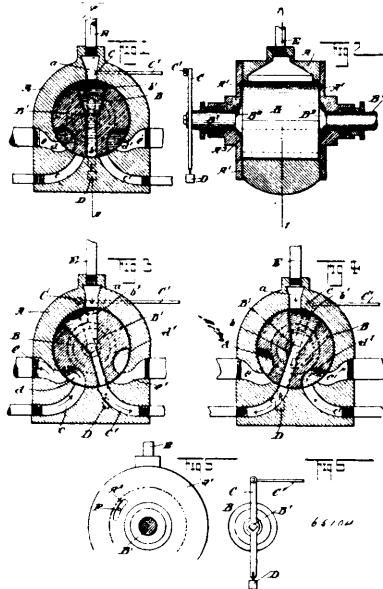
mechanism for the wheel, such mechanism having a portion within and a portion exterior to said wheel, and a connecting device be-



tween said interior and exterior parts, said device being extended through the hollow journal, substantially as described. 4th. A device of the character described, comprising a wheel having aligned hubs, a supporting frame having journals upon which the hubs of the wheel are mounted, one of the journals being hollow, a motor in the wheel, a starting mechanism for the wheel, having one of its shafts mounted in the hollow journal, and means for operating said shaft, substantially as described. 5th. A device of the character described, comprising a wheel having aligned hubs, a supporting frame having hollow journals upon which the wheel is mounted, a motor supported by the frame in the wheel, a feed supply leading to the motor through one of the hollow journals, a starting mechanism for the wheel having one of its shafts mounted in the other journal of the frame, and means for operating said shaft, substantially as described. 6th. In a device of the character described, the combination with a wheel, and a motor therein for operating it, of a supporting wheel having a vertical hub and journals upon which the wheel is mounted, one of the journals being hollow, a starting mechanism having one of its shafts in the hollow journal, a vertical shaft mounted in the hub of the frame, and a connection between the said shaft and the shaft of the starting mechanism working in the hollow journal, substantially as described. 7th. In a device of the character described, the combination with a wheel, and a motor therein for operating it, of a supporting frame provided with a vertical hub and with journals upon which the wheel is mounted, one of the journals being hollow, a starting mechanism in the wheel and having one of its shafts mounted in the hollow journal, said shaft being provided with an arm at its outer end, a vertical shaft mounted in the hub of the frame and provided with an arm at its lower end, means for operating said vertical shaft, and a connection between the arms of said shafts, substantially as described. 8th. A motor wheel, comprising two spaced axially aligned hollow hub parts mounted to rotate, a frame having members extending through said hollow hub parts, one of said members being hollow, a motor supported by the frame and located between said spaced hub parts, a shifting pinion in driving connection with said motor, an inner and an outer set of gear teeth between which is located said pinion, said gear teeth being on wheel proper, a shaft extending through the hollow frame member and connected with said pinion to shift it into engagement with either set of gear teeth, and means for turning said shaft, substantially as described. 9th. A motor wheel, comprising two spaced axially aligned hollow hub parts mounted to rotate, a frame having members extending through said hollow hub parts, one of said members being hollow, a motor supported by the frame and located between said spaced hub parts, a fuel supply pipe extending to the motor through the hollow frame member, a rim connected with said hub parts, and a driving connection between the motor and the rim, substantially as described. 10th. A motor wheel, comprising a vehicle wheel, a motor suspended within the wheel, a connecting mechanism between the motor and the wheel for rotating the latter, and a reversing and disconnecting device for said connecting mechanism, to reverse the motion of the wheel as to throw the mechanism out of gear with the wheel, substantially as described. 11th. A motor wheel, comprising two spaced axially aligned hollow hub parts mounted to rotate, a frame having members extending through said hollow hub parts, one of said members being hollow, a motor supported by the frame and located between said spaced hub parts, a fuel supply pipe extending to the motor through the hollow frame member, a valve controlling the connection of said pipe with the motor, a valve operating device extending through said hollow frame member, a rim connected with said hub parts,

and a driving connection between the motor and the rim, substantially as described. 12th. A motor vehicle, provided with driving wheels, a motor in each wheel for rotating said wheel, a frame mounted on the wheels, and a connection between the wheels, to steer the same in unison, substantially as described. 13th. A motor vehicle provided with a bolster, driving wheels having their fork arms mounted to turn in said bolster, a motor in each wheel for rotating it, and a connection between said fork arms, and under the control of the operator, for steering the wheels simultaneously, substantially as described. 14th. A motor wheel for vehicles, comprising a wheel carrying two bevel driving wheels, a frame work sleeve on which said wheel is journaled, an engine supported from said sleeve, and a gearing between the main shaft of the engine and said bevel driving gear wheels, for rotating the motor wheel in the usual direction, substantially as described. 15th. A motor wheel for vehicles, comprising a wheel carrying two bevel driving wheels, a frame work sleeve on which said wheel is journaled, an engine supported from said sleeve, a gearing between the main shaft of the engine and said bevel driving gear wheels, for rotating the motor wheel in the usual direction, and means for throwing said gearing out of mesh with either of the bevel driving gear wheels, substantially as described. 16th. A motor wheel for vehicles, comprising a wheel carrying two bevel driving wheels, a frame work sleeve on which said wheel is journaled, an engine supported from said sleeve, a gearing between the main shaft of the engine and said bevel driving gear wheels, for rotating the motor wheel in the usual direction, means for throwing said gearing out of mesh with either of the bevel driving gear wheels, and means, substantially as described, and under the control of the operator, for actuating the device for throwing the gearing in and out of mesh, as set forth.

No. 65,101. Rotary Valve. (Soupape rotatoire.)



Joseph Bradley Stage, Tallbot, Michigan, U.S.A., 25th November, 1899; 6 years. (Filed 19th June, 1899.)

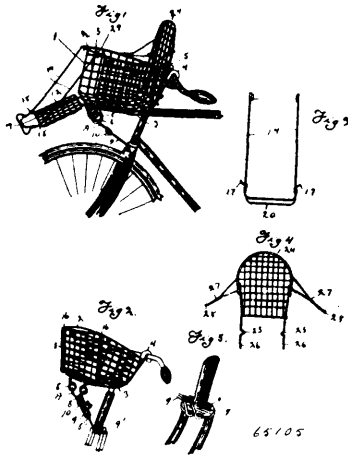
Claim.—A valve comprising a casing having a steam inlet, two cylinders ports and two exhaust ports, a plug valve mounted to turn in the casing and having exhaust cavities and an inlet port registering at all times with the inlet port of the casing and adapted to register with either one of the cylinder ports, a pin extended from the plug valve into a slot formed in a head of the casing, an arm rigidly attached to a stem of the valve, a weight on said arm and a shifting rod extended from the arm, substantially as specified.

No. 65,105. Bicycle Carrier. (Porte paquet de bicyeles.)

Fremont B. Shackleton, Eric, Kansas, U.S.A., 25th November, 1899; 6 years. (Filed 24th June, 1899.)

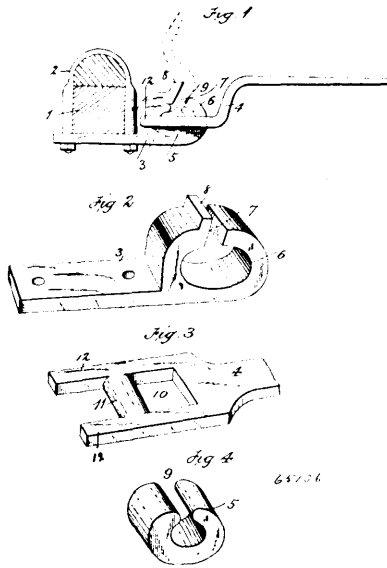
Claim.—1st. The combined baby seat and parcel carrier for bicycles, comprising the basket 1, provided with the continuous top rail 2, formed with the integral eyes 16 16, the front piece 12, hinged to said basket and formed with the eyes 18 18, and the removable pins 29 29, adapted to be inserted through said aligned eyes in the front piece and basket rail, to secure said front piece in position, substantially as shown and described. 2nd. The combined baby seat and parcel carrier for bicycles, comprising a basket having a hinged front, and an adjustable coil spring brace, having its upper end attached to the lower rail of the basket, and its lower end adjustably secured to a second brace having prongs bent upwardly to engage the fork crown of a bicycle, substantially as shown and described. 3rd. The combined seat and parcel carrier for bicycles,

comprising a basket having a hinged front, eyes formed in the top rail of said basket, corresponding eyes in top of hinged front, re-



movable pins adapted to engage said eyes, and a detachable back having arms 27 at either side, provided with looped ends adapted to be engaged with the top rail of said basket, and said back having curved wire projections at its lower end adapted to engage in said basket, substantially as shown and described. 4th. In a combination seat and parcel carrier for bicycles, the basket having a hinged front and a detachable back, the coiled spring brace A, secured to the bottom and front rail of said basket, said brace being adjustably secured by means of a clamp 10 to the brace 9 having its lower ends bent upwardly forming prongs to engage the fork crown of a bicycle and a holder 0, for engaging the said prongs to retain said brace in position, substantially as shown and described. 5th. The combined baby seat and parcel carrier for bicycles, comprising the basket provided with the continuous top rail 2, formed with the integral eyes 16 16, and the bottom rail 3 formed with the integral hooks 4 4, the front piece 12, provided with the rail 19, provided with the integral eyes 18 18, and the double foot rest 20, provided with the parallel braces 14 14, having hooked ends 15 15, and the lateral pins 17 17, and adapted to support the front piece 12 when lowered, substantially as shown and described.

No. 65,106. Thill Coupling. (*Arceau de linonnière.*)



Willis Clemons Wesley and William Clark, both of West Superior, Wisconsin, U.S.A., 25th November, 1899; 6 years. (Filed 3rd July, 1899.)

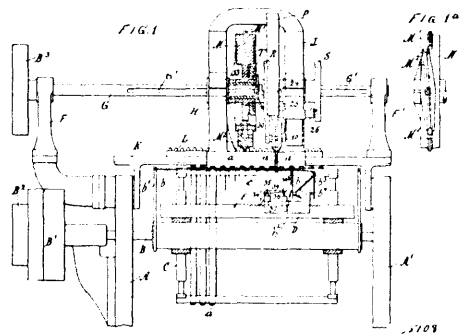
Claim.—A thill coupling comprising a head formed with a transverse elongated aperture 6, intersected by the transverse slot 7, the rear wall of which projects upwardly to form a stop shoulder 8, an elastic cushion corresponding in outline to the aforesaid aperture, and provided with the transverse slot registering with the slot of the head, and the thill iron having a rectangular aperture 10, and cross bar 11, at the end of the aperture, and parallel rearwardly extending arms 12, substantially as and for the purpose set forth.

No. 65,107. Potato Preserving Process.
(*Procédé pour préserver les patates.*)

John G. Neumann, Indianapolis, Indiana, U.S.A., 25th November, 1899; 6 years. (Filed 20th September, 1899.)

Claim.—1st. The process of preparing and preserving potatoes which consists in chemically disintegrating the vegetable tissues of the tubers, forming a pasty coat on the exterior, and cooking the product, then cooling the same, reducing it to particles or small pieces, and finally desiccating it, substantially as set forth. 2nd. The process of preparing and preserving potatoes which consists in disintegrating the vegetable tissues of the tubers in the manner specified, forming a thin pasty coat on the exterior, and cooking the product, next cooling the same, reducing it to particles or small pieces and desiccating the latter, substantially as set forth. 3rd. The improved process of preparing and preserving potatoes, consisting of disintegrating the vegetable tissues of the tubers by treatment with a suitable compound of sulphur dioxide, producing a thin pasty coat on the exterior, and cooking the product, allowing the same to cool, then reducing it to a vermicular or equivalent form, and desiccating it by baking, substantially as set forth. 4th. The improved process of preparing potatoes which consists in disintegrating the vegetable tissues by soaking in a solution of sulphur dioxide, subjecting the product to a steam bath to form a pasty coat thereon, cooking in an alkaline bath, mashing the product when cool, and desiccating it by baking, substantially as set forth.

No. 65,108. Thread Twisting Machine.
(*Machine à tordre le fil.*)

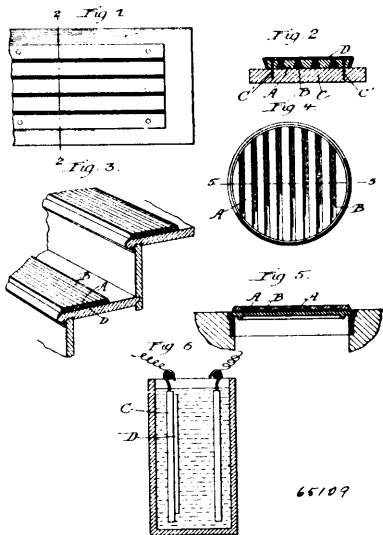


Albert Kryszat & Co., Berlin, Prussia, 25th November, 1899; 6 years. (Filed 17th December, 1898.)

Claim.—1st. An automatic knotting machine for binding the hanks of reeled yarn, comprising a reel having devices for feeding a lower thread, a vertically moving bifurcated bobbin carrier carrying a bobbin for supplying the upper thread, a pair of pivoted arms having hooked ends adapted to engage said lower thread, means for rotating said arms to form a loop and then separating them to enlarge the loop sufficiently to permit the entrance of one leg of the bifurcated bobbin carrier, and means for shifting the bobbin back and forth from one leg to the other of the carrier to wind said upper thread around the loop, substantially as described. 2nd. In combination, the reel, the bobbin carried thereby for supplying a lower thread, tension means for such thread, means for imparting to said bobbin a step by step movement longitudinally of the reel, a bifurcated bobbin carrier with a bobbin for an upper thread movable therein, a pair of arms having hooked ends for engaging the lower threads, means for rotating said arms to form a loop and separating said arms to enlarge the loop, means for reciprocating the bobbin carrier to cause the loop of the lower thread to enter the slot between the legs thereof, means for simultaneously moving the bobbin from one leg to the other to wind the upper thread about the loop, and means for imparting to the bobbin carrier and twisting arms an intermittent horizontal movement, substantially as described. 3rd. In combination with the reel and means carried thereby for supplying a lower thread, a bobbin carrier for supplying an upper thread and a device for forming a loop in said lower thread comprising a rod capable of a reciprocating and axially rotary movement, a pair of arms pivoted on said rod and having thread engaging ends, stationary guides co-acting with said arms for opening and closing the same on the reciprocating of the rods, means for imparting to said rod a reciprocating motion and means for rotating said rod, substantially as described. 4th. In combination with the reel and means carried thereby for supplying a lower thread, a bobbin carrier and bobbin with operating means for supplying an upper thread; a bearing sleeve Q carried by the frame of the machine, a rod 24 mounted thereon capable of longitudinal and rotary movement therein, loop forming arms pivotally mounted on said rod 24, means for reciprocating said rod, a guide slot in the sleeve Q, a pin 28 projecting from the rod into said guide slot, a bifurcated lever engaging said pin, and means for operating said lever to impart a rotary movement to said rod, substantially as described. 5th. In a machine

of the class described, the combination with the reciprocating bobbin carrier and bobbin for the upper thread and the loop forming devices, with means for imparting movement bodily to said parts after each trying operation, of a reel for the skeins to be tied, a rack arranged longitudinally thereof, a bobbin carrier movable longitudinally of said rack, a bobbin for a lower thread carried by said carrier a spring actuated pawl carried by said carrier and engaging the rack and arranged to be struck and operated by the descending bobbin carrier of the upper thread, substantially as described.

No. 65,109. Stair Tread. (*Couverture de marches d'escalier.*)



William Herman Winslow, Chicago, Illinois, U.S.A., 25th November, 1899; 6 years. (Filed 28th October, 1899.)

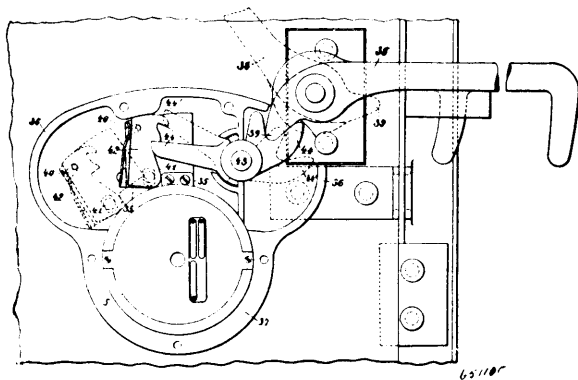
Claim. 1st. An article of manufacture, a tread adapted to be attached to stairs or other places with which the feet comes in contact and comprising a series of strips of non-slipping material, a series of strips of harder material intermediate or between the strips of non-slipping material, the several strips placed in proximity to each other so as to form a practically continuous surface, and a layer of deposited metal which engages the several strips and binds them firmly together. 2nd. As an article of manufacture, a tread for preventing slipping of the feet, comprising a series of strips of non-slipping material provided with inclined or beveled edges, a series of strips of harder material also provided with beveled edges and placed intermediate or between the strips of non-slipping material, the several strips associated together so as to form a substantially continuous surface, and a coating of electrically deposited metal on one of the continuous surfaces formed by said strips, said electrically deposited metal engaging the strips and binding them firmly together. 3rd. As an article of manufacture, a tread to prevent slipping of the feet, comprising a series of strips of non-slipping material, a series of independent strips of harder material intermediate or between the strips of non-slipping material, the several strips associated together so as to form a substantially continuous surface, and a binding device adapted to firmly bind the several strips together. 4th. As an article of manufacture, a tread to prevent slipping of the feet, comprising a series of strips of non-slipping material provided with inclined or beveled edges, a series of intermediate strips of harder material provided with inclined or beveled edges and loosely inserted between the strips of non-slipping material, the several strips associated together so as to form a substantially continuous surface, and a binding device associated with said strips and adapted to firmly bind them together.

No. 65,110. Cylinder Lock. (*Serrure de cylindre.*)

Emerich von Marsovszky, Budapest, Hungary, 25th November, 1899; 6 years. (Filed 30th October 1899.)

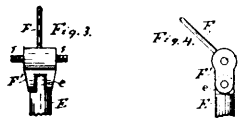
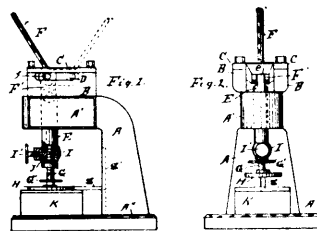
Claim.—1st. In a cylinder lock, the combination of a base plate, a superposed bolt cylinder and a superposed locking cylinder, a key having a compound bit consisting of two sections, horizontal spring pressed bolts to lock said sections together, the ends of said bolts being flush with the end of the bit, a series of presser pins mounted on the locking disc and a cam on the base plate mounted in the path of movement of said presser pins and adapted to actuate the same against the bit bolt ends, and means for locking the bolt cylinder to the base plate until the key bit is uncoupled, and for locking the bolt cylinder to the locking cylinder as soon as the detent bolts of the said bolt cylinder have been disengaged from the same by the stationary bit section, substantially as described. 2nd. In a cylinder lock, the combination of a superposed base plate, bolt and locking cylinders, a key having a compound bit with two sections, one being rigidly connected to the key shaft and the other

pivotally mounted and longitudinally moveable thereon, a series of spring pressed bolts a right angles to the key shaft to retain the



two bit sections locked together, said bolt ends being accessible from the end of the bit, a series of spring pressed pins to engage with and operate said bit bolts, said pins being mounted on the locking cylinder, a stationary cam mounted in the path of movement of the said pins to operate the same when the locking cylinder is turned, and means for disengaging the bolt cylinder from the base plate when the bit sections have been parted, in the manner and for the purpose, substantially as described. 3rd. In a cylinder lock, the combination of superposed base plate, bolt and locking cylinders and a key having two bit sections as specified, means for locking the said sections together, and means in connection with the locking cylinder and the base plate to disengage said bit sections when the locking cylinder is turned, means for releasing the bolt cylinder from the base plate and locking the same to the locking cylinder after the bit sections have been separated, and means for retaining the bolt cylinder in the unlocked position when the key is partially withdrawn from the lock, substantially as described. 4th. In a cylinder lock having superposed base plate, bolt cylinder and locking cylinder and a key having two bit sections as specified, means in connection with the locking cylinder and base plate to disengage said bit sections when the locking cylinder is turned and to disengage the bolt cylinder from the base plate when the key is further turned after the bit sections have been separated, an annular groove in the locking cylinder having mounted therein a spring pressed pin and a nut projecting into the groove and having an orifice to receive the said pin, and means for turning the nut on this pivot from the outside of the lock, in the manner and for the purpose substantially as described. 5th. In a cylinder lock having superposed base plate and bolt and locking cylinders, a key having a compound bit, consisting of two sections and a set of spring pressed bolts mounted as specified to retain said bit sections locked together, means in connection with the locking cylinder and base plate to disengage said bit sections when the locking cylinder is turned, and to disengage the bolt cylinder after the sections have been separated and when the key is further turned, a ratchet like catch or claw on the bolt, of the bolt disc, a tumbler pivoted in proximity thereto and adapted to engage and retain in the closed position a door lock, in the manner and for the purpose substantially as described.

No. 65,111. Press. (*Presse.*)

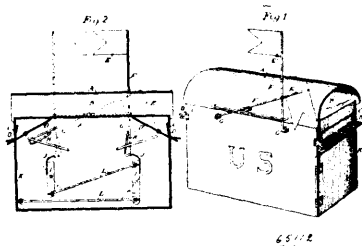


Julius Tisch and Daniel Tisch, both of Grand Rapids, Michigan, U.S.A., 25th November, 1899; 6 years. (Filed 16th February, 1899.)

Claim.—In a press, a vertically reciprocating shaft, a standard for supporting said shaft, said standard provided with slots to form

adjustable bearings for the lever fulcrum, a lever fulcrumed on said slots with sliding trunnions, one end of said lever pivotally attached to the top of the shaft, the other end free to actuate the shaft first by lever motion and finally by eccentric motion induced by the sliding of the trunnions in the slots as the lever is drawn forward to force the shaft down, substantially as and for the purpose set forth.

No. 65,112. Postal Box Signal. (*Signal de boite postale.*)



Francis C. Bates, San Jose, California, U.S.A., 25th November 1899; 6 years. (Filed 9th November, 1899.)

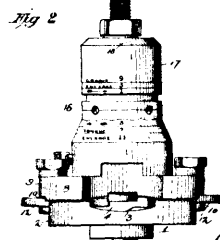
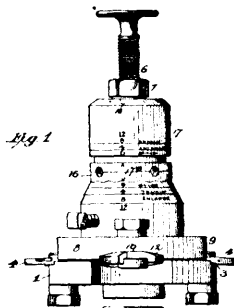
Claims.—1st. A letter box having one or more slots or openings⁸ for the introduction of mail matter, hinged flaps normally covering said slot having inwardly projecting levers which are movable when the flaps are lifted, signal targets mounted upon shafts turnable in the sides of the box having lever arms projecting interior thereto adapted to be pressed by the action of the flap lever whereby the signal is thrown up into view. 2nd. A postal box having one or more openings for the reception of mail matter, hinged flaps covering said openings having levers projecting inwardly, signals mounted upon arms which are fixed to shafts turnable in the sides of the box, levers interior to the box connecting with the signal carrying arms and normally lying in the path of movement of the interior arms of the flaps whereby the raising of the flap will act to throw the signal up into view, and latching devices which engage the inner ends of said levers to retain the signal in view after the flap has been released. 3rd. In a letter box, openings for the reception of mail matter with hinged flaps covering said openings and having interiorly projecting arms, fulcrumed lever arms carrying signals upon the outer ends having the inner ends extending within the box so that the opening of the flap engages said ends and throws the signal up into view, pivoted levers within the box having spring catches which engage the signal carrying levers and retain them in position, rods connecting said levers with a hinged door which is opened to remove matter from the box whereby the opening of said door disengages the latch and allows the signal to fall. 4th. A postal box having openings at opposite ends for the reception of mail matter and a hinged door through which said mail matter may be removed, hinged flaps normally covering the openings and having inwardly projecting arms which are movable when the flaps are raised, a plurality of signals mounted upon levers, one end of each of which projects within the box within reach of one of the arms carried by the flaps whereby the opening of either of said flaps will display a signal, levers fulcrumed within the box having spring catches, each adapted to engage one of the signal carrying levers to retain it in view, a link or rod having one end connecting with the door, and the other end to the lower part of one of the levers, a corresponding link connecting the upper part of the said lever with the bottom of the other lever so that the levers move in unison, and either or both of them will be operated to disengage its signal.

No. 65,113. Cutter Head. (*Porte-outil.*)

Samuel Johnston Shimer, Milton, Pennsylvania, U.S.A., 25th November, 1899; 6 years. (Filed 30th October, 1899.)

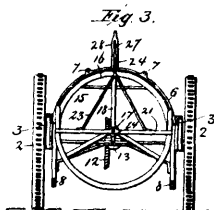
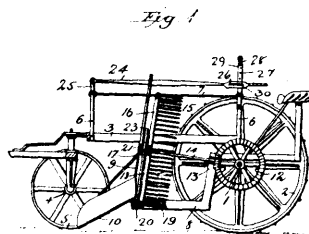
Claim.—1st. As an improved article, an expanding cutter head, comprising the two sections, one of which is provided with a hub having a predetermined number of screw threads to the inch, the movable section provided with a hub having its periphery divided by a series of consecutively arranged numerals into a number of equi-distant parts, the correspondingly threaded expanding ring provided with a peripheral mark adapted to register with said numerals when said ring is rotated, and the retaining nut having an arrow or other character for indicating the direction in which the adjusting ring is to be turned for widening and narrowing the groove, substantially as described. 2nd. As an improved article, an expanding cutter head, comprising the two sections, one of which is provided with a hub having a predetermined number of screw threads to the inch, and having on its periphery an arrow or other character, the correspondingly threaded adjusting ring provided with a peripheral mark, and the retaining nut having its periphery divided by a series of consecutively arranged numerals into a number of equi-distant parts adapted to register with mark on the adjusting ring, substantially as described. 3rd. In an expanding cutter head, the combination with the section provided with a hub having a series of peripheral screw threads of a predetermined number to the inch, of the movable section provided with a hub having its periphery divided by a series of consecutively arranged numerals into a number of equal parts, the correspondingly threaded

adjusting ring provided with peripheral marks, and the retaining nut provided with a series of consecutively arranged numerals simi-



lar to but running in the reverse direction to those of the hub of said movable section, substantially as and for the purpose specified. 4th. In an expanding cutter head, the combination with the retaining nut having its upper end divided by a series of marks into a number of equi-distant parts, of the top screw, the head of which is marked on the upper side by a double arrow, substantially as and for the purpose specified.

No. 65,114. Potato Digger. (*Arrache-patates.*)



John D. Wilcox, Pine City, Minnesota, U.S.A., 25th November, 1899; 6 years. (Filed 30th October, 1899.)

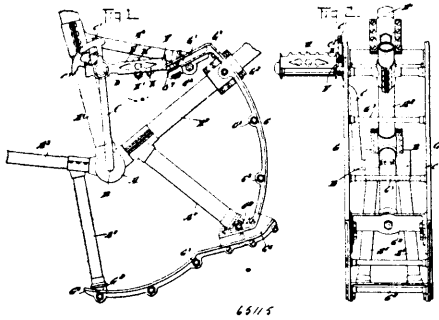
Claim.—1st. In a potato digger, the combination with the shovel, of the rotatable wheel or sieve, comprising the rim and the hub, and the arms provided with rearwardly extending pins or rods, substantially as described. 2nd. In a potato digger, the combination with the shovel and the rotatable sieve of the fender or guard located in front thereof, substantially as described. 3rd. In a potato digger, the combination with the shovel and the rotatable sieve of the semicircular fender or guard, the cross-bar connecting the upper end thereof, the stirrup connected therewith, the slotted pivoted lever and the vertical bar formed with holes, and the pin for holding said lever in its adjusted position, substantially as described.

No. 65,115. Bicycle. (*Bicycle.*)

Cephas Whitney and Alfred C. Lazarus, both of Kingston, Jamaica, West Indies, 25th November, 1899; 6 years. (Filed 6th June, 1899.)

Claim.—1st. A bicycle gear comprising a crank shaft provided with cranks, a shaft journaled in the outer end of each crank, a

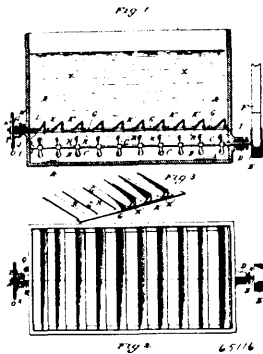
pedal carried by the said shaft, means for positively turning the said shaft to change the position of the pedal relatively to the crank and



to form an extension for the latter, and temporary locking device for the pedal, substantially as shown and described. 2nd. A bicycle gear, comprising a crank shaft, a crank secured thereon, a shaft journaled in the free end of each crank, an arm on said shaft carrying a pedal, an arm extending from the shaft at right angles to said shaft, an eccentric having its disc fixed to the bicycle frame and its eccentric rod connected with the said shaft arm, and a temporary locking device for the said arm, substantially as described. 3rd. A bicycle gear, comprising a crank shaft provided with cranks, a shaft journaled in the free end of each crank, an arm on the outer end of the shaft, a pedal carried at the free end of said arm, an arm extending from the shaft at right angles thereto, an eccentric having its disc fixed to the bicycle frame and its eccentric rod pivotally connected with the said arm extending at right angles to the shaft, and a temporary locking device for the said arm, substantially as described.

No. 65,116. Paint Mixing Tank.

(*Réservoir à mélanger la peinture.*)



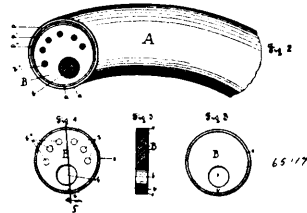
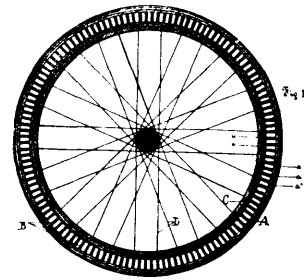
Isaac Wyman Drummond, New York City, New York, U.S.A., 25th November, 1899; 6 years. (Filed 22nd April, 1899.)

Claim.—1st. The combination, in a paint mixer, of a tank, agitating or mixing devices, a two part false bottom located above the mixing devices, each part being perforated, and means to move one of the parts, for the purposes set forth. 2nd. The combination, in a paint mixer, of a tank, agitating or mixing devices, a two part false bottom located above the mixing devices, each part being perforated in such manner that the perforations may be made to register with each other, and means to move one of the parts, for the purposes set forth. 3rd. The combination, in a paint mixer, of a tank, agitating or mixing devices, a two part false bottom located above the mixing devices, each part being perforated, the two parts resting upon each other in such manner that one will shear across the surface of the other, and means to move one of the parts, for the purposes set forth. 4th. The combination, in a paint mixer, of a tank, agitating or mixing devices, a two part false bottom located above the mixing devices, each part being perforated, the upper part having cross sections between the perforations the sides of which are at an angle to the axis of the part as a whole, and means to move one of the parts, for the purposes set forth. 5th. The combination, in a paint mixer, of a tank, agitating or mixing devices, a two part false bottom located above the mixing devices, each part being perforated, the cross sections of the lowermost part having downwardly presented angular sides whereby the currents generated by the mixer will be deflected upwardly through the openings, and means to move one of the parts, for the purposes set forth. 6th. The combination, in a paint mixer, of a tank, agitating or mixing devices, a two part false bottom located above the mixing devices, each part being perforated, the sections of the upper part which lie between the perforations being angular and having an upward pre-

sentation and the sections between the perforations of the lower part being angular and having a downward presentation, and means to move one of the parts, for the purposes set forth.

No. 65,117. Resilient Tire for Wheels.

(*Bandage rebondissant pour roues.*)



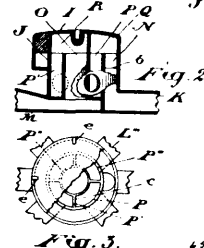
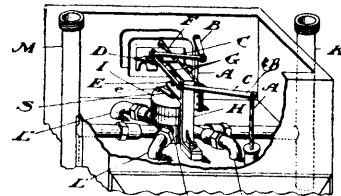
Oscar Eugene Smith, Chicago, Illinois, U.S.A., 25th November, 1899; 6 years. (Filed 1st June, 1899.)

Claim.—1st. In a wheel tire, the combination of an outer tube or casing and a series of resilient discs secured within the outer tube or casing out of contact with each other and each provided with a relatively large hole at or near its bottom portion, substantially as described. 2nd. In a wheel tire, the combination of an outer tube or casing and a series of soft rubber discs within the outer tube or casing and vulcanized thereto out of contact with each other and each provided with a relatively larger hole at or near its bottom portion, substantially as described.

No. 65,118. Valve for Gas Meters.

(*Soupape pour gazomètres.*)

Fig. 1

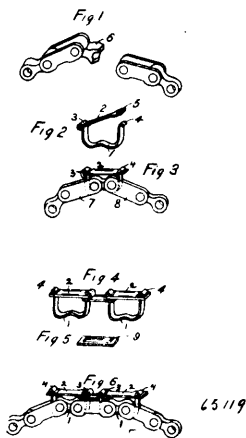


The Seymour Meter Company, assignee of John Seymour, Brantton, Ontario, Canada, 27th November, 1899; 6 years. (Filed 3rd May, 1899.)

Claim.—1st. In a meter, a valve seat having a central outlet port an annular inlet space and two or more intermediate ports of equal size, in combination with a rotary valve provided with an inlet recess adapted to place any given intermediate port in communication with the inlet and an outlet recess diametrically opposite adapted to place the opposite intermediate port in communication with the outlet port, substantially as and for the purpose specified. 2nd. In a meter, a valve seat having a central outlet port and four equal ports surrounding it, in combination with a rotary valve provided with an inlet recess adapted to register with any given port of the four and an outlet recess diametrically opposite adapted to place the opposite intermediate port in communication with the outlet port, substantially as and for the purpose specified. 3rd. In a meter, the valve seat J, provided with the outlet port O, the out-

inlet pipe M communicating therewith, the annular space N, the inlet pipe K communicating therewith, the ports P, P¹, P¹¹ and P¹¹¹, and the pipes L, L¹, L¹¹ and L¹¹¹ communicating therewith, in combination with the valve I, provided with the inlet recess R, and the outlet recess R, substantially as and for the purpose specified. 4th. In a meter, a valve seat and valve, in combination with an inlet pipe, an outlet pipe, and pipes leading to the gas spaces of the meter, all of the said pipes being connected with the valve seat and provided with unions or couplings whereby they may be disconnected and the valve seat removed, substantially as and for the purpose specified. 5th. In a meter, the valve seat J, provided with the outlet port O, the outlet pipe M communicating therewith, the annular space N, the inlet pipe K communicating therewith, the ports P, P¹, P¹¹ and P¹¹¹, the pipes L, L¹, L¹¹ and L¹¹¹ communicating therewith and union joints or couplings in the said pipes, in combination with the valve I, provided with the inlet recess Q and the outlet recess R, substantially as and for the purpose specified. 6th. In a meter, a valve seat having a central outlet port and four equal ports surrounding it, in combination with a rotary valve provided with an inlet recess adapted to register with any given port of the four, an outlet recess diametrically opposite adapted to place the opposite intermediate port in communication with the outlet port, a valve spindle suitably journalled and having one end set within a recess or step in the valve, an arm rigidly connected to the valve spindle, and two studs upon the valve set at substantially 90 degrees apart one on each side of the said arm, substantially as and for the purpose specified. 7th. In a meter, the valve seat J, provided with the outlet port O, the outlet pipe M communicating therewith, the annular space N, the inlet pipe K communicating therewith, the ports P, P¹, P¹¹ and P¹¹¹, and the pipes L, L¹, L¹¹ and L¹¹¹ communicating therewith, in combination with the valve I, provided with the inlet recess Q, and the outlet recess R, the valve spindle E, suitably journalled and having one end set within a recess or step in the valve, the arm S rigidly connected to the said spindle, and the studs e, e¹ on the valve, substantially as and for the purpose specified.

No. 65,119. Bicycle Chain Link.
(*Anneau de chaîne de bicyclette.*)



Albert Barton Crosby, assignee of John Crosby Jenkins, both of Toronto, Ontario, Canada, 27th November, 1899; 6 years. (Filed 29th September, 1898.)

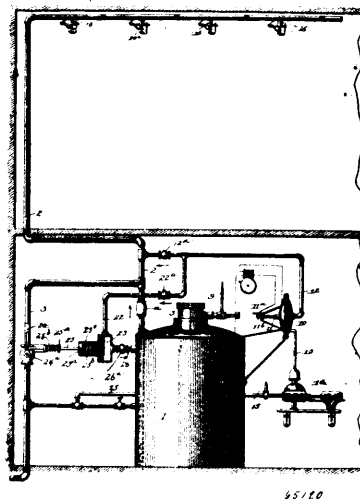
Claim.—In repair links for bicycle chains, the combination of two of the repair links comprising the bent piece of spring steel having the hinge 3, and the flat yoke 2, with the connecting link having the slot 9, substantially as described.

No. 65,120. Chemical Fire Extinguisher.
(*Extincteur d'incendie chimique.*)

Albert E. Kennedy, assignee of Henry Bush, Dayton, Ohio, U.S.A., 27th November, 1899; 6 years. (Filed 2nd September, 1899.)

Claim.—1st. In a fire extinguishing system and in combination, a preliminary supply vessel containing liquid, a distributing pipe leading from said vessel and having therein one or more heat releasable discharge valves, means for automatically maintaining a pressure in said distributing pipe, a chemical supply vessel movably mounted in said preliminary supply vessel and containing chemicals adapted to generate gas when mixed with the liquid on said preliminary supply vessel, releasing means for said chemical supply vessel held in engagement therewith by said constant pressure in said distributing pipe, a fire alarm mechanism actuated simultaneously with the releasing of said chemical supply vessel, a second and constant liquid supply independent of said preliminary supply vessel and connected to said distributing pipe and a valve intermediate said constant liquid supply and said distributing pipe, said valve being normally

held closed by said constant pressure in said distributing pipe and abnormally held closed by the pressure of the gas generated by the



releasing of said chemical supply vessel, and said valve being adapted to be automatically opened by the lowering of the pressure of said gas in said pipe caused by the exhaustion of said preliminary supply vessel after the contents of said chemical supply vessel have been mixed with the liquid in said preliminary supply vessel, whereby, on the releasing of one or more of said discharge valves said chemical supply vessel is released and an alarm actuated simultaneously, gas is generated in said preliminary supply vessel and forced through said released discharge valve or valves, and when the pressure of said gas is reduced below an effective pressure the constant liquid supply valve is opened admitting a constant source of liquid supply, providing the fire department (adapted to be called by said fire alarm) has not yet arrived and prevented the opening of said constant liquid supply valve in their discretion, substantially as specified. 2nd. In a fire extinguisher system, the combination with a main water supply pipe 3, a gas generator tank containing an acid jar with devices for sustaining the same, a pipe 2, leading from said tank to a structure to be protected, the pipe 3, being connected with the pipe 2, a valve closing said pipe 2, adapted to be automatically operated upon an abnormal rise of temperature, a chamber 10, containing a flexible diaphragm having devices for holding and releasing the acid jar, a pipe 12 containing check valve 12^a, connecting one side of the diaphragm chamber with a pipe 2, an air pump, a pipe 15, for supplying water from the pipe 3, to automatically operate said pump, and a pipe 13, for conveying compressed air to the diaphragm chamber and pipe 2, substantially as described. 3rd. In a fire extinguishing system, the combination with a main water supply pipe 3, a gas generating tank containing an acid jar with devices for releasably holding the same, a pipe 2 leading from said tank to a structure to be protected, the pipe 3, being connected with the pipe 2, a valve closing said pipe 2, adapted to be automatically operated upon an abnormal rise of temperature, a chamber containing a flexible diaphragm having devices for holding and releasing the said jar, a pipe 12, containing check valve 12^a, connecting one side of the diaphragm chamber with the pipe 2, an air pump with a pipe 13, for supplying compressed air to the diaphragm and pipe 2, a valve 24^a, a compressed air chamber 23 communicating with the gas generating tank, a check valve 26^a, interposed between said chamber 23, and the tank, and means substantially as described in said chamber for actuating the valve 24^a, upon the escape of the compressed air from said chamber into the tank, as set forth. 4th. In a fire extinguishing system, the combination with the main water supply pipe 3, a gas generating tank containing an acid jar with devices for releasably sustaining the same, a pipe 2, leading from said tank to a structure to be protected, the pipe 3 being connected with the pipe 2, a valve closing said pipe adapted to be automatically operated upon an abnormal rise of temperature, a chamber 10, containing a flexible diaphragm having devices for holding and releasing the acid jar, a pipe 12, containing check valve 12^a, connecting one side of said diaphragm chamber with the pipe 2, an air pump with a pipe 13, for supplying compressed air to the diaphragm chamber, and a pipe 2, a valve 24^a, a compressed air chamber 23, communicating with the gas generating tank, a check valve 26^a, interposed between the said chamber 23, and the tank, a pipe 22, containing check valve 22^a, connected with the pipe 12, for supplying compressed air to the chamber 23, and means substantially as described, in said chamber for actuating the valve 24^a, upon the escape of the compressed air from said chamber into the tank, substantially as and for the purpose set forth. 5th. A sprinkler for fire extinguishers having a series of inclined radial arms 20^a of sheet metal with free spaces between them, said radial arms having teeth 20^b bent out of their lower edges and projecting into the space between the said arms, substantially as shown

6th. In a tank for chemical fire extinguishers, an acid jar having a chanfered or beveled shoulder at its upper end and trunnions located out of the centre of gravity of the jar when in upright position, a supporting frame for said jar consisting of two arms 7, having slots 7^a to receive the trunnions secured to the under side of the cap of the tank, and a trip for sustaining and releasing said jar including an arc-shaped piece 8, adapted to engage the beveled shoulder of the jar, and a rod or stem 8^a, adapted to be operated exteriorly of the tank, substantially as shown and described. 7th. In a fire extinguishing system and in combination a preliminary supply vessel containing liquid, a distributing pipe leading from said vessel and having therein one or more head releasable discharge valves, means for automatically maintaining the pressure in said distributing pipe, and a chemical supply vessel adapted to discharge its contents into said preliminary supply vessel, means operated by said constant pressure in said distributing pipe for preventing the discharge of said chemical supply vessel, a second and constant liquid supply vessel connected directly to said distributing pipe, and a valve intermediate said constant liquid supply and said distributing pipe, said valve being normally held closed by effective pressure in said distributing pipe or said preliminary supply vessel, and said valve being adapted to open when said vessel ceases to be effective, whereby on the release of one or more of said discharge valves, the contents of said chemical supply vessel are discharged into preliminary supply vessel to generate gas to force the contents of said preliminary supply vessel through said discharge valve or valves, and when the pressure in said distributing pipe or preliminary supply vessel ceases to be effective, said constant liquid supply valve is opened admitting a constant source of liquid supply directly to said distributing pipe, substantially as specified. 8th. In a fire extinguishing apparatus, the combination with the water and gas tank, a cage or reduced top extension 5, and a pendent frame, or parallel bars, having lengthwise slots of the acid jar, having a head or top shoulder, and trunnions which are located at one side of the diametrical centre of the jar, the horizontally slidable rod 8^a which engages the head of the jar and supports it in normal position, a coil spring encircling said rod, a pivotal lever 9, whose shorter arms are connected with said rod by links, the slidable trip, a rod 11 held in suitable bearing and having a catch or trip proper 11^a, which engages the longer arm of the lever 9, when the latter is in horizontal position, a flexible diaphragm connected with the inner end of the trip rod, and a chamber for said diaphragm having air pipes attached for operating, as shown and described. 9th. In a fire extinguishing apparatus, the combination, with the water and gas tank, of an acid jar, and a pendent frame having lengthwise slots, the jar being pivoted eccentrically on said slots, and a movable device which normally engages the head of the jar and is adapted to release the same, so that it may fall and then rotate for discharge of its contents, as specified. 10th. In a fire extinguishing apparatus, the combination with the water distributing pipe, having discharge pipes provided with lateral ears 16^a, levers 17 pivoted to the latter and curved as shown, an easily fusible wire which normally secures one arm of said levers to the ears, valves that normally close the exits of the nipples 16 and rest upon the lower arms of said levers 17, and spring 17^a which aid in throwing the latter, for opening the valves, as shown and described. 11th. In a fire extinguishing apparatus, the combination with the water distributing pipe, and valve therefor, of levers which hold said valve closed and extend laterally as shown, and an easily fusible wire which encircles said levers and secures them together in normal position, as shown and described. 12th. In a fire extinguishing apparatus, the combination, with the water distributing pipe, having pendent nipples, of the sprinkling device, composed of horizontal radial arms 20^a which are inclined transversely and have lateral wings 20^b of triangular form and inclined downward, for dividing and deflecting water, and a central conical portion arranged vertically, as shown and described.

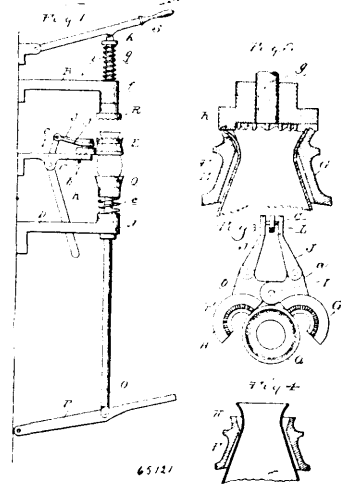
No. 65,121. Chimney Crimping Machine.

(Machine à gaufrer les verres de lampe, etc.)

The Toledo Glass Company, assignee of Harry C. Wood and Amos R. Wilson, both of Toledo, Ohio, U.S.A., 27th November, 1899; 6 years. (Filed 5th April, 1899.)

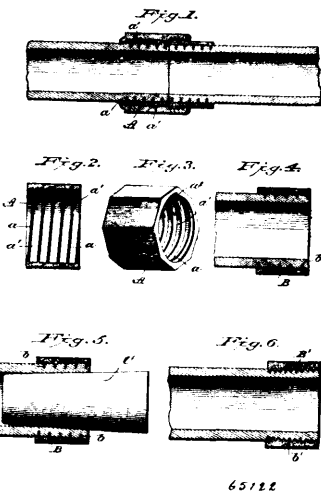
Claim.—1st. In a crimping machine for chimneys or other ware with a flaring end, a ring adapted to support the flaring end against distortion, and a crimping die adapted to crimp the chimney against the ring. 2nd. In a crimping machine for chimneys with a flaring end, a ring adapted to bear against and support the under side of the flaring end, corrugations or teeth on the upper edge thereof, and a die having complementary teeth to those of the ring, adapted to shape the edge of the chimney by compressing the edge between the two members. 3rd. In a crimping machine for chimneys with a flaring end, a two part ring adapted to be clamped about the chimney and to support the flaring end thereof against distortion, corrugations or teeth upon the upper edge of the ring, and a crimping die adapted to crimp the chimney against the ring. 4th. In a crimping machine for chimneys with a flaring end the combination with a movable support adapted to receive the chimney base, a two part ring adapted to be closed about the chimney and to support the flaring end against distortion, and a crimping die for crimping the chimney top against the ring. 5th. In a crimping machine for chimneys with a flaring end, the combination with a two part ring

adapted to be closed about the chimney below the flaring end, a support adapted to receive the chimney base, means for lowering



the base support to bring the flaring end in contact with the ring and a crimping die adapted to crimp the chimney against the ring, substantially as described.

No. 65,122. Pipe Coupling. (Joint de tuyau.)



Charley Alexander Bailey and George Whitfield Stevens, both of Cromwell, Connecticut, U.S.A., 27th November, 1899; 6 years. (Filed 26th October, 1899.)

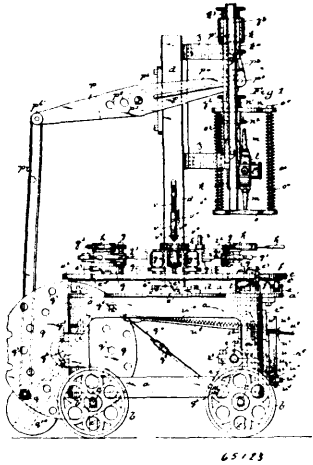
Claim.—1st. In a pipe coupling, the combination with a soft metal pipe, of a collar provided internally with a comparatively thin spiral rib, adapted to swage a thread on the pipe, substantially as shown and for the purpose set forth. 2nd. A collar for coupling on to a soft metal pipe, said collar having internally a spiral rib or thread and a plane surface between said rib or thread, substantially as shown and for the purpose set forth. 3rd. A collar for coupling to a soft metal pipe, said collar having internally a spiral rib or thread and a plane surface between the rib or thread, the outer surface of the collar being provided with plane surfaces, substantially as shown and for the purpose set forth. 4th. A collar for coupling to a soft metal pipe, said collar having an internal spiral rib or thread with a plane surface between the same, the collar being slightly tapered internally from one end to the other and the outer surface provided with flat surfaces, as herein shown and described and for the purpose set forth.

No. 65,123. Apparatus for Forming Glass Articles. (Appareil pour la confection d'articles en verre.)

John J. Power, The Simonds Manufacturing Company and James Negley Cooke, all of Pittsburg, Pennsylvania, U.S.A., 27th November, 1899; 6 years. (Filed 12th May, 1899.)

Claim.—1st. In apparatus for forming glass articles, the combination of a rotary table, a press mould fixedly situate beneath the table at the charging point adapted to receive the molten glass through the table, a mould in which the neck is formed, and a plunger above the press mould and in line therewith. 2nd. In apparatus for forming glass articles, the combination of a plunger, a

rotary table, a mould in which the neck is formed, a press mould fixedly situate beneath the table and mechanism for moving the



plunger and press mould simultaneously toward and away from each other. 3rd. In apparatus for forming glass articles, the combination of a rotary table, a press mould combination of a rotary table, a press mould fixedly situate beneath the table at the charging point adapted to receive the molten glass through the table, a mould in which the neck is formed, a plunger above the press mould and in line therewith, and mechanism for moving the press mould to and from the neck mould. 4th. In apparatus for forming glass articles, the combination of a rotary table, a press mould fixedly situate beneath the table at the charging point adapted to receive the molten glass through the table, a mould in which the neck is formed, a plunger above the press mould and in line therewith, mechanism for moving the press mould to and from the neck mould, and mechanism for automatically locking the press mould in its raised position. 5th. The combination of an endless carrier, a plurality of neck moulds carried thereby, a single press mould fixedly situate beneath the carrier at the charging point and adapted to receive the molten glass through the endless carrier, and mechanism for raising and lowering the press mould to and from each of the neck moulds. 6th. The combination of an endless carrier, a plurality of neck moulds carried thereby, a single press mould fixedly situate beneath the carrier at the charging point and adapted to receive the molten glass through the endless carrier, mechanism for raising and lowering the press mould to and from each of the neck moulds, and mechanism for automatically locking the press mould in its raised position. 7th. The combination of an endless carrier, a plurality of neck moulds carried thereby, a single press mould fixedly situate beneath the carrier at the charging point adapted to receive the molten glass through the endless carrier, a vertically movable slide connected to the press mould and mechanism connected to said slide for raising and lowering the same. 8th. The combination of an endless carrier, a plurality of neck moulds carried thereby, a single press mould fixedly situate beneath the carrier at the charging point and adapted to receive the molten glass through the endless carrier, a vertically movable slide connected to the press mould, mechanism connected to said slide for raising and lowering the same and mechanism for automatically locking the slide in its raised position. 9th. The combination of an endless carrier, a plurality of neck moulds carried thereby, a press mould mounted on a vertically movable slide for receiving the molten glass and a rod pivoted to said slide and connected to a shaft, and mechanism connected to said shaft for raising and lowering the press mould to and from each one of the neck moulds, substantially as and for the purpose set forth. 10th. The combination of an endless carrier, a plurality of neck moulds carried thereby, a press mould mounted on a vertically movable slide for receiving the molten glass, a rod pivoted to said slide and mechanism connected to said rod for raising and lowering the press mould to and from each one of the neck moulds, substantially as and for the purpose set forth. 11th. The combination of an endless carrier, a plurality of neck moulds carried thereby, a press mould mounted on a vertically movable slide and provided with a link thereon, and mechanism connected to said link for raising and lowering the press mould to and from each one of the neck moulds, substantially as and for the purpose set forth. 12th. The combination of an endless carrier, a plurality of neck moulds carried thereby, a press mould mounted on a slide for receiving the molten glass, a rod pivoted to said slide and provided with a link thereon, a bell crank lever mounted on a shaft having one arm journaled in said link, and mechanism connected to the opposite arm of the bell crank lever for raising and lowering the press mould to and from each one of the neck moulds, substantially as and for the purpose set forth. 13th. The combination of an endless carrier, a plurality of neck moulds carried thereby, a press mould mounted on a slide for receiving

ing the molten glass, a rod pivoted to said slide and provided with a link thereon, a bell crank lever mounted on a shaft having one arm journaled in said link, a rod connected to the opposite arm of said bell crank lever, and mechanism connected to last named rod for raising and lowering the press mould, to and from each one of the neck moulds, substantially as and for the purpose set forth. 14th. The combination of an endless carrier, the plurality of moulds carried thereby, a press mould for receiving the molten glass mounted upon a slide, a rod pivoted to the said slide and provided with a link thereon, and a bell crank lever mounted on a shaft having one end journaled in said link, and a rod connected to the opposite end of the bell crank lever and connected to a disc or arm on the main shaft to raise and lower the press mould to and from each one of the moulds, substantially as and for the purposes set forth. 15th. The combination of an endless carrier, a plurality of moulds carried thereby, a press mould for receiving the molten glass mounted upon a slide, a means for raising and lowering the press mould to and from the plurality of moulds, and a rocking or tilting mechanism adapted to engage with said slide to automatically lock the press mould in its raised position substantially as and for the purposes set forth. 16th. The combination of an endless carrier, a plurality of moulds carried thereby, a press mould for receiving the molten glass mounted upon a slide, mechanism for raising and lowering the press mould to and from the plurality of moulds, a rocking or tilting mechanism adapted to engage with the slide to automatically lock the press mould in its raised position, and means connected to the raising and lowering mechanism to operate the same, substantially as and for the purposes set forth. 17th. The combination of an endless carrier, a plurality of moulds carried thereby, a press mould for receiving the molten glass mounted upon a slide, mechanism for raising and lowering the press mould to and from the plurality of moulds, a rocking or tilting mechanism having a nut thereon adapted to engage with the rocking or tilting mechanism to operate the same, substantially as and for the purposes set forth. 18th. The combination of an endless carrier, a plurality of moulds carried thereby, a press mould for receiving the molten glass mounted upon a slide, mechanism for raising and lowering the press mould to and from the plurality of moulds, a rocking or tilting mechanism adapted to engage with the slide to lock the press mould in its raised position, a rod connected to the raising and lowering mechanism having a nut thereon adapted to engage with the rocking or tilting mechanism, and a spring connected to the rocking or tilting mechanism and to the raising and lowering mechanism to operate the same, substantially as and for the purposes set forth. 19th. The combination of a pressing head, a rotatable disc mounted on said pressing head, slides mounted within said disc, and a series of plungers connected to said slides. 20th. The combination with the pressing head having seats, of a rotatable disc mounted on said pressing head, a series of plungers on said disc, and operating handle having a rod thereon extending through the rotating disc and adapted to engage with the seats in the pressing head, and a spring fitting around the rod within the rotating disc, substantially as and for the purposes set forth. 21. In blowing mechanism, the combination of a cylinder or support, a hollow blowing tube extending through the cylinder or support, and a cam or eccentric engaging with the hollow blowing tube to raise and lower the same, substantially as and for the purposes set forth. 22nd. In blowing mechanism, the combination of a cylinder or support, a hollow blowing tube extending through the cylinder or support, a slot within the said cylinder or support, and a cam or eccentric having a pin thereon extending through said slot and engaging with the hollow blowing tube to raise and lower the same, substantially as and for the purposes set forth. 23rd. In blowing mechanism, the combination of a cylinder or support, a hollow blowing tube extending through the cylinder or support, means engaging with the hollow tube for raising and lowering the same, and means for holding the hollow blowing tube in its lowered position, substantially as and for the purposes set forth. 24th. In blowing mechanism, the combination of a cylinder or support, a hollow tube extending through the cylinder or support, means engaging with the hollow tube for raising and lowering the same, and a spring connected to said hollow tube to hold it in its lowered position, substantially as and for the purposes set forth. 25th. In blowing mechanism, the combination with a mould of a cylinder or support, a hollow blowing tube extending through the cylinder or support, a series of openings at the lower end of the hollow tube, and a rigid flange or collar on said blowing tube for engaging with the top of the mould, substantially as and for the purposes set forth. 26th. In blowing mechanism, the combination with a mould of a cylinder or support, a hollow blowing tube extending through the cylinder or support, a flange or collar on said blowing tube for engaging with the top of the mould, and a tapered pint below said rigid flange having a series of openings therein, substantially as and for the purposes set forth. 27th. In blowing mechanism, the combination with a mould, of a cylinder or support, a hollow blowing tube extending through the cylinder or support, a flange or collar on said blowing tube for engaging with the top of the mould, a straight or flat face below said rigid flange or collar for entering said mould, and a tapered point below said straight or flat face having a series of openings therein, substantially as and for the purposes set forth. 28th. In apparatus for forming articles of glassware, the combination with a press mould, of a plunger, mechanism for raising the press mould and for lowering

the plunger simultaneously, mechanism for locking the press mould in its raised position, and mechanism for continuing the downward movement of the plunger after the mould has been locked.

No. 65,121. Post Base. (Base de poteau.)



65121

George W. Brown, Malahide, Elgin, Ontario, 27th November, 1899; 6 years. (Filed 25th September, 1899.)

Claim.—1st. As an improved article of manufacture, the herein-described fence post base having opposite flanges tapering to a common driving point, one of the said flanges terminating in a flat or horizontal upper end below the upper ends of the others, the upper end of the opposite flange also being flat or horizontal. 2nd. The combination with a fence post of a base having opposite flanges tapering to a common driving point, one of said flanges terminating in a flat or horizontal upper end below the upper ends of the others, the upper end of the opposite flange also being flat or horizontal, the faces of two of the flanges forming a lateral bearing against which the fence post is secured, and the short flange forming a vertical support for the post, substantially as described.

No. 65,125. Heating and Ventilating Apparatus.

(Appareil à ventiler et chauffer.)

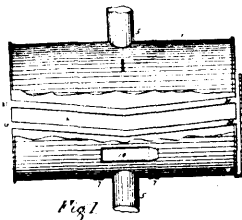


Fig. 1

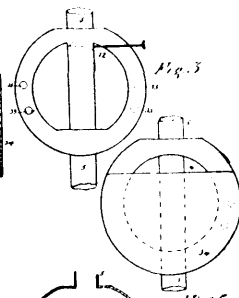


Fig. 3

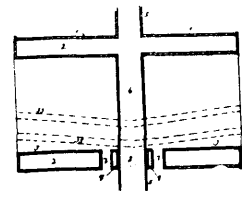


Fig. 2

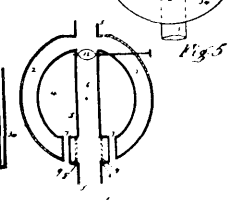


Fig. 4

65125

William Alexander Cowan, Middleton, Norfolk, Ontario, Canada, 27th November, 1899; 6 years. (Filed 3rd June, 1897.)

Claim.—1st. In an apparatus of the class specified, a heater consisting of the combination of an inner and an outer casing with smoke space between them and a smoke pipe made to pass directly through the centre of the same, constructed with adjustable openings in the said pipe in the smoke space between the outer and

inner casing, and means to open and close them for direct draft up the smoke pipe or around the sides of the heater and a damper in the central pipe to control the same, substantially as and for the purpose specified. 2nd. In an apparatus of the class specified, a heater consisting of the combination of an inner and an outer casing with smoke space between them, and a smoke pipe made to pass through the centre of the same and auxiliary pipes enclosed in the smoke space to carry the heat to the ends of the heaters, substantially as specified. 3rd. In an apparatus of the class specified, a heater consisting of the combination of an inner and an outer casing with smoke space between them, and a smoke pipe made to pass through the centre of the same, auxiliary pipes enclosed in the smoke space to carry the heat to the ends of the heater, short vertical pipe 7 through the outer and inner lining and a cover attached to one end of the heater leaving a space between the heater and the cover to cause a suctional draft through the said auxiliary pipes, substantially as specified.

No. 65,126. Shoe. (Chaussure.)

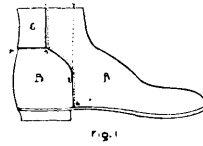


Fig. 1



Fig. 4

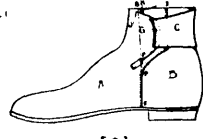


Fig. 2

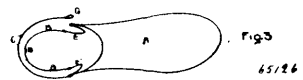


Fig. 3

65126

Hiram Franklin Lambert and Francis James William Layman, both of Merlin, Ontario, Canada, 27th November, 1899; 6 years. (Filed 20th September, 1899.)

Claim.—1st. The manner of cutting pieces A and B, substantially as and for the purpose hereinbefore set forth. 2nd. The manner of putting the pieces A, B, B', E, E' together, substantially as and for the purpose hereinbefore set forth. 3rd. The combination of the pieces, A, C, F, H, for the purpose of fastening, substantially as hereinbefore set forth.

No. 65,127. Heating Furnace. (Fournaise.)

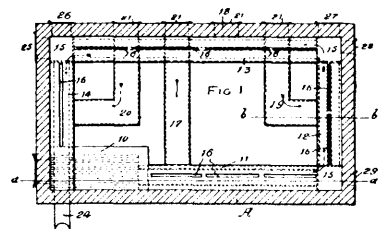


Fig. 1

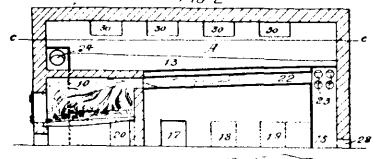


Fig. 2

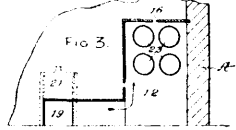


Fig. 3

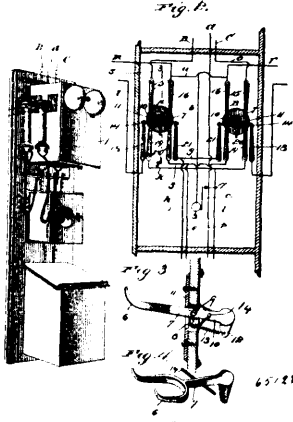
65127

William Couch Macey, Vancouver, British Columbia, Canada, 27th November, 1899; 6 years. (Filed 2nd October, 1899.)

Claim.—1st. In a heater for the purpose set forth, having a reservoir within a casing A, in combination with a fire box, heating chambers 11, 12, 13 and 14, arranged around the inner walls of the said casing, said chambers being independent of each other by spaces 15, one or more flues communicating with the fire box and with each of the said spaces, and such communication returning and escaping through the casing A over the fire box, and means for

passing cold air to within the chambers on a plane with the base of the casing, openings in the chambers to allow the heated air to escape to the reservoir, and means for conducting it from thence to any point desired, substantially as and for the purposes set forth. 2nd. In a heater as an economizer for utilizing the maximum percentage of heat generated by a furnace having a reservoir enclosed by a non-conductive casing, and pipes or flues for conducting the heated gases on a slightly rising plane around the inner walls of the reservoir, heating chambers enclosing such flues at intervals, ducts for admitting cold air to such chambers, and slotted openings in the upper sides of such chambers for the heat to escape to the reservoir, and means for drawing off the heated air from the reservoir as required, substantially as set forth.

No. 65,128. Telephone System. (Système de téléphone.)



William W. Bennett, Mesquite, Texas, U.S.A., 27th November, 1899; 6 years. (Filed 9th October, 1899.)

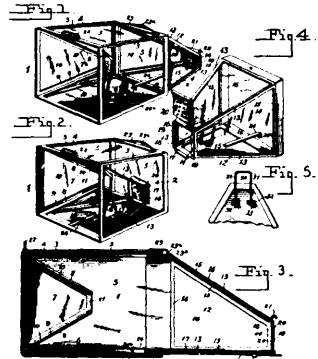
Claim.—1st. In a telephone system, the substation apparatus having a pair of receivers, and two separate receiver operated switches, the main line leading to the apparatus in sections which have separate terminal connections respectively with the separate switches, circuit wire connections including the switches and the main line terminals in the bell circuit, the other circuit wire connections including the switches in circuit with the two receivers and with the transmitter, whereby the removal of either receiver for use provides for closing the speaking circuit over one section of the main line, substantially as set forth. 2nd. In a telephone system, the substation apparatus having a pair of receivers, and two separate receiver operated switches, each switch having separate upper and lower contacts, the main line having separate terminal connections respectively with certain contacts of the separate switches, circuit wire connection including the remaining contacts of the switches and the main line terminals in the bell circuit, and other circuit wire connections between the last named contacts of each switch and the transmitter and the two receivers, whereby the removal of either receiver for use, provides for closing the speaking circuit over one section of the main line. 3rd. In a telephone system, the substation apparatus having a pair of receivers, and two separate receiver operated switches, each switch comprising a switch lever normally held elevated and provided with an oppositely extending contact pin, two pairs of contact fingers arranged side by side and adapted to be simultaneously engaged by said contact pin, and a third pair of contact fingers arranged opposite the other two pairs and adapted for engagement by the opposite portions of the contact pin, circuit wire connections for including said opposite fingers of each switch in the main line and bell circuits, and circuit wire connections between the first named springs and the local battery, the transmitter, and the two receivers.

No. 65,129. Fish Trap. (Avaloire.)

Oscar P. Clark, Bentonville, Arkansas, U.S.A., 28th November, 1899; 6 years. (Filed 30th October, 1899.)

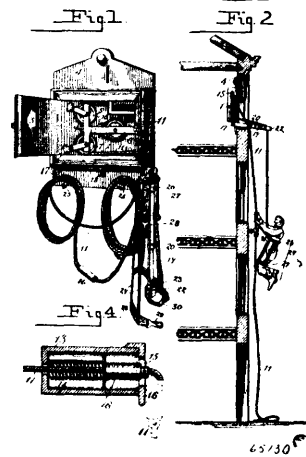
Claim.—1st. A fish trap having a body provided with a hood extension adapted to be nested therein, substantially as set forth. 2nd. A fish trap comprising a body provided at one end with an entrance opening, a separate hood registering with the end of the body opposite the entrance opening thereof, both said body and the hood being provided with a plurality of transparent panel, and means for detachably fastening the hood to the body, substantially as set forth. 3rd. In a fish trap, the body, provided with an inwardly extending entrance funnel at one end, and at its opposite end with a hood extension adapted to be nested within the body over the funnel, substantially as set forth. 4th. In a fish trap, the body, provided at one end with an inwardly disposed entrance funnel, and at its opposite end with a pyramidal hood, adapted to be nested within the body over the funnel, substantially as set forth. 5th. In a fish trap, a transparent body, provided at one end

with an inwardly disposed transparent entrance funnel, and at its opposite end with a transparent pyramidal detachable hood adapted



to be nested within the body over the funnel, substantially as set forth. 6th. A fish trap, comprising a transparent body having at one end an inwardly disposed transparent entrance funnel, and a separate transparent pyramidal hood detachably fitted to the opposite end of the body, substantially as set forth. 7th. A fish trap, comprising a body having at one end an inwardly disposed entrance funnel, and at its opposite end a pyramidal detachable hood, said body and the funnel and hood portions thereof consisting of a skeleton frame work of metal strips having grooves in their edges, and transparent panels fitted in the grooved edges of said strips, substantially as set forth. 8th. A fish trap, comprising a transparent body having a metallic bottom plate, and provided at one end with an inwardly disposed entrance funnel, and its opposite end with pyramidal detachable hood, said hood having a metallic bottom plate and a perforate closure at its small end, substantially as set forth. 9th. A fish trap, comprising a body provided at one end with an inwardly disposed entrance funnel and at its opposite end with a pyramidal detachable hood, said hood being provided at its small end with guides, and a perforate slide gate working in said guides, substantially as set forth. 10th. A fish trap, comprising a body provided at one end with an entrance opening, and a separate hood registering with and adjustably connected to the end of the body opposite the entrance opening thereof, both the said body and the hood being provided with a plurality of transparent panels, and with metallic bottom plates, substantially as set forth. 11th. A fish trap comprising a body provided in the bottom thereof with a catch opening, a separate hood extension detachably registering within one end of the body and also provided with a catch opening, and spring catches fitted respectively to the frame work of the body and the detachable hood and engaging in said catch openings, substantially as set forth.

No. 65,130. Fire Escape. (Appareil de sauvetage.)

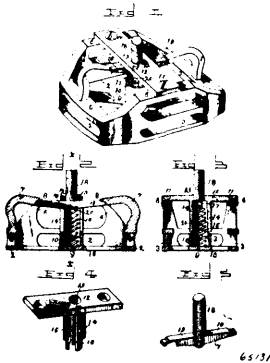


John Laming, St. Stephen, New Brunswick, Canada, 28th November, 1899; 6 years. (Filed 30th October, 1899.)

Claim.—1st. In a fire escape, a casing, triangularly arranged pulleys therein, and a cushioning spring housed within the casing, in combination with a hoisting and lowering device, as a rope, reeved around the pulleys and passing through the spring, and a stop fast on said rope and adapted to co-operate with the spring. 2nd. In a fire escape, the combination with a stationary casing adapted to be arranged within a building and adjacent to a window

and a cushioning device within said casing, of a longitudinally extensible arm pivotally connected to the casing and adapted to be swung outward through the window opening to form a support for the hoisting and lowering device, a pulley at the outer end of said arm, and a rope running over said pulley and co-operating with the cushioning device. 3rd. In a fire escape, the combination with a casing, of a coiled spring housed therein, a hoisting and lowering device, as a rope passing through the coils of said spring, and a stop or button fast on the rope and adapted to operate upon said spring. 4th. In a fire escape, the combination with a casing, of a series of pulleys and a cushioning spring arranged therein, a hoisting and lowering device, as a rope, passing around said pulleys and through the spring, a stop or button fast on said rope, a rod or shaft connected to the casing and disposed horizontally, and an extensible arm connected to said rod or shaft, and having a pulley at its outer end for guiding and supporting the rope. 5th. In a fire escape, a casing, a series of pulleys journaled therein, and a hoisting and lowering device, as a rope, passing around said pulleys and provided with a stop fast thereon, in combination with a cushioning spring housed within the same casing and having said rope passed there-through, substantially as described.

No. 65,131. Trace Supporting. (*Support de traits.*)



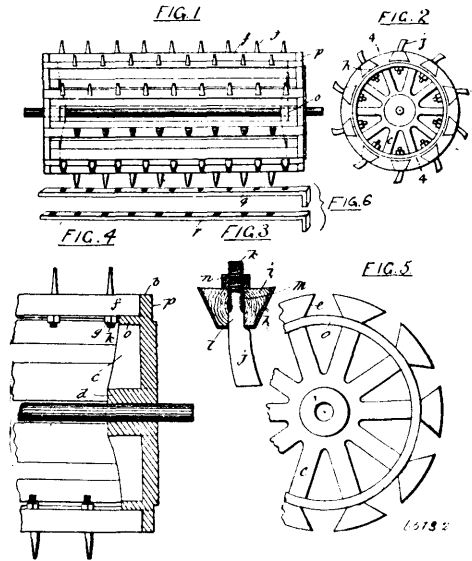
Henry W. Kimm, Jobs, Iowa, U.S.A., 28th November, 1899; 6 years. (Filed 2nd November, 1899.)

Claim.—1st. In a trace carrier, the combination with a frame having opposite fixed hooks, of a guide bar located transversely intermediate the hooks with a vertical opening and a pendent tube having opposite longitudinal slots, a vertically movable cross head located within the tube and having its opposite ends projecting outwardly through the respective slots in the tube, and an operating stem carried by the cross head and projecting upward through the opening in the guide bar, the opposite projecting ends of the cross head being adapted to form tongues which are normally held in engagement with the under sides of the respective hooks, substantially as and for the purpose set forth. 2nd. In a trace carrier, the combination with the frame thereof of having opposite fixed hooks and a socket located intermediate of the hooks, of a guide bar located transversely between the hooks aligned above the socket and provided intermediate of its ends with a vertical opening, a pendent tube in communication with said opening, provided with opposite longitudinal slots and having its lower end seated within the socket, a vertically movable cross head arranged within the tube having its opposite ends projecting outwardly through the respective slots formed in the tube, and provided with an operating stem projecting upwardly through the opening formed in the guide bar, and a coiled spring housed within the tube and bearing at one end against the bottom of the socket and at the other end against the lower side of the cross head, whereby the latter is normally held in engagement with the hooks, substantially as shown and described. 3rd. In a trace carrier, the combination with the frame thereof, of hooks supported thereby, transversely opposite bridge pieces provided upon the frame and extending longitudinally of the same, a guide bar removably secured to the bridge pieces, extending transversely between the hooks, and provided with a central opening, and a vertically movable cross head, having an operating stem projecting upwardly through the opening in the guide bar, the opposite ends of the cross head being normally in engagement with the under sides of the respective hooks, substantially as and for the purpose set forth. 4th. In a trace carrier, the combination with a frame, having a socket located centrally thereof of opposite hooks supported upon the frame, transversely opposite bridge pieces provided upon the frame and extending longitudinally at opposite sides of the hooks, a guide bar connected to the bridge pieces, transversely between the hooks, and provided intermediate of its ends with a vertical opening, a tube pendent from the guide bar and provided with opposite longitudinal slots aligned with the hooks, the lower end of the tube being situated within the socket, a vertically movable cross head received within the tube, having its opposite ends projecting through the slots in normal engagement with the respective hooks, and provided with an operating stem projecting

upwardly through the opening in the guide bar, and a coiled spring housed within the tube and adapted to hold the cross head in its normal elevated position, substantially as shown and described.

No. 65,132. Threshing Machine Cylinder.

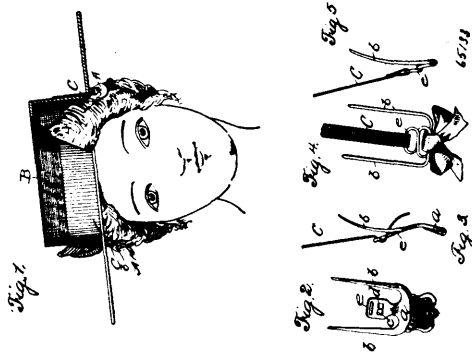
(*Cylindre de machine à battre.*)



Henry Moody, Terrebonne, Quebec, Canada, 28th November, 1899; 18 years. (Filed 30th October, 1899.)

Claim.—1st. A cylinder for threshing machines, consisting of a pair of circular end pieces each having a series of corresponding peripheral notches, a series of tooth carrying bars set at their ends in said notches, and each consisting of an angle iron with wood filling, a series of teeth formed with stems taking through said angle irons and wood filling, and a series of retaining nuts taking upon the inner ends of said stems, substantially as described and for the purpose set forth. 2nd. A cylinder for threshing machines, consisting of a pair of circular end pieces each having a series of corresponding flared peripheral notches, a series of tooth carrying bars set at their ends in said notches and each consisting of an angle iron of V cross-section with its apex flattened, a wood filling for said angle iron, a series of teeth formed with stems taking through said U irons and wood filling, and a series of retaining nuts taking upon the inner ends of said stems, substantially as described and for the purpose set forth. 3rd. A tooth carrying bar for threshing machine cylinders, consisting of an angle iron having a wood filling, substantially as described and for the purpose set forth. 4th. A tooth carrying bar for threshing machine cylinders, consisting of an angle iron of V cross-section with its apex flattened and having a wood filling, substantially as described and for the purpose set forth. 5th. A cast iron head for threshing machine cylinders, having its outer face milled near the periphery thereof, substantially as described and for the purpose set forth. 6th. A cast iron head for threshing machine cylinders, having its inner face formed with an annulus near the periphery thereof, substantially as described and for the purpose set forth.

No. 65,133. Hat Fastener. (*Attache de chapeau.*)

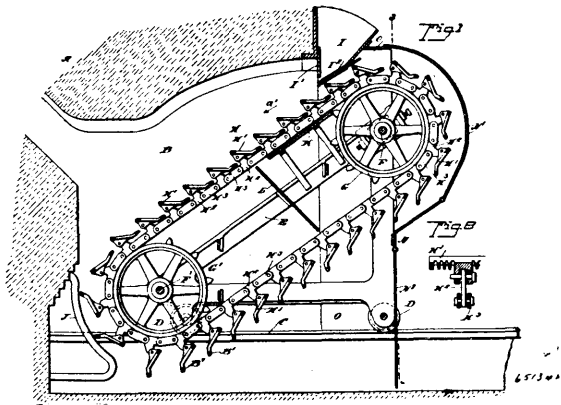


Henry Silas Grace, San Francisco, California, U.S.A., 28th November, 1899; 6 years. (Filed 30th October, 1899.)

Claim.—A hat fastener having two prongs adapted to enter the hair of the wearer and conform to the shape of the head, and pro-

vided at the lower end with a cross piece which connects the two prongs, and with a loop centrally arranged upon the cross piece and projecting in a general direction between said prongs, and an elastic connection which holds it to the hat, whereby a single central connection is arranged to draw equally upon the fastener and hold it and the hat in place, substantially as described.

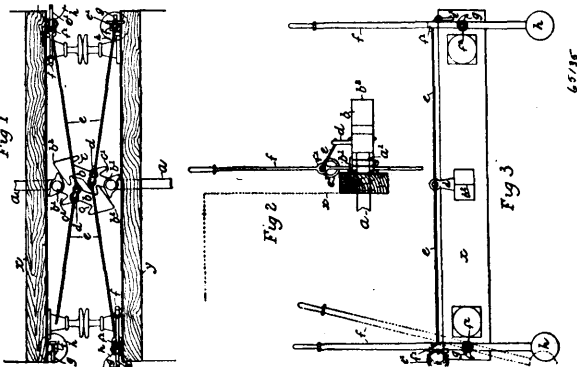
No. 65,134. Furnace. (Fournaise.)



Rudolf Ruetschi, Perth Amboy, New Jersey, U.S.A., 28th November, 1899; 6 years. (Filed 30th October, 1899.)

Claim.—1st. A furnace provided with a fire box, and an endless travelling grate having pivoted grate bars arranged to form a continuous support for the fuel at the upper run of the traveling grate, and to form open spaces between adjacent grate bars at the lower run of said grate for the passage of ashes and coal dust, said grate being arranged in an inclined position, the grate bars being arranged in step form on the upper run, substantially as shown and described. 2nd. A furnace provided with a fire box, an endless traveling grate having pivoted grate bars arranged to form a continuous support, for the fuel at the upper run of the traveling grate, and to form open spaces between adjacent grate bars at the lower run of said grate for the passage of ashes and coal dust, a table under part of the upper run at the front or fuel receiving end thereof, and a deflecting plate extending downwardly and forwardly between the upper and lower runs and below the lower end of said table, substantially as shown and described. 3rd. In a furnace, the combination of an inclined traveling grate mounted in the fire box, and means mounted beneath the outer portion of said grate, such means receiving the coal dust from the grate and carrying the same outwardly beyond the ashes. 4th. A traveling grate, comprising pivotally connected links, alternate links of which are formed with outwardly projecting lugs, and grate bars pivotally mounted on said lugs, whereby the bars are held away from the chain proper. 5th. A traveling grate, comprising links pivotally connected with each other to form a chain, alternate links being formed with outwardly projecting lugs, and grate bars of angular cross section pivotally mounted on said lugs.

No. 65,135. Car Coupler. (Attelage de chars.)

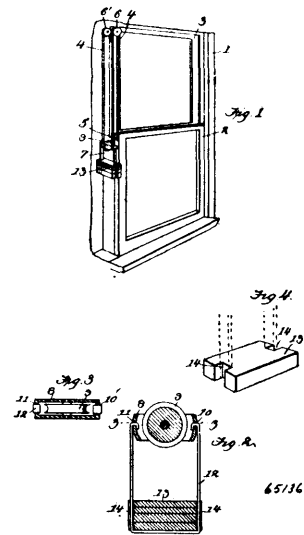


Henry James Marks, Toowoomba, Queensland, Australia, 28th November, 1899; 6 years. (Filed 30th October, 1899.)

Claim.—1st. In a car coupling, the combination with a truck having a draw bar at each end of a quadruple hook so pivoted thereto that the said hook can only be swung or moved laterally, and governor weights arranged to tend to keep the said hook central, substantially as set forth. 2nd. The combination with a drawbar

at each end of a car of a quadruple hook *b* pivoted thereto, a projection *d* on said hook, chains or ropes *e*, connected to said projection, and having each a ring *e*¹, and pivoted side levers having an eye *f*¹, through which one of said chains passes and a hook *g*, all substantially as and for the purposes set forth.

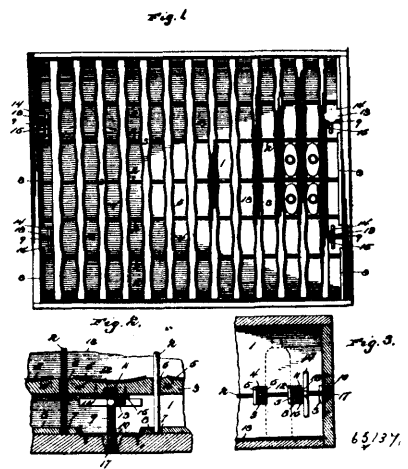
No. 65,136. Sash Weight. (Poids de châssis.)



Henry Johnson, Cleveland, Ohio, U.S.A., 28th November, 1899; 6 years. (Filed 30th October, 1899.)

Claim.—1st. A sash weight consisting of a pulley frame, a weighted stirrup carried by said frame, substantially as described. 2nd. A sash weight consisting of a pulley frame, a stirrup depending from said frame and removable weight sections seated in said stirrup, substantially as described. 3rd. A sash weight consisting of a pulley frame, a stirrup depending from said frame and removable weight sections of different sizes seated in said stirrup, substantially as described. 4th. A sash weight consisting of a pulley frame, having openings in the ends thereof, a substantially U-shaped stirrup secured to said frame and having its ends secured in said openings, a series of different sized weights, provided with notched ends adapted to engage the sides of said stirrup and removable therefrom, substantially as described.

No. 65,137. Bottle Crate. (Caisse à bouteilles.)

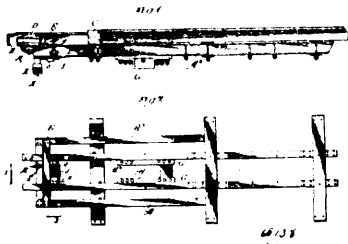


George C. Chappell, Jacksonville, Florida, U.S.A., 28th November 1899; 6 years. (Filed 30th October, 1899.)

Claim.—1st. The combination of a crate, a series of parallel clamping bars, a series of horizontal rods rigid with the crate and arranged at right angles to and slidingly supporting the clamping bars, said bars and rods dividing the crate and forming separate bottle receiving compartments or spaces, and an adjusting device for causing the clamping bars to engage the entire contents of the crate, substantially as described. 2nd. The combination of a crate provided at one end with an opening extending entirely through it, a series of parallel supporting rods rigid with the crate, a series of clamping bars slidingly mounted on the rods, said rods and bars being arranged at

right angles to each other and dividing the crate into separate compartments, a nut mounted on the crate and registering with the said opening, and a screw engaging the nut and the adjacent clamping bar and arranged to extend through said opening, whereby the end clamping bar is adapted to be arranged close to the end of the crate to adjust it to its full extent, substantially as described.

No. 65,138. Draw Bar Attaching Device.
(Appareil à assujettir les barre d'attelage.)

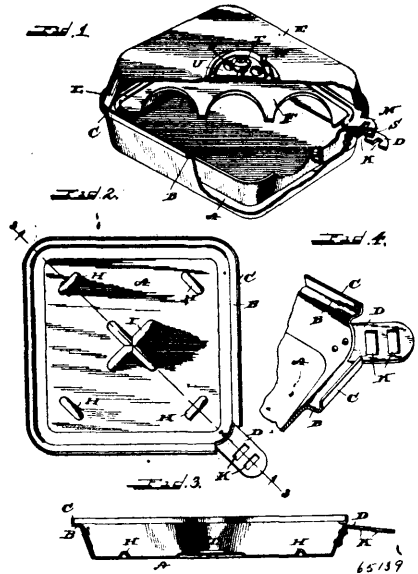


Henry Howard Sessions, Chicago, Illinois, U.S.A., 28th November 1899; 6 years. (Filed 31st October, 1899.)

Claim.—1st. In a car, the combination with the draft beams and a suitably attached draw bar, of means for confining said bar laterally toward its free end, comprising a laterally extending coil spring, a yielding stop plate, and means connecting said stop plate with both ends of said spring capable of transmitting force to the spring at one of its ends when the stop plate is moved in one direction and at its opposite end when the stop plate is moved in the opposite direction to its first movement, substantially as and for the purpose set forth. 2nd. In a car, the combination with the draft beams, and a draw bar suitably attached at one of its ends, of means for confining said draw bar laterally toward its free end, comprising a spring, movable spring sockets or the like, for confining said spring, and in engagement with the draw bar and connected with said movable sockets to compress the spring, according to the direction of pressure at the bar, substantially as and for the purpose set forth. 3rd. In a car, the combination with the draft beams, and a suitably attached draw bar, of means for confining said bar laterally towards its free end, comprising a yielding stop plate, a spring, connecting means between the yielding stop plate and spring, and a non-yielding stop plate connected with the frame provided with a lug or the like, in such position as to normally engage said draw bar while said spring is under a safe stress, substantially as and for the purpose set forth. 4th. In a car, the combination with the draft beams, and a suitably attached draw bar, of means for confining said bar laterally toward its free end, comprising a yielding stop plate, a spring, connecting means between the yielding stop plate and spring, and a non-yielding stop plate connected with the frame provided with a projection on each side of the draw bar allowing limited movement only in either direction and serving normally to engage said draw bar in its lateral movement while said spring is under safe stress, substantially as and for the purpose set forth. 5th. In a car, the combination with the draft beams, and a suitably attached draw bar, of means for confining said bar laterally towards its free end, comprising a yielding stop plate, a spring, spring engaging means, connecting and disconnecting means between said yielding stop plate and said spring engaging means, permitting a shifting of said plate with relation to said spring, and an adjustable non-yielding stop connected with said draft beams, substantially as and for the purpose set forth. 6th. In a car, the combination with the draft beams, and a suitably attached draw bar, of means for confining said bar laterally towards its free end, comprising a yielding stop plate, a spring, movable spring sockets for the two ends of said spring, and pressure transmission means connected with said sockets and adjustably connected with said plate, substantially as and for the purpose set forth. 7th. In a car, the combination with the draft beams, and a suitably attached draw bar, of means for confining said bar laterally towards its free end, comprising a yielding stop plate, a spring, movable spring sockets for the two ends of said spring, a shell connected with said spring sockets and movable with relation to either socket in one direction and engaging the same socket to move it in the opposite direction, and means for adjustably connecting said shell to said plate to permit shifting of the latter with relation to the shell, substantially as and for the purpose set forth. 8th. In a car, the combination with the draft beams, and a suitably attached draw bar, of means for confining said bar laterally towards its free end, comprising a yielding stop plate, a spring, movable spring sockets for the two ends of said spring, a shell connected with said spring sockets and movable with relation to either socket in one direction and engaging the same socket to move it in the opposite direction, lugs and recesses on shell and plate affording detachable connection, means for rotating said shell, and means for holding the shell in the position of interlocking connection with said plate, substantially as and for the purpose set forth. 9th. In a car, the combination with draft beams and suitably attached draw bar, of lateral confining means, comprising a yielding stop plate, a transversely extending bolt, a coil spring thereon, relatively short spring sockets on said bolt, an external connecting shell engaging

said sockets, lugs and recesses on shell and sockets, whereby a movement of the shell carries with it the spring socket opposite that end of the spring towards which the shell is moving, lugs and recesses on said shell and plate forming an interlocking engagement, and a spring and an operating rod for holding the shell and plate in engagement and for disconnecting said parts at will, substantially as and for the purpose set forth. 10th. In a car, the combination with the draft beams and a suitably attached draw bar, of a spring, an adjustable yielding stop plate connected with said spring, and an adjustable non-yielding stop plate provided with stops affording a clearance at one side, at least, of the draw bar, substantially as and for the purpose set forth. 11th. In a car, the combination with the draft beams and a suitably attached draw bar, of a spring, an adjustable yielding stop plate connected with said spring, a stop supporting bracket N¹, supported from the draft beams, and an adjustable non-yielding stop N, fixed thereto, substantially as and for the purpose set forth.

No. 65,139. Cooking Utensil. (Ustensile de cuisine)



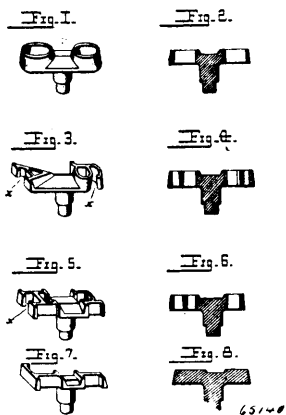
John H. Kughler, Chicago, Illinois, U.S.A., 28th November, 1899; 6 years. (Filed 24th October, 1899.)

Claim.—1st. In a combination cooking utensil, the combination with a pan provided with a shoulder around the upper edge thereof and a cover adapted to rest upon said shoulder, of a cooking utensil adapted to be supported within the pan, and perforated ears on said pan and utensil projecting outside of the cover, substantially as described. 2nd. In a combination cooking utensil, the combination with a pan provided with a shoulder around its edges, and a cover adapted to rest upon said shoulder, of a tray resting on said shoulder below the cover, said tray and pan being each provided with perforated ears extending beyond the cover, substantially as described. 3rd. In a combination cooking utensil, the combination with a pan provided with a shoulder around its edge, of a cover adapted to rest upon said shoulder, a knob at the centre of said cover, and a rotary damper pivoted upon said knob, said damper and cover being provided with perforations adapted to register with one another, substantially as described. 4th. In a combination cooking utensil, the combination with a suitable cover, of a pan provided with an annular shoulder around its edge to support the cover, and angularly disposed ribs struck up in the bottom of said pan, substantially as described. 5th. In a combination cooking utensil, the combination with a pan having a shoulder around its edge, and a cover therefor, of a tray adapted to rest upon said shoulder, and a stiffening rib struck up on said tray and extending around the same adjacent to the edge thereof, said tray and pan being provided with perforated ears extending beyond the cover, substantially as described. 6th. In a combination cooking utensil, the combination with a pan provided with a shoulder around its edge and a cover therefor, of a smaller pan located within the first mentioned pan, and lateral centring ribs in the sides of said smaller pan, both of said pans being provided with perforated ears extending beyond the cover, substantially as described.

No. 65,140. Type for Typewriters.
(Caractères pour clavigraphes.)

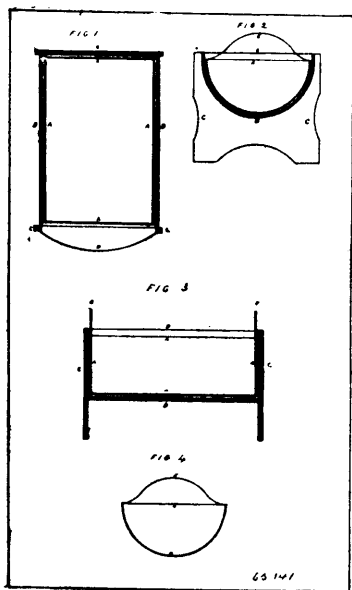
William Cary Hull, Traverse City, Michigan, U.S.A., 28th November, 1899; 6 years. (Filed 10th April, 1899.)

Claim.—A type for typewriting machines, comprising a type piece, and one or more characters on the face of said type piece, said



characters having their inner and outer marginal edges extending at an angle from face to back of said type piece without shoulder or ledge, substantially as and for the purpose specified.

No. 65,141. Machine for Preparing Seed for Sowing.
(*Machine à préparer le grain de semence.*)



John Middleton, Elkhorn, Manitoba, Canada, 28th November, 1899; 6 years. (Filed 20th May, 1898.)

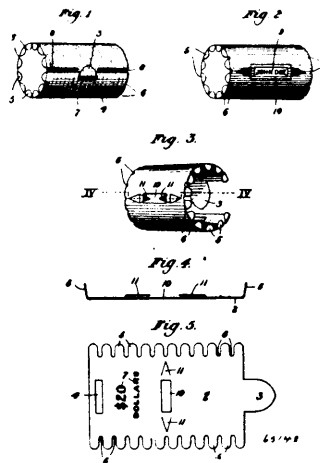
Claim.—In an apparatus for bluestoning wheat a vessel in which a perforated vessel is suspended to receive the wheat to be submitted to the sulphate of copper solution to enable it to be skimmed by overflow and retain the solution in the outer vessel for future use, as shown and described for the purpose set forth.

No. 61,142. Coin Case. (*Boîte à monnaie.*)

The Cable Coin Case Company, assignee of Daniel J. Cable, all of Pittsburg, Pennsylvania, U.S.A., 28th November, 1899; 6 years. (Filed 12th May, 1899.)

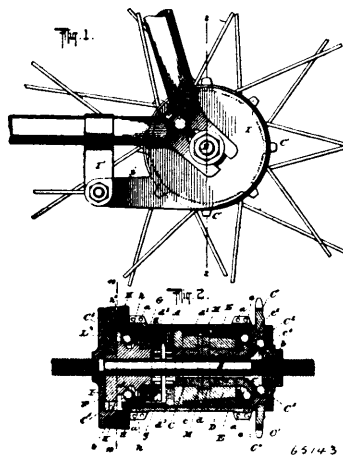
Claim.—1st. A coin holder, consisting of a metallic plate adapted to be bent around a package of coins into cylindrical form, provided with inwardly bent retaining extensions at each end, a securing tang projecting from one side, a receiving slot for the tang at the opposite side, and a name opening in the plate, with inwardly turned retaining lips. 2nd. A coin holder, consisting of a rectangular metallic plate adapted to be bent around the coins into cylindrical form and provided on its sides forming the ends of the holder with extensions or scallops adapted to be bent inwardly against the end coins, the plate being cut away so as to form at the bottoms and between said extensions or scallops recesses inside the bending line for the purpose of preventing buckling of the metal at the bending line of the scallops, and a name opening in the plate

with inwardly turned retaining lips. 3rd. A coin holder, consisting of a rectangular metallic plate adapted to be bent around the coins



into cylindrical form and provided on its sides forming the ends of the holder with extensions or scallops adapted to be bent inwardly against the end coins, the plate being cut away so as to form at the bottoms and between said extensions or scallops recesses inside the bending line for the purpose of preventing buckling of the metal at the bending line of the scallops, a name opening in the plate with inwardly turned retaining lips, and indicating characters stamped in the blank.

No. 65,143. Cycle Mechanism. (*Mécanisme de cycle.*)



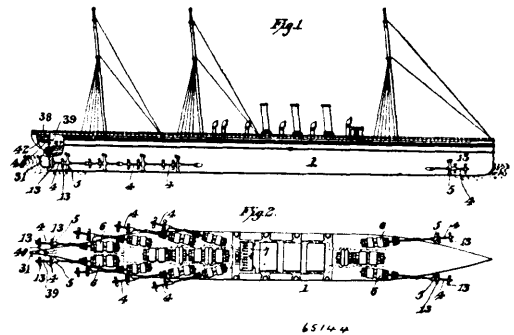
The New Departure Bell Company, assignee of Harry Pond Townsend, all of Bristol, Connecticut, U.S.A., 28th November, 1899; 6 years. (Filed 30th December, 1898.)

Claim.—1st. In a bicycle, a wheel hub, propelling means, a clutch brake, detachable rotative connecting means between the propelling means and the hub and the propelling means and the brake to rotate the hub and wheel upon forward propulsion of the propelling means, to permit the hub to rotate free from connection with the propelling means when detached, and to operate the brake upon the exertion of force backward upon the propelling means, substantially as described. 2nd. In a bicycle, the combination with wheel propelling and braking mechanisms located at opposite ends of the hub, of a laterally shifting connecting device, and means controlled by the rider through the propelling mechanism, to shift the connecting device to connect it with either the wheel hub or the brake, or to disconnect it from both. 3rd. In a bicycle, the combination with wheel propelling and braking mechanisms located at opposite ends of the hub, of a laterally shifting connecting device intermediate the wheel propelling and braking mechanisms, means controlled by the rider through the propelling mechanism to shift the connecting device, and brake operating means actuated by the connecting device, substantially as shown and described. 4th. In a bicycle, the combination with a driving wheel and a brake located at opposite ends of the hub, of a sleeve rigidly connected with said driving wheel, a laterally shifting connecting device arranged to engage the brake or the hub, and connections between the sleeve and the laterally shifting connecting device to shift said device, substantially as shown and described. 5th. In a bicycle, the com-

ination with a driving wheel and brake located at opposite ends of the hub, of a sleeve connected rigidly with the driving wheel, a sleeve mounted on the sleeve of the driving wheel, and connections between said sleeves whereby a rotation of the sleeve of the driving wheel imparts a lateral and rotative movement to the sleeve mounted thereon, substantially as shown and described. 6th. In a bicycle, a pedal shaft and pedals to rotate it, a wheel axle and hub, a driving wheel at one end of the hub, a brake at the other end comprising an expandible brake ring and a brake drum concentric therewith, and detachable connecting means intermediate of the driving wheel and said hub on one side and said brake ring upon the other, all so constituted and arranged that a forward propulsion of the pedals will connect the connecting means with the hub and advance the wheel, a stationary position of the pedals will detach said connection and permit the free rotation of the hub, and a backward pressure upon the pedals will bring into engagement the connecting means and the brake ring so as to expand the same against the brake drum to brake the wheel, substantially as shown and described. 7th. In a bicycle, the combination with an expandible brake ring mounted on a fixed support, of a brake drum mounted on the wheel or hub, and a pedal actuated means to expand said brake ring and cause it to engage the brake drum, substantially as shown and described. 8th. In a bicycle, a clutch brake comprising a rotative movable member and a split ring concentric therewith, driving means, and means intermediate the driving means and the ends of the split brakering to cause the ring to engage the movable member, substantially as shown and described. 9th. In a bicycle, a clutch brake comprising a rotative movable member and a split ring concentric therewith, driving means, and connecting means between the driving means and the movable member to rotate the same for forward propulsion, and means between the driving means and the split brake ring to move the ends thereof upon a reverse action of the driving means to engage the movable member and thus brake the wheel, substantially as shown and described. 10th. A driving and brake mechanism, comprising driving means, a rotative movable brake member, a brake member attached to a fixed support, consisting of a split ring, one end being held against motion, a lever arranged to engage the free end of the ring and means to connect the driving mechanism with the rotative movable member to rotate it for forward propulsion, and means to connect the driving means with the lever to expand the brake ring and cause it to engage with the movable brake member upon backward action of the driving means, substantially as shown and described. 11th. In a bicycle, the combination with a wheel and its hub, of a brake comprising an expandible member mounted on a fixed support and a member mounted on the wheel hub, a driving wheel and connections for rotating the hub and for expanding the expandible brake member, and devices controlled by the rider for connecting said driving wheel with the wheel hub or the expandible brake member or for disconnecting it from both, substantially as shown and described. 12th. In a brake mechanism, the combination with a split ring mounted on a fixed support, of a drum mounted on a rotating support, means to rotate the rotating support in one direction only, a lever to expand the split ring to cause it to be brought into frictional contact with the drum, and means to connect the rotating means and the lever when force is exerted upon the rotating means in a reverse direction, substantially as shown and described. 13th. A driving and brake mechanism for bicycles, comprising driving means, a rotative movable brake member, a stationary expandible brake ring concentric therewith, and means to connect the driving means with the rotative movable member to rotate it and the wheel, and means to expand the brake ring and cause it to frictionally engage the rotative movable member to brake the wheel, substantially as shown and described. 14th. In a bicycle, a driving and brake mechanism comprising a drive wheel and a hub, a rotative movable brake member upon the hub, a stationary expandible brake ring concentric therewith, means to connect the drive wheel with the hub to rotate it and the movable brake member in one direction for forward propulsion of the driving wheel, and means to connect the driving wheel with the expandible brake ring to expand it against the movable brake member upon the exertion of force in a reverse direction upon the drive wheel, substantially as shown and described. 15th. A rotating shaft, a barrel surrounding it provided with an interior clutch socket, a shifting sleeve upon the shaft provided with a male cone end and connections between said shaft and shifting sleeve arranged to bring the shifting sleeve and clutch socket into engagement upon a rotation of the shaft in one direction and to disengage the same upon reverse movement of the shaft, substantially as shown and described. 16th. In driving and brake mechanism, comprising propelling means, a hub and a brake, a shaft within the hub and a shifting connection consisting of a sleeve upon the shaft capable of horizontal motion thereon to connect the propelling means and hub for forward propulsion and to connect the propelling means and brake operating mechanism to actuate the brake, substantially as shown and described. 17th. In a bicycle, the combination with the wheel and its driving and braking mechanisms of a shaft, a shifting connection between the wheel driving mechanism and the hub of the wheel and between the wheel driving mechanism and the brake mechanism, and a key and groove connection between the shifting connection and the shaft, substantially as shown and described. 18th. In a bicycle, the combination with the wheel and its propelling and braking mechanisms located at opposite ends of the hub of the wheel, of a

laterally shifting connecting device intermediate the wheel propelling and braking mechanisms, consisting of a sleeve having double cone ends carried upon the shaft, a key and groove connection between said sleeve and shaft, and clutch sockets upon the hub and brake actuating mechanism with which said sleeve may engage, substantially as shown and described. 19th. In a bicycle, the combination with driving and braking mechanisms of means controlled by the direction of pressure upon the pedals for connecting the driving mechanism with the wheel or brake, and means for preventing a loose action of the pedals, substantially as shown and described. 20th. In a bicycle, the combination with the driving wheel and brake of a laterally shifting connecting device arranged to connect the wheel with the hub or brake, means actuated by a relative rotation of the driving wheel and connecting device to shift the connecting device, and a friction device arranged to insure a relative rotation of the driving wheel and connecting device, substantially as shown and described. 21. t. In a bicycle, the combination with the driving wheel and brake actuating mechanism of a laterally shifting connecting device arranged to connect the driving wheel with the hub and the driving wheel with the brake actuating mechanism, means actuated by a relative rotation of the driving wheel and connecting device to shift said connecting device, and a friction device carried by the connecting device arranged to engage the hub and brake actuating mechanism to insure the relative rotation of the driving wheel and the connecting device, substantially as shown and described. 22nd. In a bicycle, the combination with a driving wheel and brake actuating mechanism located at opposite ends of the hub, of a shaft rigidly connected with the driving wheel, a shifting sleeve thereon having male cone ends, a key and groove connection between the sleeve and shaft, clutch sockets fixed to the hub and brake actuating mechanism, and a spring carried by the sleeve and arranged to engage with the clutch sockets on either side to insure a certain movement of the sleeve relative to the shaft, substantially as shown and described. 23rd. In a clutch brake for a cycle or other vehicle, an expandible and contracting spring of tempered steel and a steel drum with a braking surface hardened to a greater degree of hardness than the surface of the spring, combined and arranged with means to move the ends of the brake ring relatively to each other to bring the surface of the spring into contact with the hardened surface of the drum, and thus brake the wheel without the use of fibre, leather or other frictional surface to form a braking surface, substantially as shown and described. 24th. In a bicycle, the combination with the wheel and its propelling and braking mechanisms located at opposite ends of the hub of the wheel, the propelling means having attached thereto a shaft loose upon the axle, of a laterally shifting connecting device intermediate the wheel propelling and braking mechanisms, consisting of a sleeve carried upon the shaft, one end having a male screw and the other end provided with teeth, a key and groove connection between said sleeve and shaft, and a female screw socket within the hub, and teeth upon the brake actuating mechanism with which said sleeve may engage upon one side and the other, substantially as shown and described. 25th. In a bicycle, the combination with the wheel and its propelling and braking mechanisms located at opposite ends of the hub of the wheel, the propelling means having attached thereto a shaft loose upon the axle, of a laterally shifting connecting device intermediate the wheel propelling and braking mechanisms, consisting of a sleeve carried upon the shaft, one end being a male cone and the other provided with teeth, a key and groove connection between said sleeve and shaft, and a clutch socket within the hub and teeth upon the brake actuating mechanism with which said sleeve may engage upon one side and the other, substantially as described.

No. 65,144. Ship. (Navire.)

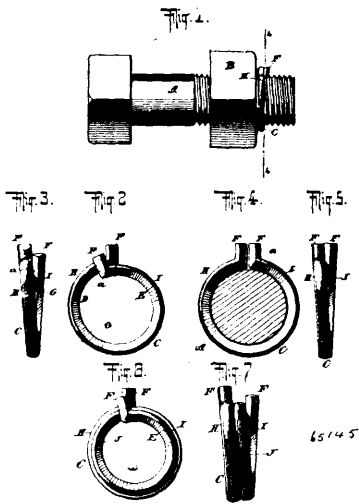


Richard B. Painton, Williamsport, Pennsylvania, U.S.A., and William H. Bambridge, London, England, 28th November, 1899; 6 years. (Filed 3rd February 1899.)

Claim.—1st. The combination with the hull of a vessel, of front and rear pairs of short propeller shafts extending through the hull at opposite sides of the prow and stern ends thereof, a pair of duplicate screw propellers of the same size fitted on the exterior portion of each propeller shaft and arranged a distance apart one in advance

of the other, with their blades alternately disposed in staggered relation, the rearmost propeller of each pair working against the surge water thrown back from the propeller in advance thereof, and serving to press such water outwardly from the hull, means to space said propellers apart, and fastening means to hold the propellers on the shaft in their spaced relation, substantially as set forth. 2nd. The combination of a propeller shaft provided with separate squared portions spaced a distance apart, a pair of duplicate propellers having squared openings in their hubs to respectively fit the separate squared portions of the shaft, means to space the propellers apart and a single fastening for detachably securing both propellers on the shaft, substantially as set forth. 3rd. The combination of a propeller shaft provided at an exterior point intermediate its ends with a squared key portion and at its extreme outer end with a separate squared key portion, duplicate screw propellers arranged one in advance of the other and having squared openings in their hubs to respectively fit the squared key portions of the shaft, a removable spacing sleeve loosely fitted on the shaft and interposed between the hubs of the spaced propellers, and a fastening engaging with the outer tip end of the shaft to lock the outermost propeller in place, substantially as set forth. 4th. The combination with the hull of a vessel, of a pair of short propeller shafts extended through the hull at opposite sides thereof, a pair of duplicate screw propellers fitted on the outer end portion of each propeller shaft with their blades alternately arranged with respect to each other in staggered relation, each of said pair of propellers having their blades twisted in inverted positions, whereby the same may be turned in a direction inward toward the hull to provide for propelling the same in a forward direction, means to space the propellers apart, and fastening means to hold the propellers on the shaft in their spaced relation, substantially as set forth.

No. 65,145. Nut Lock. (Arrête-écrou.)



Charles C. Gill, New York City, New York, U.S.A., 28th November, 1899; 6 years. (Filed 2nd November, 1899.)

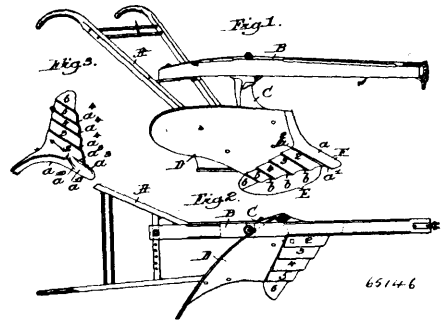
Claim.—1st. A nut lock comprising a spring ring or clip initially of reducing diameter, one portion of the ring substantially conforming to the bolt so as to be readily started thereon, and the other portion thereof defining a smaller diameter than that of the bolt so as to be expanded by the bolt as the ring is screwed thereon, substantially as and for the purpose set forth. 2nd. A nut lock comprising a spring ring or clip initially of reducing diameter and having at its ends the outwardly extending arms, one portion of the ring substantially conforming to the bolt so as to be readily started thereon, and the other portion thereof defining a smaller diameter than that of the bolt so as to be expanded by the bolt as the ring is screwed thereon, substantially as and for the purposes set forth.

No. 65,146. Plough. (Charrue.)

Pratt Allen Spicer, Marshall, Michigan, and Alfred M. Ziegler, Boston, Massachusetts, U.S.A., 28th November, 1899; 6 years. (Filed 2nd November, 1899.)

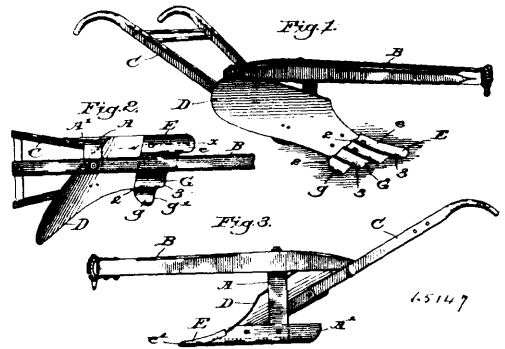
Claim.—1st. A ploughshare composed of a series of sections each having its landside edge joined with an adjacent section at its edge farthest from the landside by a shoulder, the shoulder between said sections extending entirely across said share from its cutting edge to an edge abutting the moldboard, substantially as described. 2nd. A ploughshare having a series of sections lying in different planes, the upper and lower sides of said share being of like contour near the cutting edge of said share, substantially as described. 3rd. In a plough, the combination with a moldboard, of a share having a series of sections, each having its landside edge joined with an adjacent section at its edge farthest from the landside by a shoulder, said

shoulders extending entirely across said share from its cutting edge to its edge abutting the moldboard, said shoulders also projecting



above the top of the moldboard where it abuts the share, substantially as described. 4th. A ploughshare having a series of sections, each having its landside edge joined to a depending lip of the adjacent section at its edge farthest from the landside, leaving the tops of said sections in different planes, the upper and lower sides of said share being of like contour near the cutting edge of the share, substantially as described. 5th. A ploughshare having a series of sections, the top of one section being arranged substantially at the level of the bottom of the next section toward the landside, whereby the cutting edges of all the sections may be placed in substantially the same horizontal plane, substantially as described. 6th. A ploughshare having a series of sections in different planes, the cutting edges of said sections being located one with relation to the other to act as stated in substantially the same horizontal plane, substantially as described. 7th. A ploughshare having a series of sections located in different planes, the cutting edges of said sections being located one with relation to the other as stated, whereby the edge of each said sections is adapted to cut the soil in a horizontal plane, substantially as described. 8th. A ploughshare having a series of sections presenting their top surfaces in different planes, each section of said series of sections in a line parallel with the cutting edges being thinner along the landside edges of each section than along the edges farthest from the landside, whereby the backward wear of the cutting edge may be kept uniform, substantially as described. 9th. A plough point presenting at its edge most remote from the landside a slip extended below its under surface, and a share having its cutting edge connected with said lip, substantially as described. 10th. A ploughshare having a series of sections, each having its landside edge joined to a depending lip extended below the bottom of the adjacent section at its edge farthest from the landside, leaving the top of said sections in different horizontal planes, the said sections being thinner along their landside edges than along their edges farthest from the landside, whereby the backward wear of the cutting edge may be kept uniform, substantially as described.

No. 65,147. Plough. (Charrue.)



Pratt Allen Spicer, Marshall, Michigan, and Alfred M. Ziegler, Boston, Massachusetts, U.S.A., 28th November, 1899; 6 years. (Filed 2nd November, 1899.)

Claim.—1st. A plough having a point concavo-convex in cross-section at its cutting edge, and extending rearwardly therefrom, substantially as described. 2nd. A plough having a point with its movable upper surface grooved longitudinally and uniformly from its top to its cutting edge, substantially as described. 3rd. A plough point having its upper surface grooved to its entire length, and having its underside convex and a reinforcing portion of metal extending backwardly from the cutting edge upon its said convex portion, substantially as described. 4th. A plough point having its landside rounded from its underside outwardly and upwardly, as and for the purposes described. 5th. A ploughshare, the upper surface of which provided with a series of narrow ridges and wider

depressions between them, said ridges and depressions extending the entire width of the ploughshare, substantially as described. 6th. A ploughshare having its upper surface crossed by a series of concave depressions and ridges, and having its under surface crossed by a series of grooves and convexities, substantially as described. 7th. A plough point having a cutting edge, combined with a ploughshare having part of its cutting edge depressed below the cutting edge of the point, substantially as described. 8th. A plough point presenting a cutting edge, combined with a share having a series of grooves in the direction of its width, and presenting a series of cutting edges, one or more of the cutting edges of the share being lower than the cutting edge of the point to thus provide for dip, substantially as described. 9th. A ploughshare having its upper surface provided with a series of depressions and its under surface provided with a series of ridges extending in the direction of the said depressions, substantially as described. 10th. A ploughshare having its upper surface provided with a series of depressions, and its under surface provided with a series of ridges extending in the direction of the said depressions and a reinforced portion upon these ridges extending backward from the cutting edge, substantially as described. 11th. In a plough, the combination of a mouldboard with a ploughshare, the latter presenting on its upper surface a series of depressions extending from its top to its cutting edge, and having the bottoms of said depressions flush or in alignment with that part of the mouldboard that abuts the share between the said ridges, substantially as described. 12th. In a plough, the combination of a mouldboard with a ploughshare, the latter having its upper surface provided with a series of ridges and its under surface provided with grooves located symmetrically relatively to said ridges, and having its upper surface between said ridges substantially flush with the front surface of the mouldboard at the junction of the mouldboard and the ploughshare, sub-

stantially as described. 13th. A ploughshare provided at its upper side in the direction of its width with a series of ridges starting at its cutting edge, and at its under side with a series of grooves, thereby presenting in the direction of its length a cutting edge of substantially uniform thickness, substantially as described. 14th. A ploughshare having at its upper side in the direction of its width a series of grooves, the under side of the share having a contour symmetrical in shape with its upper side to thus present a cutting edge of substantially uniform thickness for the share, substantially as described. 15th. In a plough, a mouldboard, combined with a ploughshare, the upper surface of which has a series of parallel grooves of uniform width and extending from its top to its cutting edge, and a series of connecting ridges between said grooves, said ridges projecting without the plane of the surfaces of the mouldboard where it abuts the share between said ridges, whereby the underside of the furrow slice is left ribbed, thereby reducing friction and suction, substantially as described. 16th. In a plough, the combination of a mouldboard with a ploughshare, the latter having its under surface provided with a series of grooves, and its upper surface provided with a series of ridges, projecting above or without the plane of the surface of the mouldboard where it abuts the ploughshare between the said ridges, substantially as described. 17th. A plough composed of a suitable standard, a point having a cutting edge, and a share having a portion of its cutting edge depressed below the cutting edge of the point, suitable handles, and a beam located substantially central with relation to the cutting edge of the plough to thus produce a centre draft plough, substantially as described. 18th. In a plough, the combination with a mouldboard, of a ploughshare, the latter presenting at its edge next the mouldboard a series of projections which extend above the plane of the lower end of the mouldboard, to operate, substantially as described.

TRADE-MARKS

Registered during the month of November, 1899, at the Department of Agriculture—
Copyright and Trade-Mark Branch.

7088. F. J. WESTON & SONS, Toronto, Ont. Boots and Shoes, 2nd November, 1899.
7089. FRANK W. WITCHER & COMPANY, Boston, Massachusetts, U.S.A., Rubber Soles and Heels for Boots and Shoes, 3rd November, 1899.
7090. P. W. ELLIS & COMPANY, Toronto, Ont. Watches, Watch Movements and Watch Cases, 3rd November, 1899.
7091. { THE BRITISH URALITE COMPANY, LTD., London, England. Com-
7092. { pounds of Asbestos and Silica for use in building and decorations,
6th November, 1899.
7093. HERBERT HENRY STEVENS, Port Elgin, Ont. Brushes, Brooms and Whisks, 7th November, 1899.
7094. { ROBERT WILLIAM HUDSON, Liverpool and West Bromwich, England,
7095. { trading as R. S. HUDSON. Soap, 8th November, 1899.
7096. D. F. TAYLOR & COMPANY, LTD., Birmingham, England. Pins, 9th November, 1899.
7097. THE ONTARIO LEAD AND WIRE COMPANY, LTD., Toronto, Ont. Bowls for Water Closet Purposes, 11th November, 1899.
7098. CURTIS'S & HARVEY, LTD., London, England. Explosive Substances, 13th November, 1899.
7099. RICE LEWIS & SON, LTD., Toronto, Ont. Hose for the Conveying or Conducting of Water or Fluids, 13th November, 1899.
7100. { H. WALTER DORKIN, Montreal, Que. Scissors, Pocket and Pen Knives,
7101. { Table Cutlery and Razors, 13th November, 1899.
7102. { SADAO JIN & SHINKICHI TAMURA, Vancouver, B.C. Canadian,
7103. { Japanese and Chinese Merchandise, 13th November, 1899.
7104. MADAM JOSEPHINE SENECAI, nee JOSEPHINE SAUVAGEAU, Montreal, Que. Pharmaceutical Composition, 14th November, 1899.
7105. DAVID B. WOOD, Brantford, Ont. Flour, 18th November, 1899.
7106. { THE TODD REMEDY COMPANY, LTD., Toronto, Ont. Medicine, 21st
7107. { November, 1899.
7108. THORPE & COMPANY, LTD., Vancouver, B.C. Aerated Waters, Syrups, Cordials and Cider, 21st November, 1899.
7109. THORPE & COMPANY, LTD., Vancouver, B.C. Liquor Compound from the Juice of Citron and Lemon, 21st November, 1899.
7110. WELLINGTON LEBARON HAMM, St. John, N.B. Tea, Coffee, Spices, Baking Powder, Cream of Tartar, Currants, Corn Starch and Flavouring Extracts, 21st November, 1899.
7111. JOHN EDMUNDSON ALEXANDER and AUSTIN HERNDON KEITH, Toronto, Ont. Pharmaceutical Preparations, 21st November, 1899.
7112. ISAAC BLUMENSTIEL, Hamilton, Ont. Cigars, 22nd November, 1899.
7113. EDWARD L. DREWRY, Winnipeg, Man. A Beverage, 22nd November, 1899.
7114. { LEWIS BERGER & SONS, LTD., London, England. Paints and Painters'
7115. { Supplies, 22nd November, 1899.
7116. DAVID B. WOOD, Brantford, Ont. Flour, 22nd November, 1899.
7117. FARBENFABRIKEN, vormals FRIEDRICH BAYER & COMPANY, Elberfeld, Prussia, Germany. Pharmaceutical Preparations, 23rd November, 1899.
7118. CHEMISCHE FABRIK von HEYDEN, ACTIENGESellschaft, Radebeul, near Dresden, Saxony, Germany. A Sweetening Compound for Industrial and Domestic Uses, 23rd November, 1899.
7119. MANLIUS BULL, Winnipeg, Man. Soap, 24th November, 1899.

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7120. JOHN HENRY ANDREW & COMPANY, LTD., Toledo Steel Works, Sheffield, England. Steel and Steel Goods, such as hammers, mining tools and files, 24th November, 1899.
7121. THE LESTER H. GREENE COMPANY, Montpelier, Vermont, U.S.A. Medicines, 27th November, 1899.
7122. THE AMERICAN WRINGER COMPANY, New York, N.Y., U.S.A. Wringers, Mangles and Washing Machines, 27th November, 1899.
7123. { WEBSTER CLAY BALL, Cleveland, Ohio, U.S.A. Watches and Portable
7124. { Clocks, 27th November, 1899.
7125. WILLIAM BENDER & SONS, Stuttgart, Germany. Knitted Fabrics and Garments made therefrom, such as socks, stockings and abdominal supports, 28th November, 1899.
7126. JOHN T. HAGAR, Montreal, Que., trading as J. & T. BELL. Boots and Shoes, 29th November, 1899.
7127. KALMAN HAAS, New York, N.Y., U.S.A. Oysters, 29th November, 1899.
7128. SIMEON RAOUL GAUTHIER, Montreal, Que. A Medical Compound for Rheumatism, 29th November, 1899.

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10902. ARGONAUT WALTZES. By Lottie Marks, Toronto, Ont., 2nd November, 1899.
10903. THE HIGH SCHOOL ENGLISH GRAMMAR. (Revised Edition.) By John Seath, B.A. The Canada Publishing Company, (Ltd.) Toronto, Ont., 2nd November, 1899.
10904. A LIFE OF CHRIST FOR THE YOUNG. By George Ludington Weed The Westminster Company, (Ltd.), Toronto, Ont., 2nd November, 1899.
10905. PERPETUAL CALENDAR. John B. McKay, Toronto, Ont., 2nd November, 1899.
10906. THE EMPIRE SERIES PRIMER. Part II. A. & W. MacKinlay, Halifax, N.S., 3rd November, 1899.
10907. REV. THOMAS FRASER FULLERTON. (Photo.) Robert L. Cotton, Charlottetown, P.E.I., 4th November, 1899.
10908. THE PRINCE EDWARD ISLAND CANADIAN CONTINGENT. (Photo.) Robert L. Cotton, Charlottetown, P.E.I., 4th November, 1899.
10909. GROUPE DES OFFICIERS DU CONTINGENT CANADIEN. (Photo.) Jules Ernest Livernois, Québec, Qué., 6 novembre 1899.
10910. MAJOR W. A. WEEKS. (Photo.) Robert L. Cotton, Charlottetown, P.E.I., 6th November, 1899.
10911. THE FLAG OF CANADA. Words and Music by J. Doan Graham, Sharon, Ont., 6th November, 1899.
10912. THE VICTORIAN SPELLER. By W. A. McIntyre, B.A., and J. C. Saul, M. A. W. J. Gage & Co., (Ltd.), Toronto, Ont., 6th November, 1899.
10913. THE WIDOW OF OLD WINDSOR HALL. (Lyric.) By Charles D. Bingham, Toronto, Ont., 6th November, 1899.
10914. SERGEANT MAJOR BORLAND. (Photo marked A.) Charles Lewis Rosevear, Toronto, Ont., 6th November, 1899.
10915. SERGEANT MAJOR BORLAND. (Photo marked B.) Charles Lewis Rosevear, Toronto, Ont., 6th November, 1899.
10916. SERGEANT MAJOR BORLAND. (Photo marked C.) Charles Lewis Rosevear, Toronto, Ont., 6th November, 1899.
10917. SERGEANT MAJOR BORLAND. (Photo marked D.) Charles Lewis Rosevear, Toronto, Ont., 6th November, 1899.
10918. CITY OF KASLO. (Photo.) David Prosser Kane, Kaslo, B.C., 6th November, 1899.
10919. THE OFFICE PAPER. Volume II. Number 8. November, 1899. Robert Goltman, Montreal Que., 8th November, 1899.
10920. AN ANALYTICAL SYNOPSIS OF THE CRIMINAL CODE AND OF THE CANADA EVIDENCE ACT. By James Crankshaw, B.C.L. C. Théoret, Montreal, Que., 8th November, 1899.
10921. CODE DE PROCÉDURE CIVILE DE LA PROVINCE DE QUÉBEC. ANNOTÉE. Par Paul G. Martineau, B.C.L., et Romuald Delfausse, L.L.B., C. Théoret, P. G. Martineau et R. Delfausse, Montréal, Qué., 8 novembre 1899.
10922. DEER HUNTING IN MUSKOKA. (Drawing.) Arthur Heming, Hamilton, 8th November, 1899.
10923. THE CANADIAN MAGAZINE. November, 1899. The Ontario Publishing Company, (Ltd.) Toronto, Ont., 8th November, 1899.
10924. THE SUTTON SOUVENIR AND HOUSEKEEPER'S LITERARY COOK BOOK. William Bowman Tucker, Sutton, Que., 9th November, 1899.
10925. MANUAL OF PRACTICAL BOOK KEEPING. By R. Goltman, Montreal, Que., 10th November, 1899.

10926. IMPECUNIOUS DAVIS. Characteristic Two-Step. March and Cake-Walk. By Kerry Mills. F. A. Mills, New York, N. Y., U.S.A., 10th November, 1899.
10927. THE CROWN OF LIFE. By George Gissing. (Book.) W. J. Gage & Company, (Ltd.), Toronto, Ont., 11th November, 1899.
10928. ONTARIO PRACTICE REPORTS. By T. T. Rolph. J. F. Smith, Q.C., Editor. Volume XVIII. The Law Society of Upper Canada, Toronto, Ont., 11th November, 1899.
10929. THE SKY PILOT. A Tale of the Foot-hills. By Ralph Connor. The Westminster Company, (Ltd.), Toronto, Ont., 11th November, 1899.
10930. CANADA'S HYMN OF EMPIRE. Four part song for mixed voices. Words by Arthur Cox. Music by H. H. Godfrey. Arthur Cox, Toronto, Ont., 13th November, 1899.
10931. CANADA'S HYMN OF EMPIRE. Song for Solo Voice. Words by Arthur Cox. Music by H. H. Godfrey. Arthur Cox, Toronto, Ont., 13th November, 1899.
10932. IF THIS BE LOVING. Words by Clifton Bingham. Music by Hope Temple. The John Church Company, Cincinnati, Ohio, U.S.A., 13th November, 1899.
10933. IN TIMES OF PERIL. A Tale of India. By G. A. Henty. Griffith, Farran, Browne & Co., (Ltd.), London, England, 13th November, 1899.
10934. FRIENDS THOUGH DIVIDED. A tale of the Civil War. By G. A. Henty. Griffith, Farran, Browne & Co., (Ltd.), London, England, 13th November, 1899.
10935. STURDY AND STRONG; or, HOW GEORGE ANDREWS MADE HIS WAY. By G. A. Henty. Blackie & Son, (Ltd.), Edinburgh, Scotland, 13th November, 1899.
10936. A CHAPTER OF ADVENTURES; or, THROUGH THE BOMBARDMENT OF ALEXANDRIA. By G. A. Henty. Blackie & Son, (Ltd.), Edinburgh, Scotland, 13th November, 1899.
10937. SUPPLEMENT TO HIGH SCHOOL PHYSICAL SCIENCE. By F. W. Merchant, M.A. The Copp, Clark Co. (Ltd.), Toronto, Ont., 14th November, 1899.
10938. COW BRAND SODA. (Recipe Book.) John Dwight & Co., Montreal, Que., and Toronto, Ont., 14th November, 1899.
10939. EDUCATIONAL REVIEW SUPPLEMENTARY READINGS; CANADIAN HISTORY, NUMBER SEVEN, SEPTEMBER, 1899. George U. Hay, St. John, N.B., 14th November, 1899.
10940. THE BIBLE UNDER HIGHER CRITICISM. By Rev. E. H. Dewart, D.D., William Briggs, Toronto, Ont., 15th November, 1899.
10941. LYRICAL ECHOES. By Katherine A. Clarke. William Briggs, Toronto, Ont., 15th November, 1899.
10942. OFFICIAL DIRECTORY, DISTRICT OF WESTERN ONTARIO, NOVEMBER, 1899. The Bell Telephone Company of Canada, (Ltd.), Montreal, Que., 15th November, 1899.
10943. OUR COMRADE TOMMY ATKINS. Words and Music by Robert Awde, Toronto, Ont., 15th November, 1899.
10944. ENDYMION'S DREAM. By Francis Thomé. (Music.) The John Church Company, Cincinnati, Ohio, U.S.A., 15th November, 1899.
10945. SOUS LES SAULES. (Under the Willows.) By Francis Thomé. (Music.) The John Church Company, Cincinnati, Ohio, U.S.A., 15th November, 1899.
10946. UNE FÊTE À MADRID. By Francis Thomé. (Music.) The John Church Company, Cincinnati, Ohio, U.S.A., 15th November, 1899.
10947. HEAVEN AT LAST. (Song.) By Frank L. Moir. The John Church Company, Cincinnati, Ohio, U.S.A., 16th November, 1899.
10948. AN EXILE'S SONG. By Maude Valerie White. The John Church Company, Cincinnati, Ohio, U.S.A., 16th November, 1899.
10949. A MOTHER'S SONG. By Maude Valerie White. The John Church Company, Cincinnati, Ohio, U.S.A., 16th November, 1899.
10950. UNE SUEÑO. (A Dream.) Music by Maude Valerie White. The John Church Company, Cincinnati, Ohio, U.S.A., 16th November, 1899.
10951. THE IVY LEAF. (Des Epheublatt.) (Von Boddien.) Song. English words by J. Ahrem. Music by E. Lassen. The John Church Company, Cincinnati, Ohio, U.S.A., 17th November, 1899.

10952. WHEN FIRST I SAW THEE. (Als ich dich kaum gesehn.) Song. English words by J. Ahrem. Music by E. Lassen. The John Church Company, Cincinnati, Ohio, U.S.A., 17th November, 1899.
10953. THE ROSEDALE. (Three-Step.) By Arthur Wellesley. Whaley, Royce & Co., Toronto, Ont., 17th November, 1899.
10954. THE PIONEERS OF BLANSHARD. By William Johnston, Township of Blanshard, Ont., 18th November, 1899.
10955. ESQUIMALT BAY. (Photo.) L. F. Hacking, Vancouver, B.C., 21st November, 1899.
10956. WHILE SHEPHERDS WATCHED THEIR FLOCKS BY NIGHT. (Hyun-Carol.) Music by H. Crawford Scadding, Toronto, Ont., 21st November, 1899.
10957. THE SAILOR'S GRAVE. Song. Words by H. F. Lyte. Music by Arthur S. Sullivan. The Anglo-Canadian Music Publishers' Association, (Ltd.), London, England, 21st November, 1899.
10958. FOR TROUBLED HEARTS. By Charles Aubrey Eaton, M.A. The Poole Printing Company, Limited, Toronto, Ont., 22nd November, 1899.
10959. THE CHILD AND THE RAINBOW. (Song.) Words by C. W. Canfield. Music by Homer N. Bartlett. Op. 185. No. 2. The John Church Company, Cincinnati, Ohio, U.S.A., 22nd November, 1899.
10960. IF? Song. By Homer N. Bartlett. Op. 185. No. 1. The John Church Company, Cincinnati, Ohio, U.S.A., 22nd November, 1899.
10961. GO HOLD WHITE ROSES. Song. Words by S. M. Peck. Music by L. Denza. The John Church Company, Cincinnati, Ohio, U.S.A., 22nd November, 1899.
10962. WHERE LOVE ABIDES. Song. Words by Hugh P. Bayne. Music by L. Denza. The John Church Company, Cincinnati, Ohio, U.S.A., 22nd November, 1899.
10963. WE'RE BRITONS NONE THE LESS, SIR! Words and Music by M. de S. Wedd. Canadian American Music Company, (Ltd.), Toronto, Ont., 22nd November, 1899.
10964. THE LAST OF THE RACE. (Picture representing group of Buffaloes.) The British Columbia Printing and Engraving Corporation, Limited Liability, Vancouver, B.C., 23rd November, 1899.
10965. LONDON TIMES NEWS AND VIEWS *re* TRANSVAAL WAR. Published in *The Globe*, Toronto, Ont. (Temporary Copyright.) *The Globe* Printing Company of Toronto, (Ltd.), Toronto, Ont., 23rd November, 1899.
10966. A GOOD HEARTED GIRL; OR A PRESENT DAY HEROINE. By Emma Marshall. W. J. Gage & Co., (Ltd.), Toronto, Ont., 24th November, 1899.
10967. LIGHT O' THE MORNING: THE STORY OF AN IRISH GIRL. By L. T. Meade. W. J. Gage & Co., (Ltd.), Toronto, Ont., 24th November, 1899.
10968. THE ODDS AND THE EVENS. By L. T. Meade. W. J. Gage & Co., (Ltd.), Toronto, Ont., 24th November, 1899.
10969. THE CARDINAL FACTS OF CANADIAN HISTORY. By James P. Taylor, Toronto, Ont., 24th November, 1899.
10970. DEPARTURE. (March and Two-Step.) By George A. Watts, London, Ont., 25th November, 1899.
10971. BOER AND BRITON. By Charles Lewis Shaw. Published in *The Telegram*, Toronto, Ont.; *The Journal*, Ottawa, Ont.; *The Telegraph*, St. John, N.B.; *The Herald*, Halifax, N.S.; *The Expositor*, Brantford, Ont.; *The Herald*, Stratford, Ont.; and *The Province*, Vancouver, B.C. (Temporary Copyright.) John A. Cooper, Toronto, Ont., 25th November, 1899.
10972. ALL FOR YOU. (Song.) Words by Samuel Minturn Peck. Music by Guy d'Hardelot. The John Church Company, Cincinnati, Ohio, U.S.A., 27th November, 1899.
10973. THE METHODIST CHURCHES OF TORONTO. By Thomas Edward Champion. The G. M. Rose & Sons Company, (Ltd.), Toronto, Ont., 27th November, 1899.
10974. MUNICIPAL TAX NOTICES FOR 1899. R. D. Richardson & Co., Winnipeg, Man., 27th November, 1899.
10975. AGRICULTURAL SOCIETY ENTRY BOOK. R. D. Richardson & Co., Winnipeg, Man., 27th November, 1899.
10976. THE LOST HEIR. By G. A. Henty. The Copp, Clark Company, (Ltd.), Toronto, Ont., 28th November, 1899.

10977. LECTURES ON CHRISTIAN UNITY. By Herbert Symonds, M.A. William Briggs, Toronto, Ont., 28th November, 1899.
10978. L'ECRIN MUSICAL: Recueil de Romances, Chansons et Mélodies. (Livre.) J. G. Yon, Montréal, Qué., 29 novembre 1899.
10979. TORONTO SATURDAY NIGHT'S CHRISTMAS, 1899. (With six Pictorial Supplements.) The Sheppard Publishing Company, (Ltd.), Toronto, Ont., 29th November, 1899.
10980. LE VIEUX CHASSEUR. Poem published in *Rod and Gun* in Canada. (Temporary Copyright.) William Henry Drummond, Montréal, Que., 30th November, 1899.
0981. THREE CHRISTMAS CAROLS. Words by Rev. C. W. Huntingford, M.A., and Rev. Arthur Montford, M.A. Music by Albert Ham. Mus. Doc. Albert Ham, Toronto, Ont., 30th November, 1899.